

Circularity & Sufficiency

3rd Luxemburg Strategy Conference

Jelmer Hoogzaad, Shifting Paradigms, 26 Sep 2023

What we do

> hifting aradigms

1. Align with development priorities



Metabolic
 analysis and
 workshops

3. Select circularopportunities andquantify impact

4. Develop a roadmap and guide investments



Agricultural residue

Relative vs absolute impacts

At the level of individual investments we risk pushing:

- relative emissions down (due to efficiency gains),
- absolute emissions up (due to capacity increases).

By exporting industries, the EU reduced its emissions while its consumption-based footprint went up.

Sources:

shifting paradigms

orks (2017) Europe's Carbon Loophole

Circular economy

Map out value chains and the **service** which they deliver (nutrition, mobility, shelter).

Then redesign them to:

- 1. extend the lifetime
- 2. prioritise regenerative and secondary resources
- 3. design for the future
- 4. team up along value chains
- 5. rethink the business model

Sources: <u>Circle Economy (2021</u>), The Key Elements of the Circular Economy Framework; <u>UN Climate Charge Global Innovation Hu</u> @COP26 (2021). Patrycja Slawuta discussing our need for 'Shelter; Photo by <u>Iz Line</u> on <u>Unsplash</u>'



Jevons Paradox (rebounds)

- The efficient use of coal with new technologies increased coal use – it did not preserve resources (Jevons, 1865)
- 2. Circular economy does not solve this, sufficiency does:
 "avoid demand for energy, materials, (..) while delivering human wellbeing (..)"
 involves technologies,

infrastructures and lifestyles





Sandie Clarke

paradox, Ecological Economics, Volume 54, Issue 1; IMFC/OECD (2021), Tax Policy and

European Environment Agency (2010). Environmental tax reform

Sufficiency-based CE in the global gap reporting

- Different priorities for low, 1. medium, high-income countries
- 2. High income countries need to: regulate transport, including air travel and international shipping
 - promote healthy diets
 - incentivize lower per capita m² living space
- 3. IPCC confirms that we need sufficiency



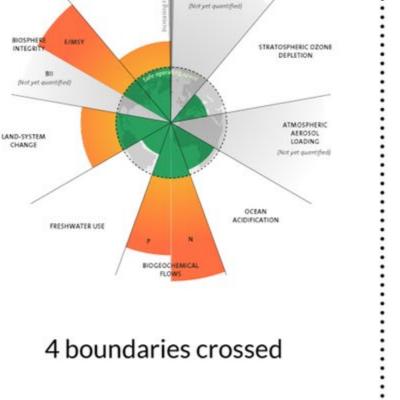
Sources: Circle Economy, Shifting Paradigms (2020).

How countries can close the circularity gap; Circle Economy, Shurung Paradigms (2021) Doubling circularity can bring us to 'well below 2 degrees'; Bocken (2022): The Sufficiency-Based Circular Economy; Photo by Dominik Lückmann on Unspirate

Trade off between sufficiency and CE

- Reducing demand for relatively circular products, may reduce a country's circularity
- 2. Sufficiency and CE are both a means to an end
- The objective is to get back within planetary boundaries

3 boundaries crossed

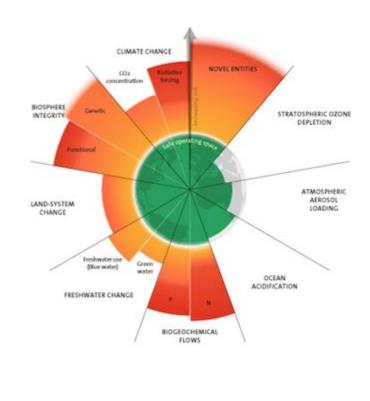


NOVEL ENTITIES

2015

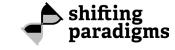
CUMATE CHANGE

2023



6 boundaries crossed

Sources: <u>Richardson, K., Steffen, W., et. al. (2023)</u>. Earth beyond six of nine planetary boundaries. *Science Advances* 9, 37.



What not to do

(...)



21st Century Urban Planning & Mobility @urbanthoughts11

...

1970: One more lane will fix it. 1980: One more lane will fix it. 1990: One more lane will fix it. 2000: One more lane will fix it. 2010: One more lane will fix it. 2020s: ?





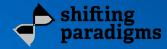
Common sufficiency policies

1. Fish quota

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- 2. Protecting natural reserves, urban planning
- 3. Restrictions on (advertising for) tobacco and alcohol
- 4. Taxes and subsidies

See: <u>EU sufficiency Policy Database</u>





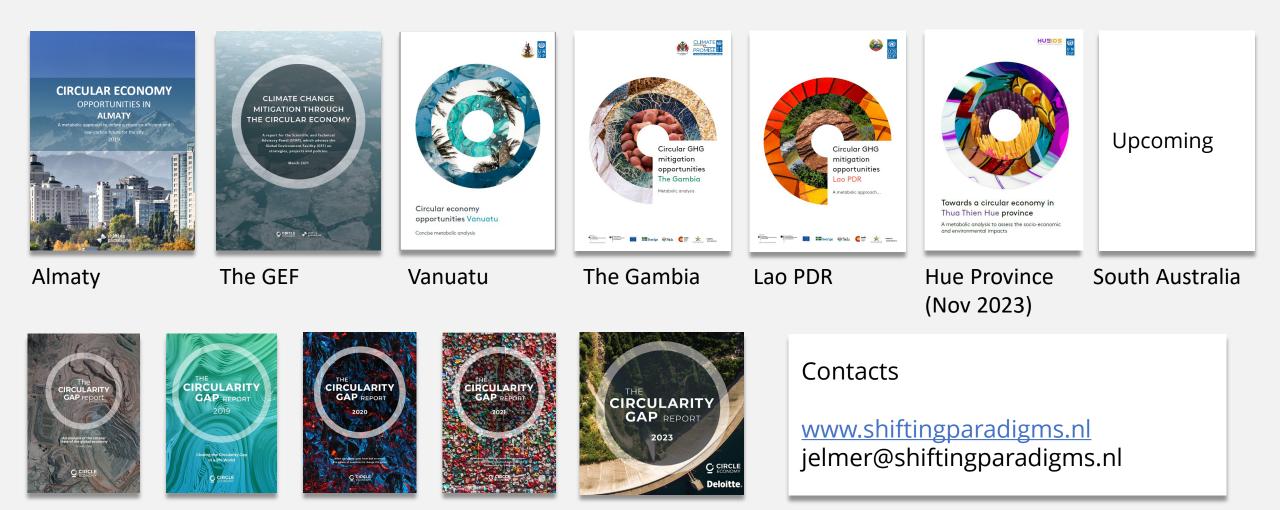
Align all aspects which affect investment decisions and consumer behavior

- Adjust the tax system (to avoid rebounds)
- 2. Regulate marketing
- 3. Remove legal barriers

Sources: Photo by <u>Brianna Tucker</u> on <u>Unsplash</u>; Ex'tax (2022). The Taxshift

Further reading





Annual global circularity gap reports



Thank you