

Circular Economy – Rising Star and Structural Challenges



ERSCP 2021

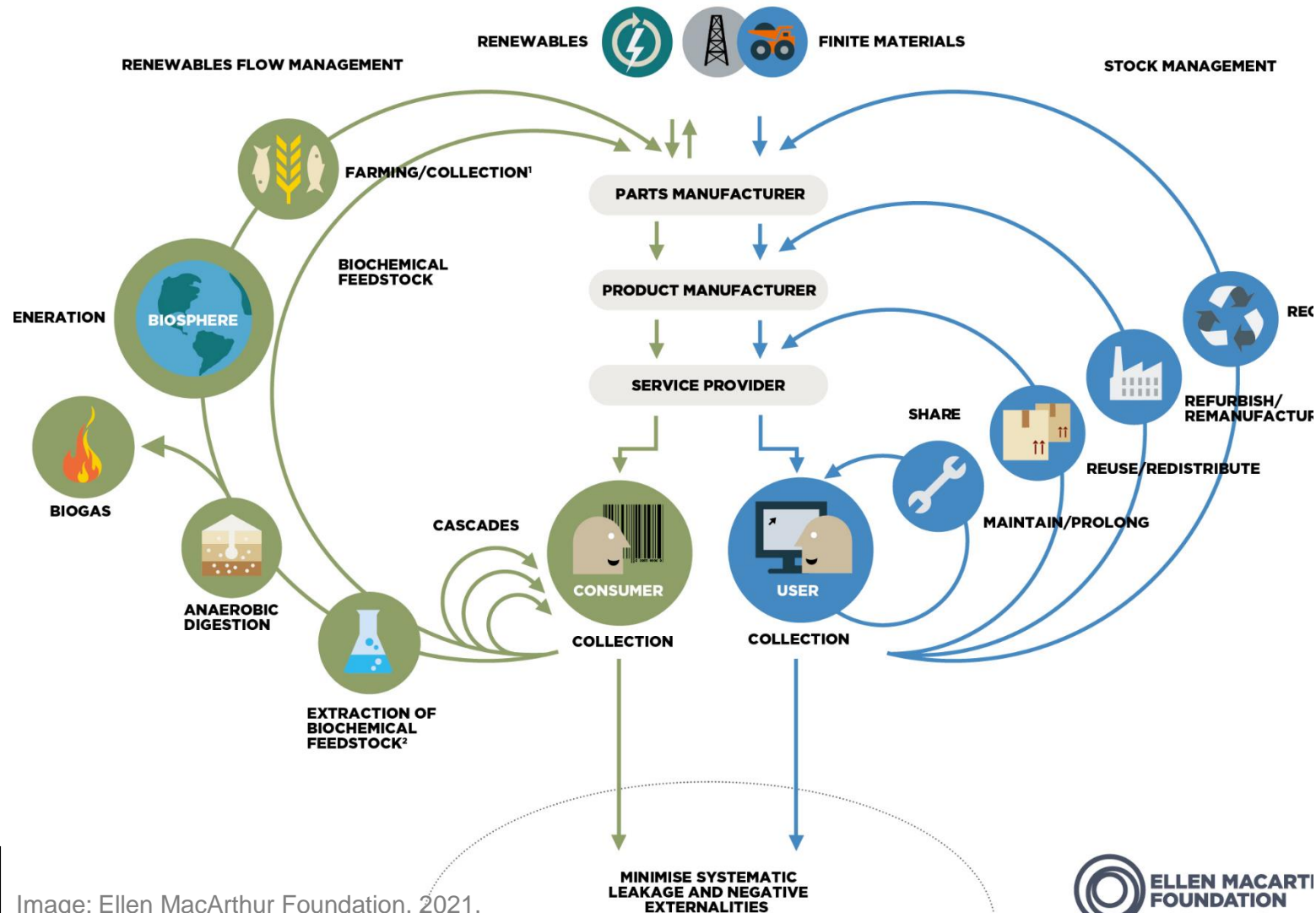
Graz, September 9, 2021

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Circular Economy - from Linear to Circular





Circular Economy - from Linear to Circular



Source: Ellen MacArthur Foundation (o. J.)



Circular Economy - Definition

CE is “an **economic system** that replaces the ‘end-of-life’ concept with **reducing, alternatively reusing, recycling and recovering** materials in production/distribution and consumption processes.

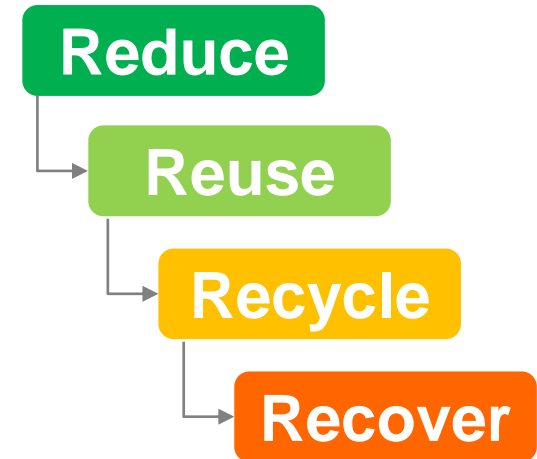


Image: 4R-Framework (own illustration)

(...),

with the aim to accomplish **sustainable development**, thus simultaneously **creating environmental quality, economic prosperity and social equity**, to the benefit of current and future generations.

It is enabled **by novel business models and responsible consumers.**”



Growth Debate (I)

Green growth

- **Pro** economic growth for increasing well-being
- **Decoupling** from ecological impact



Image: UN, 2019a

Degrowth

- **Con** economic growth, direct focus on well-being



Image: „FridaysForFuture protest Berlin 31-05-2019 32“, CC0 1.0, Leonhard Lenz



Growth Debate (II)

Green growth

- **Pro** economic growth for increasing well-being
- **Decoupling** from ecological impact

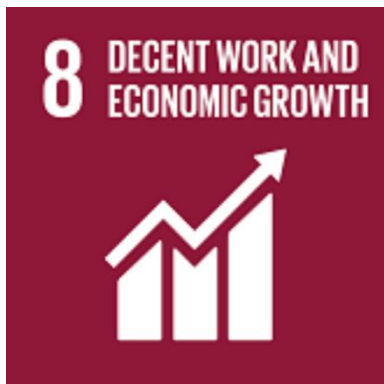


Image: UN, 2019a

Degrowth

- **Con** economic growth, direct focus on well-being

Post-growth

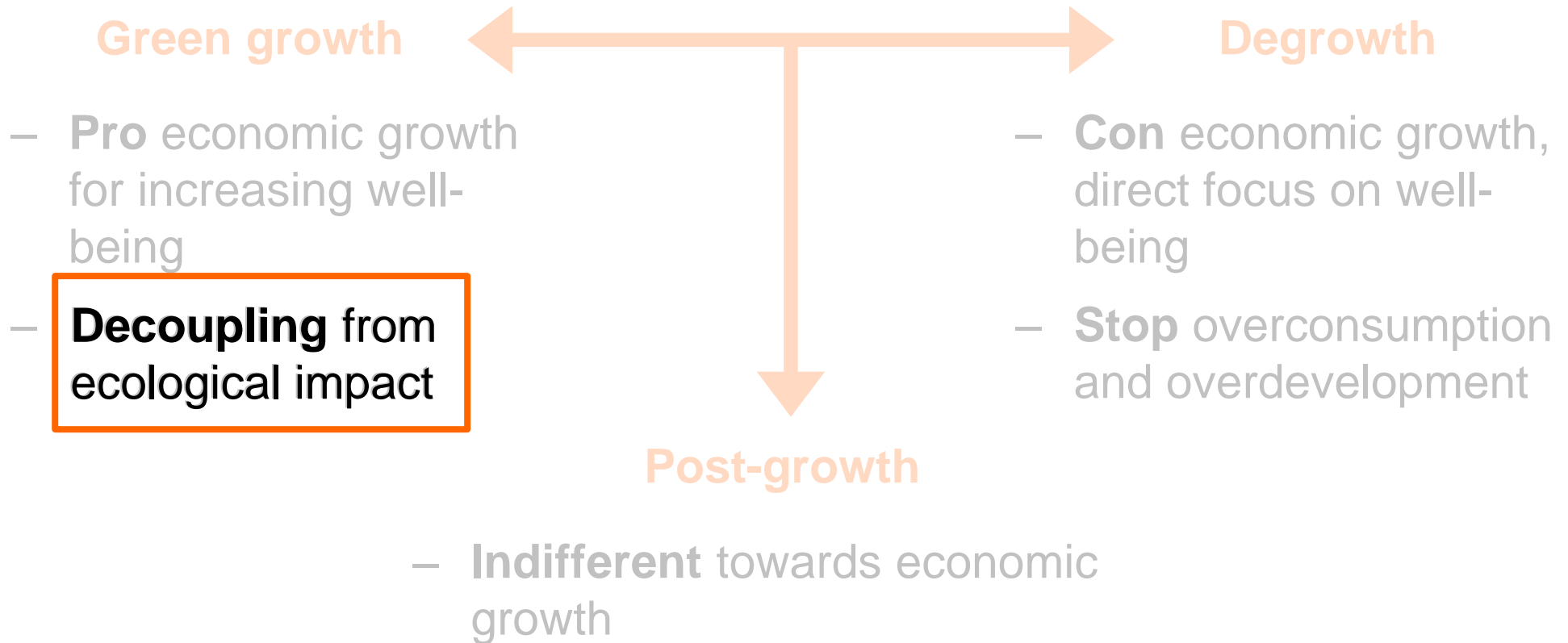
- **Indifferent** towards economic growth



Image: „FridaysForFuture protest Berlin 31-05-2019 32“, CC0 1.0, Leonhard Lenz



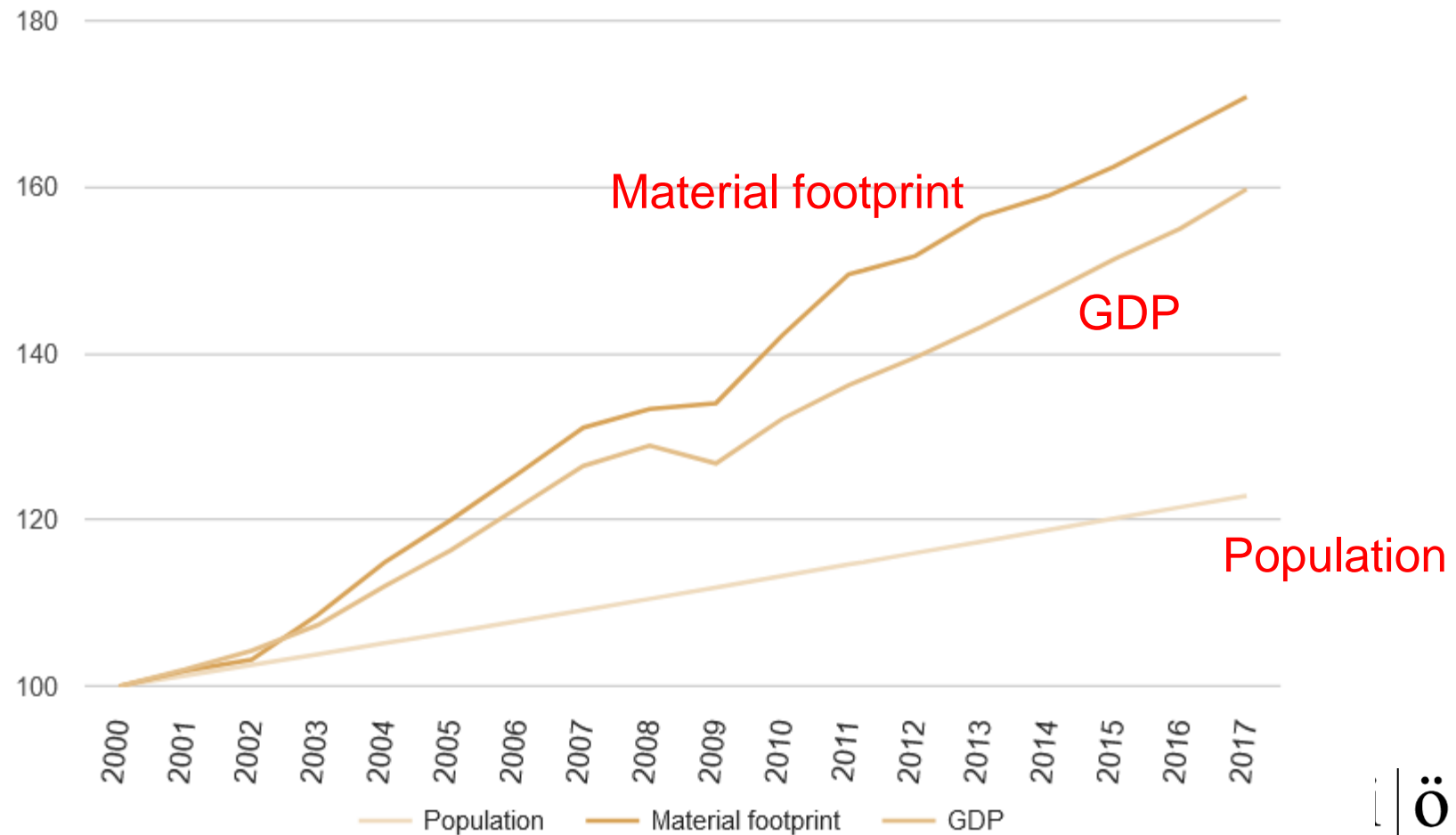
Growth Debate (III)





Material footprint and GDP (2000-2017)

Population, material footprint and GDP growth index, 2000–2017 (baseline 2000=100)





Decoupling – Absolute or Relative?



„From greening the economy to a green economy“



Decoupling – Absolute or Relative?



„From greening the economy to a green economy“



Growth Debate meets Circular Economy

- 1. How do circular economy and the growth debate relate?**
- 2. Can the circular economy successfully decouple resource consumption and economic growth?**



Ellen MacArthur Foundation (2021)

“[CE] is a **better growth opportunity** that can contribute to tackling multiple global challenges (...).”



Ellen MacArthur Foundation (2021)

“[CE] is a **better growth opportunity** that can contribute to tackling multiple global challenges (...).”

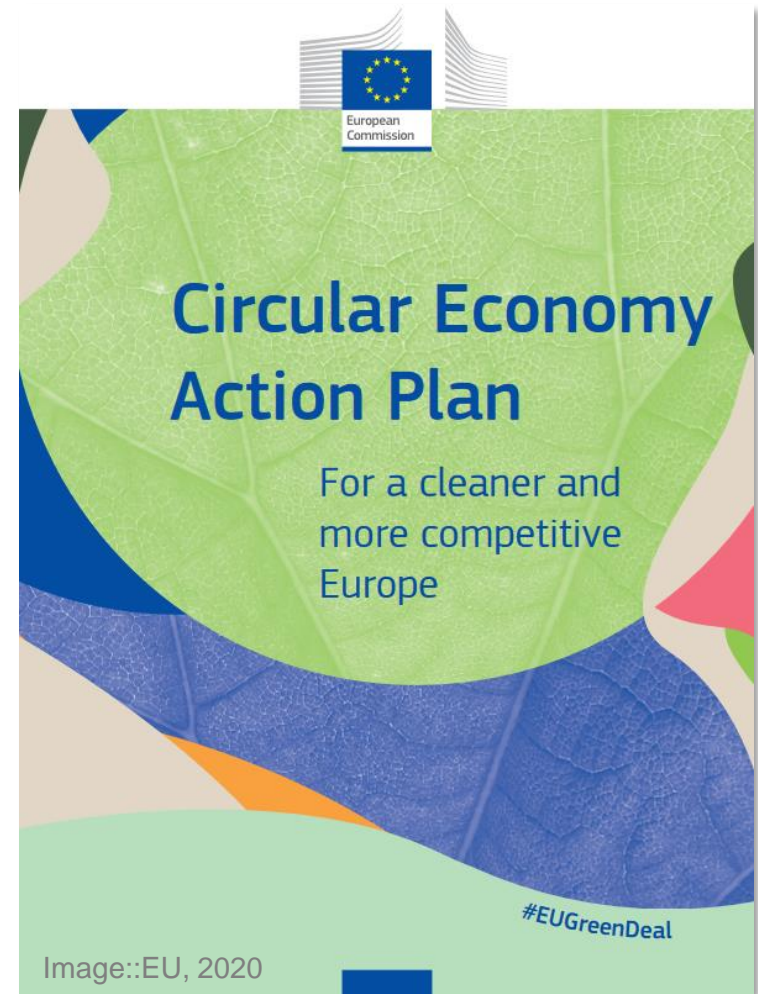
“In Europe, (...) the circular economy could yield **annual benefits of up to EUR 1.8 trillion** (USD 2.1 trillion) by 2030, double that of the linear development path, and representing **additional GDP growth of 7 percentage points.**”



EU Circular Economy Action Plan (2020)

“Scaling up the circular economy from front-runners to the mainstream economic players”

“(…) **decoupling economic growth from resource use**, while ensuring the **long-term competitiveness of the EU** and leaving no one behind”





Circular Economy – Rising Star

Google Search Inquiries 2004-2021

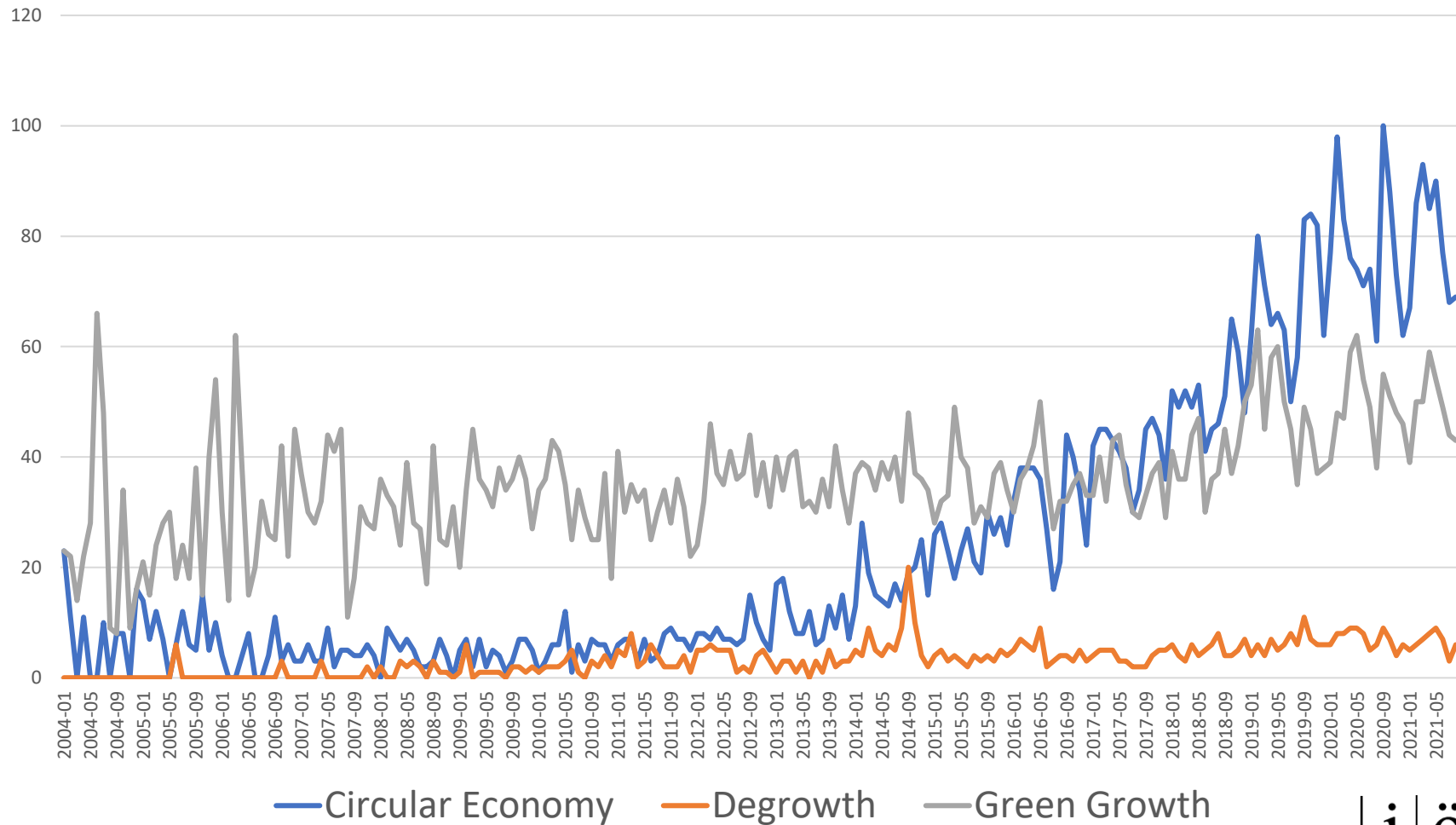


Image: Google Trends, own illustration



Circular Hub – IKEA (2021)



Image: presstext.com, IKEA, 2021



Circular Economy – The Critics (I)

“...I compared [CE] to a **siren luring us into environmental plights**. Circular economy is not a degrowth model but **another growth model**.

(...) for those companies whose business model is based on an intensive but **cheap flow of materials and energy**, (...) **circular economy is a way to counteract** the fact that an increased competition for raw materials will rise the price of their inputs and thus **make their outputs more expensive**, an evolution that would **threaten their business** model of cheap delivery of goods and services.”

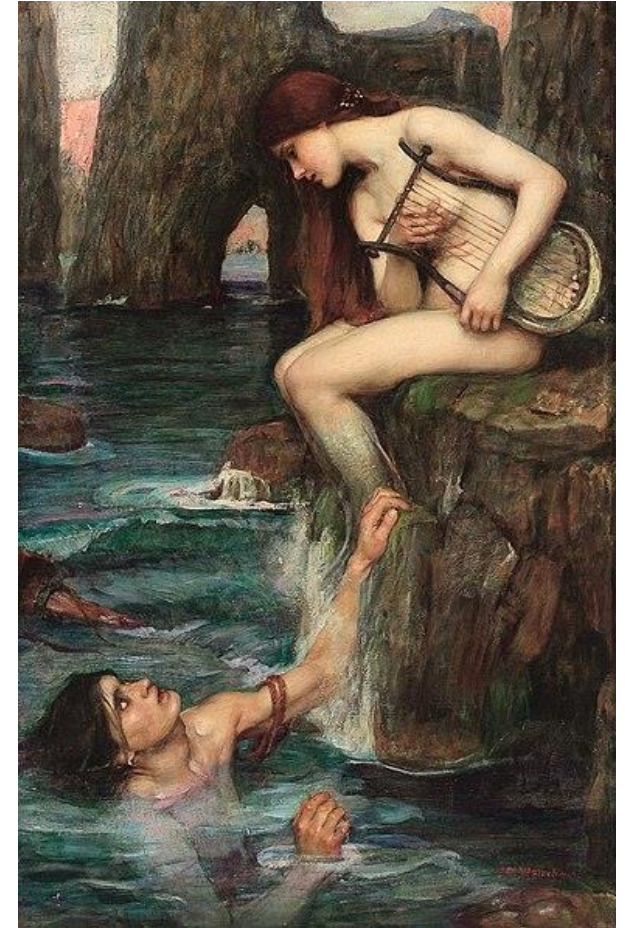


Image: „The Siren“, John William Waterhouse, [Sotheby's Lot 12](#), Wikimedia Commons, Public Domain



Circular Economy – The Critics (II)

- **Focus on recycling → Greenwashing**
 - Using primary resources is still necessary
 - Legitimizing linear business models
- **Technological solutions are dominant**, little focus on consumption patterns and sufficiency (social innovations)
- **Lack of theoretical foundation**
 - Little questioning of growth paradigm & underlying causes for environmental crisis
 - Unclear relation to planetary boundaries, bigger transformation strategies
- **Rebound effects**
 - Waste as „nutrient“ / resource → Justification for „careless consumption“?



Circular Economy – Multiple Interpretations

„Indeed, **CE can mean many different things to different people.**

While some players equate CE with a **complete overhaul of the current economic system**, others merely equate it with **additional recycling efforts.**“

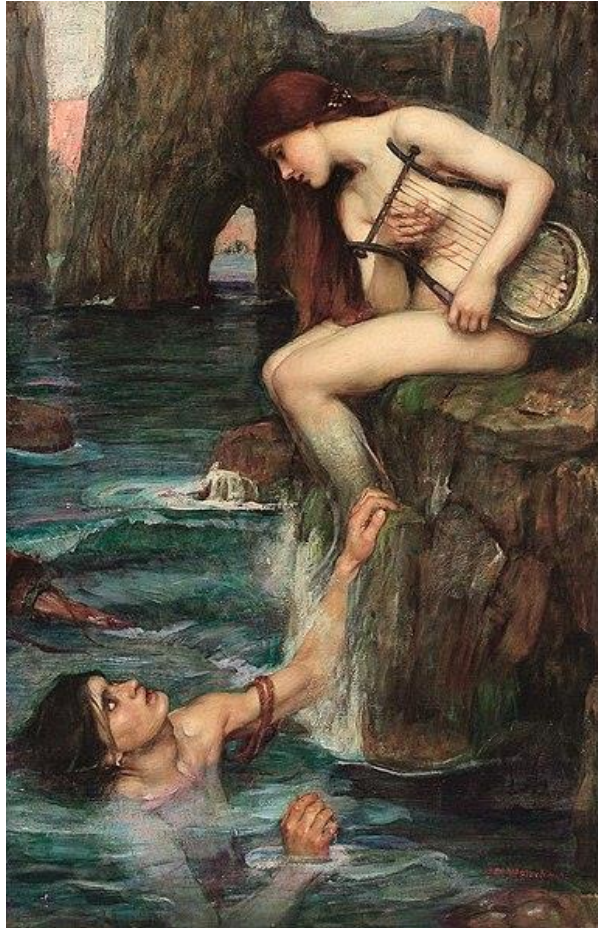
Circular Economy & Growth – Summary (for now)



- **Little overlap**
- **Big hopes**
- **Some (but serious) doubts**



Discussion



vs.

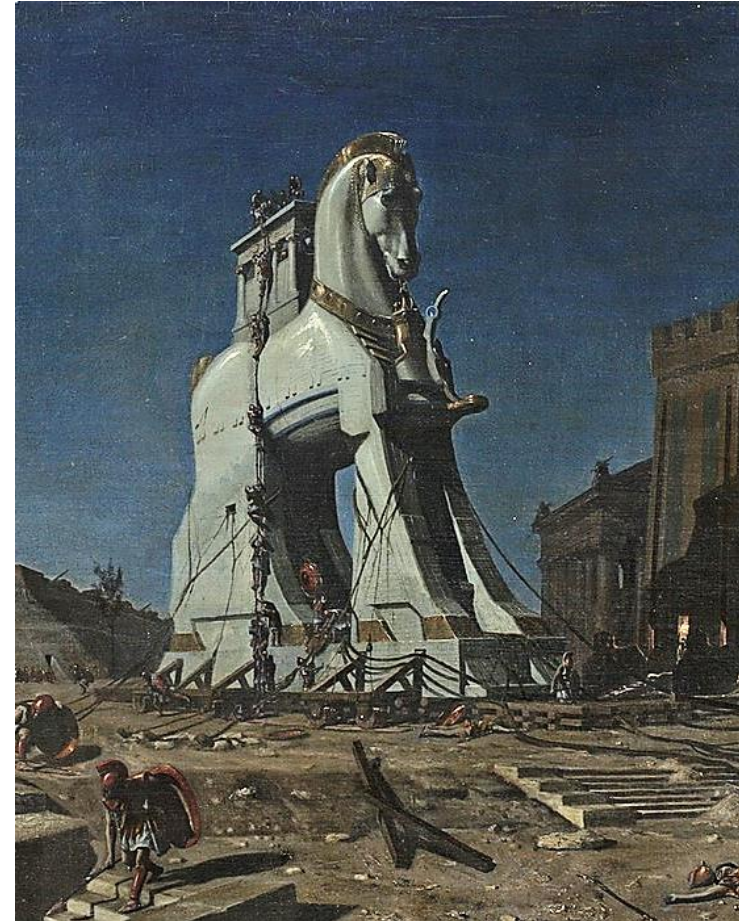


Image: „The Siren“, John William Waterhouse, [Sotheby's Lot 12](#), Wikimedia Commons, Public Domain

Image: „Le Cheval de Troie“, Henri-Paul Motte, [Vincent Lécuyer](#), Wikimedia Commons, Public Domain

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Thank you!

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2021-09-09





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