



The Future of Food: Unlocking Net Zero

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**“Zero Waste Scotland...a lighthouse
for the circular economy”**

Walter Stahel, circular economy pioneer

The unsustainable space:

Declining:
Land
Water
Ecosystems
Biodiversity
Resource capacity
Ecosystem services
Restorative capacity

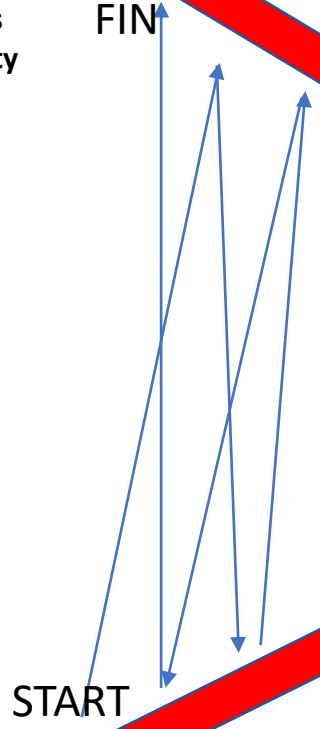
Competing, conflicting and shifting priorities means we are stuck in an unsustainable space

Unsustainable activity

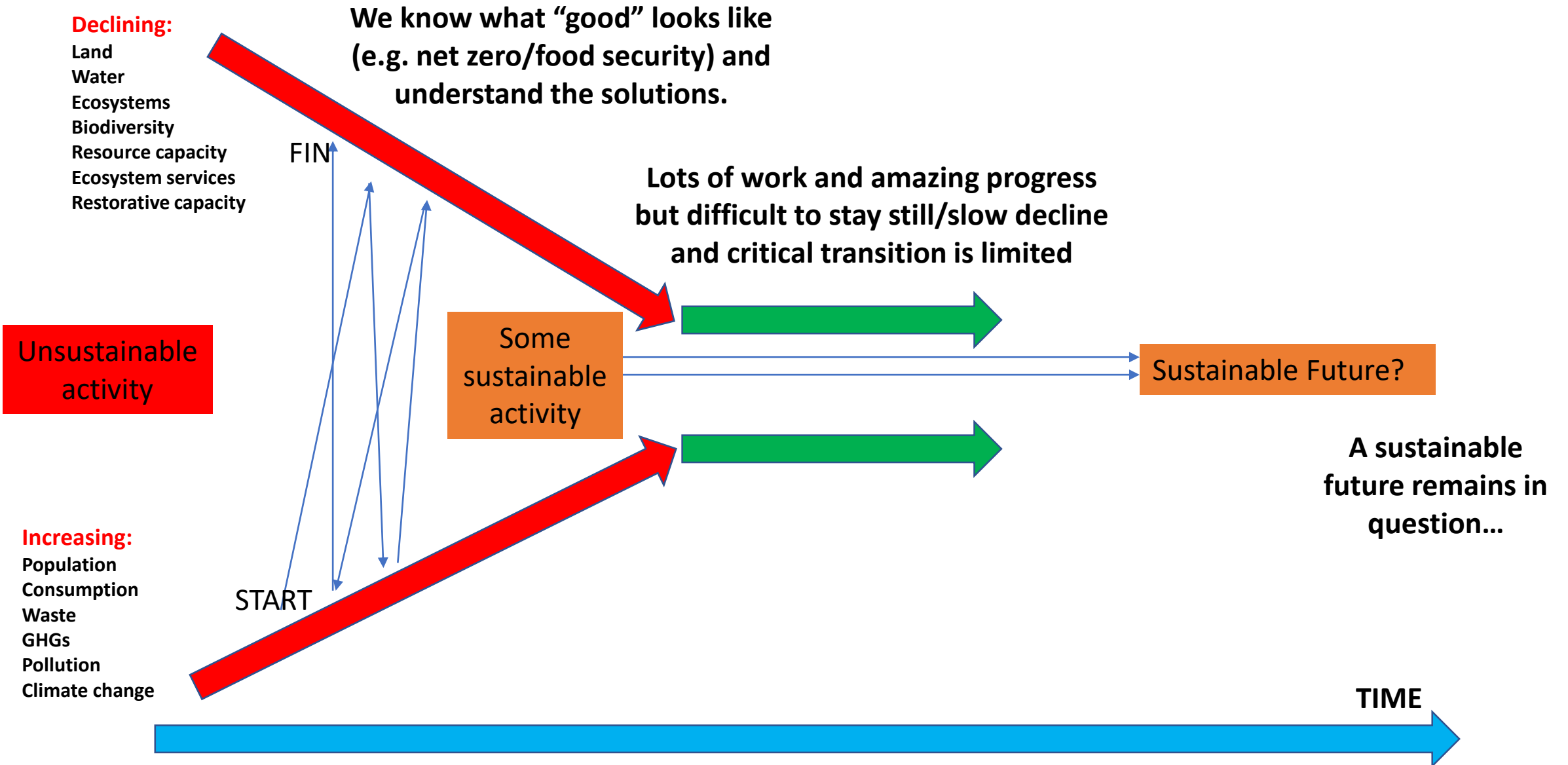
Narrowing margin for sustainable activity

Unsustainable Future

Increasing:
Population
Consumption
Waste
GHGs
Pollution
Climate change



Informed activity:



A sustainable future:

A coherent approach to explore synergies across biobased industries such as sustainable protein innovations could enable significant economic, environmental and ecological co-benefits both within and between sectors

Holistic approach



Sustainable Future

Sustainable activity and circular economy align and accelerate, new value chains develop which enable and enhance co-benefits



- Improving:**
- Land
 - Water
 - Ecosystems
 - Biodiversity
 - Resource efficiency
 - Restorative capacity
 - Ecosystem services
 - Food security

A sustainable future at national and global levels is possible

- Decreasing:**
- Consumption
 - Resource demand
 - Conflicting needs (eg. Bioenergy)
 - Food Waste
 - Pollution
 - Climate change

National protein strategies



Germany
2014



France 2014



EU 2018



Netherlands
2018



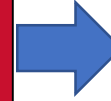
Finland 2018



Denmark
2018



Manitoba 2018



Spain
Austria
Belgium

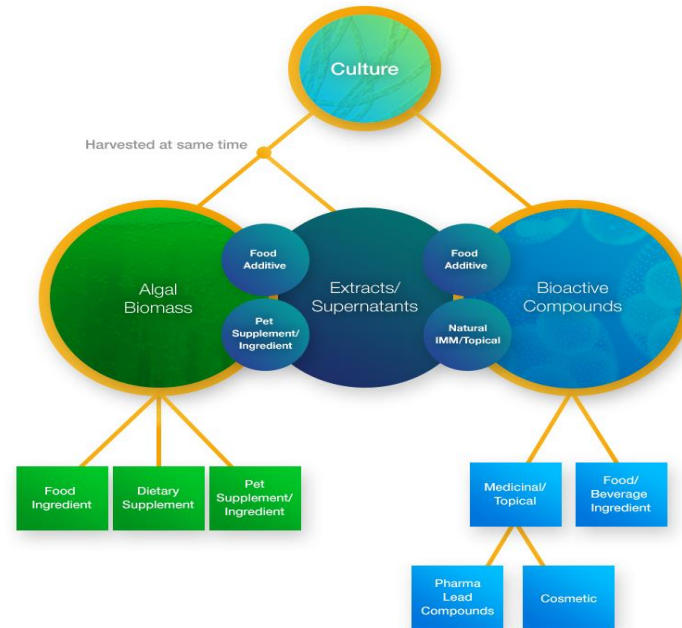
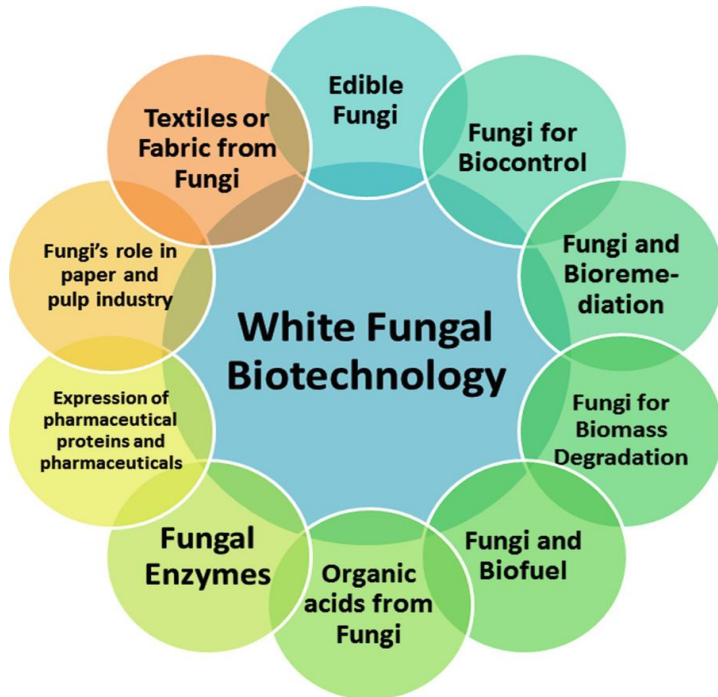
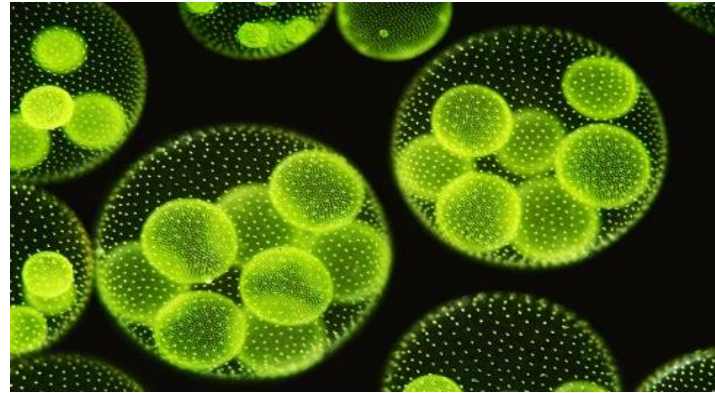


Scotland?

While each protein plan is unique to its region, the report identifies several common features:

- **Extensive stakeholder engagement and collaboration** throughout development and implementation
- **Reduce environmental impacts** of feed and food supply chains
- **Increase domestic protein production** to reduce dependence on imported soy and associated negative impacts
- **Integrate circular economy principles and platforms** to optimise biomass resources and residues within and between sectors
- **Accelerate innovation and sustainable product development** to capitalise on market trends and sub-sector growth
- **Mobilise public and private finance** to support agriculture's low carbon transition
- **Legislative and policy reform** to support agriculture's transition to circular economy

The Circular Bioeconomy



Next steps:

- 1. Continue to advance Net Zero in the context of sustainable protein production**
- 2. Increase awareness of activity already underway and benchmark progress**
- 3. Seek consensus on common goals within and between sectors**
- 4. Identify and support key targets for innovation**
- 5. Initiate conversations:**
 - Discuss and progress actions to advance sustainability, resilience and adaptation**
 - Gather evidence and views on priorities and next steps**
 - Create opportunities by working together**
 - Develop framework for delivery**





Thankyou! Questions?

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