

Ethical Consumer Week 2023

# What would more ambitious climate targets for the UK look like?

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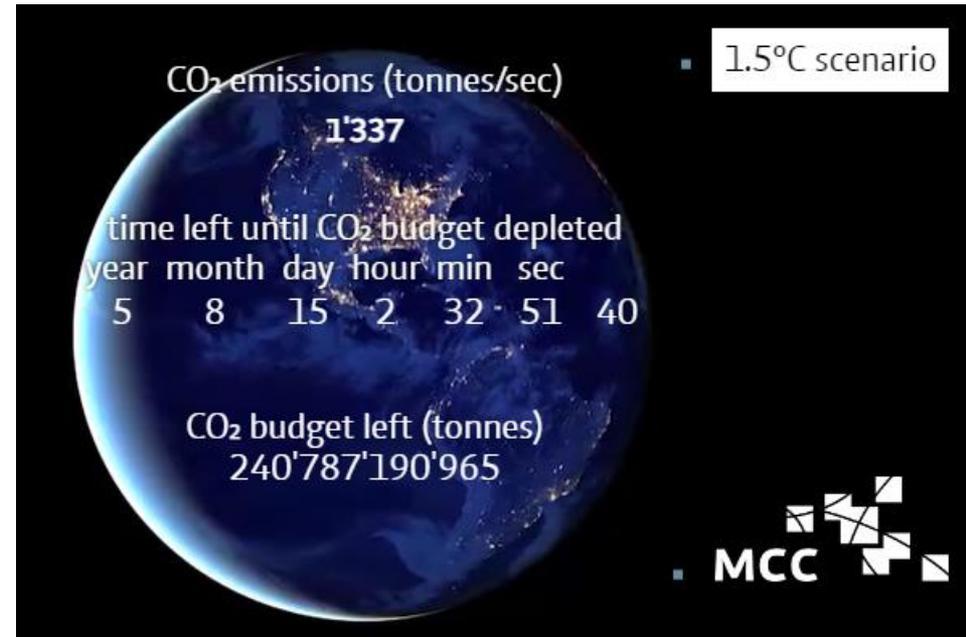
# Outline



- What is a ‘fair’ carbon budget?
  - Remaining carbon budget
  - Different ways of measuring carbon emissions
- Inequalities in carbon footprints
- Doughnut Economics and Sufficiency Lifestyles

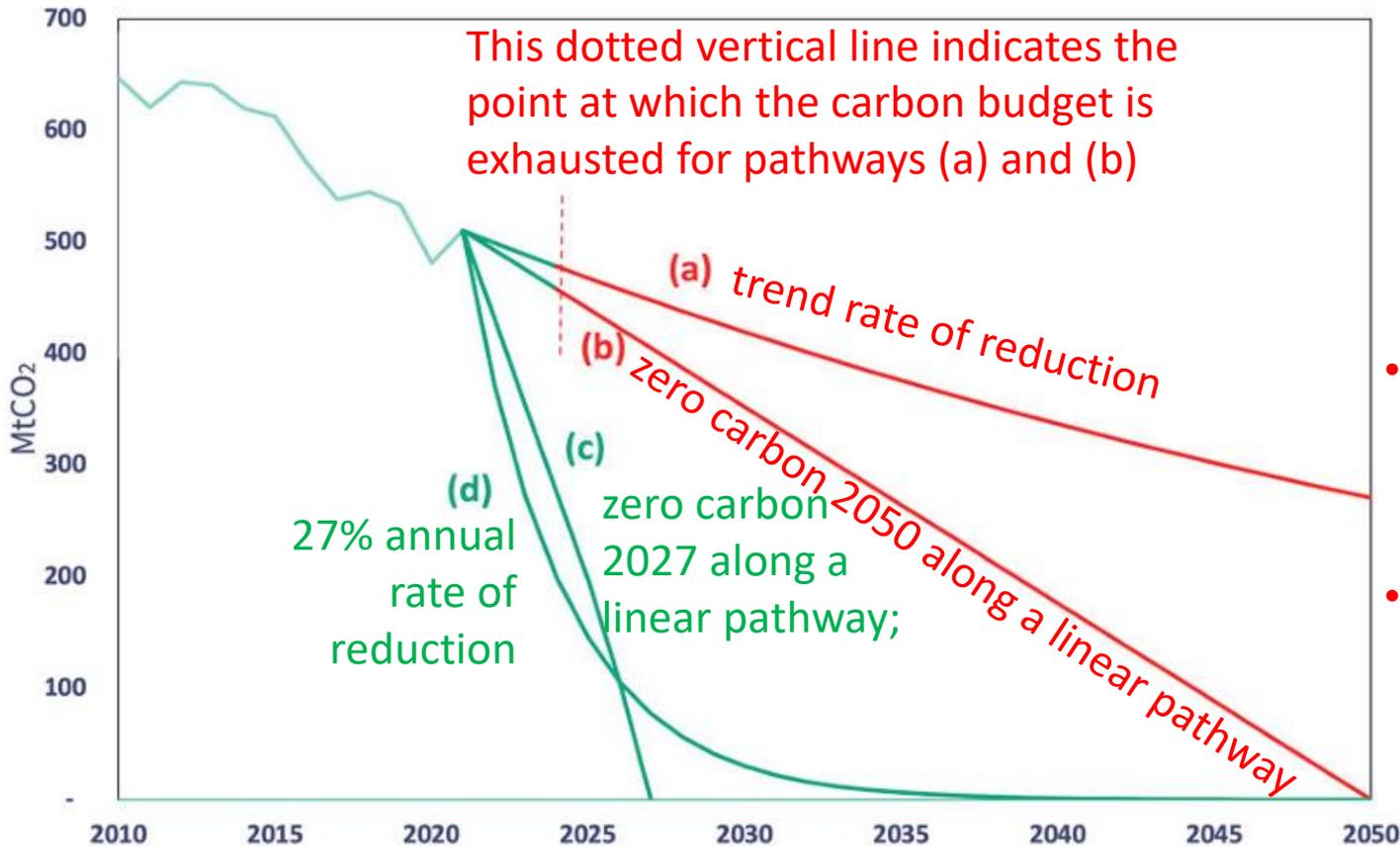
# Carbon budgets and meaningful targets

- Climate Change Commission has set a national target to reach net zero carbon emissions by 2050;
- How meaningful and fair is this target?
- “Remaining carbon budget”
  - The maximum amount of carbon emissions that can be emitted to stabilise warming at 1.5C.
- How should it be divided up?
  - Pro rata basis gives UK 2.8Gt CO<sub>2</sub>
  - But is this fair? UK has historically used more and therefore has higher responsibility;
  - A commonly used “fair” remaining budget is ~2.4Gt CO<sub>2</sub>
- How close is the UK to staying within our remaining carbon budget?



Mercator Research Institute

<https://www.mcc-berlin.net/en/research/co2-budget.html>

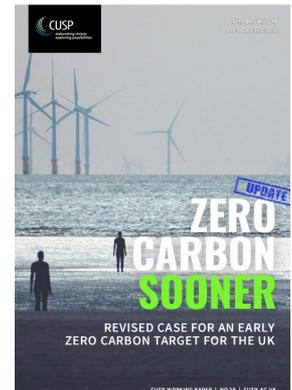


- “A target date for zero carbon is not sufficient in itself to determine whether the UK remains within its carbon budget.
- Policy must specify both a target date and an associated emissions pathway.”
- Current policies will exhaust the carbon budget well before 2030.

## Historical emissions and future emission pathways

Consumption perspective

Jackson T 2021. Zero Carbon Sooner—Revised case for an early zero carbon target for the UK. CUSP Working Paper No 29. Guildford: Centre for the Understanding of Sustainable Prosperity. [www.cusp.ac.uk/publications](http://www.cusp.ac.uk/publications)



Emissions can be accounted for using two different perspectives

- which perspective is used matters

**TV made in China, purchased in the UK, by a UK consumer:**

- Which nation should take responsibility for the emissions?**





## a) Why China should take responsibility

- Production happens under China's regulations
  - electricity mix
  - technology used
- China has the ability to reduce the production emissions

## b) Why the UK should take responsibility

- UK consumers drive the market
- Power to reduce emissions through consumption changes.

Both perspectives are valid.

Two ways of accounting for carbon emissions:

- **Production accounting perspective: Carbon emissions attributed to China;**
- **Consumption accounting perspective: Carbon emissions attributed to UK consumption.**

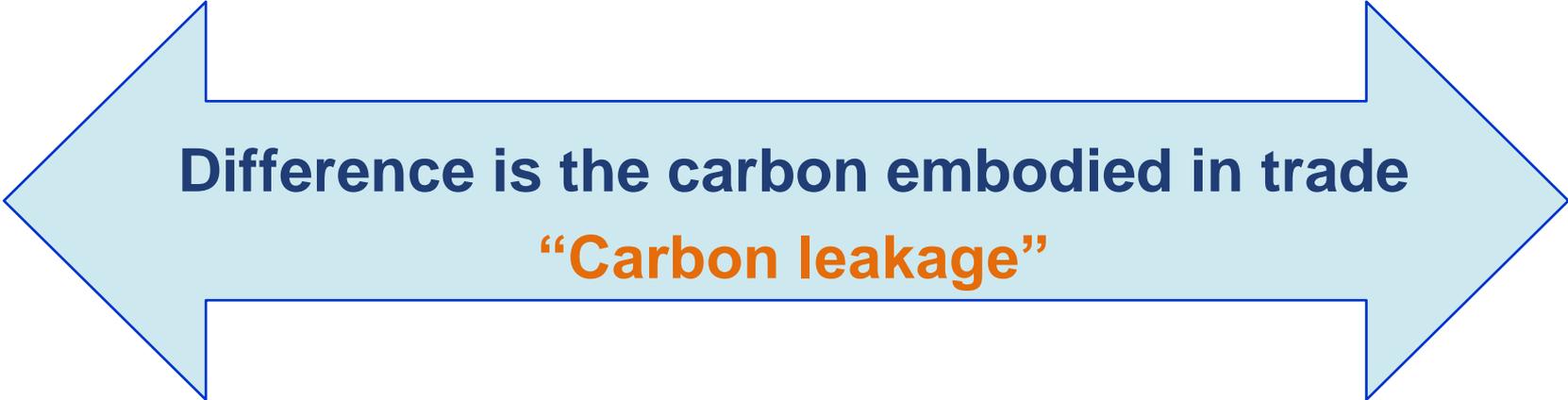
# Production and consumption accounting

- **Production Perspective**

- Territorial emissions;
- Includes exports, excludes imports;
- National emissions inventory.
- Used by UNFCCC in international climate negotiations and UK Climate Change Committee

- **Consumption Perspective**

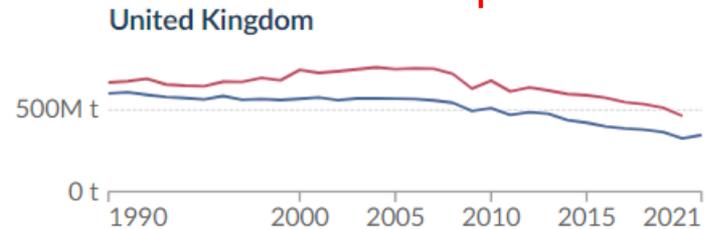
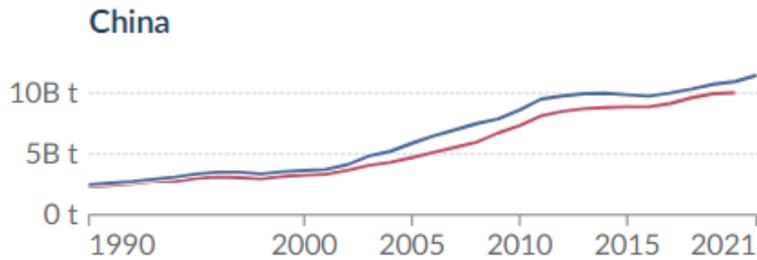
- Consumption-based emissions;
- Includes imports, excludes exports;
- Hard to estimate.



**Difference is the carbon embodied in trade**

**“Carbon leakage”**

## The 'carbon footprint' of the UK



■ Production-based ■ Consumption-based

Consumption accounting is arguably the most ethical way of measuring emissions.

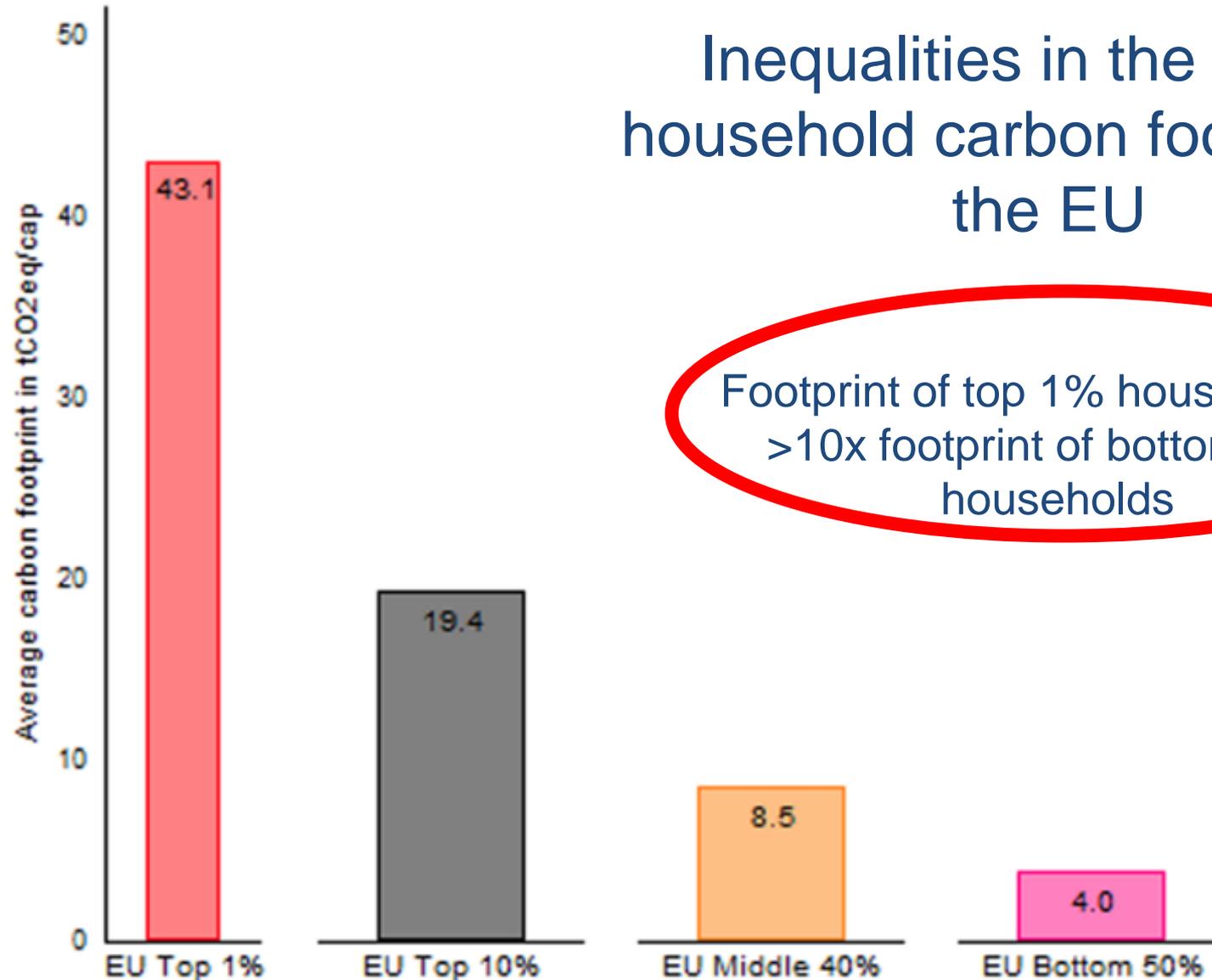
This implies a bigger task than when measuring according to the production perspective.

When calculated from the consumption perspective, absolute reductions approaching 95% of current carbon emissions as early as 2030 are required, for the UK to stay within its 'fair' remaining carbon budget.

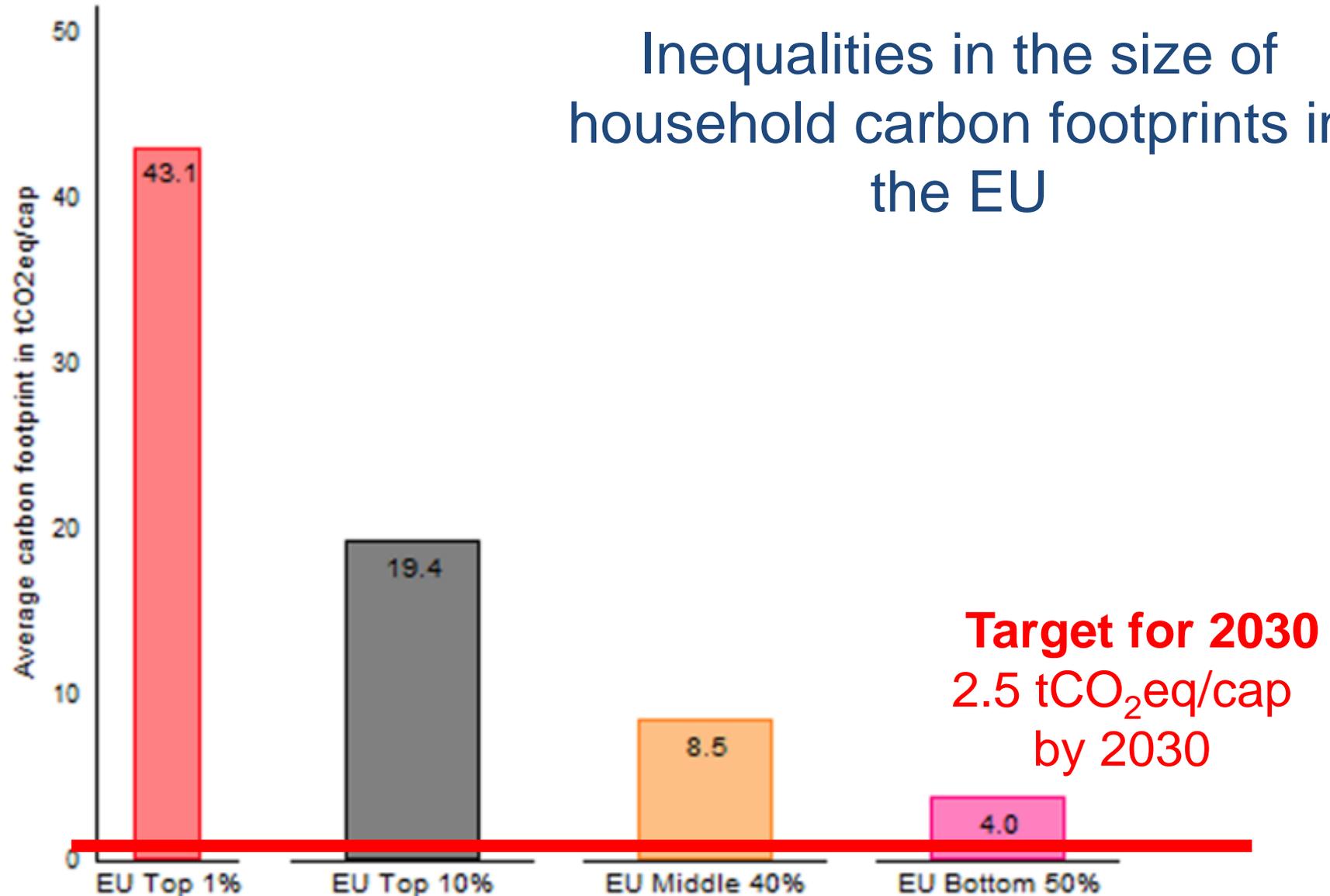


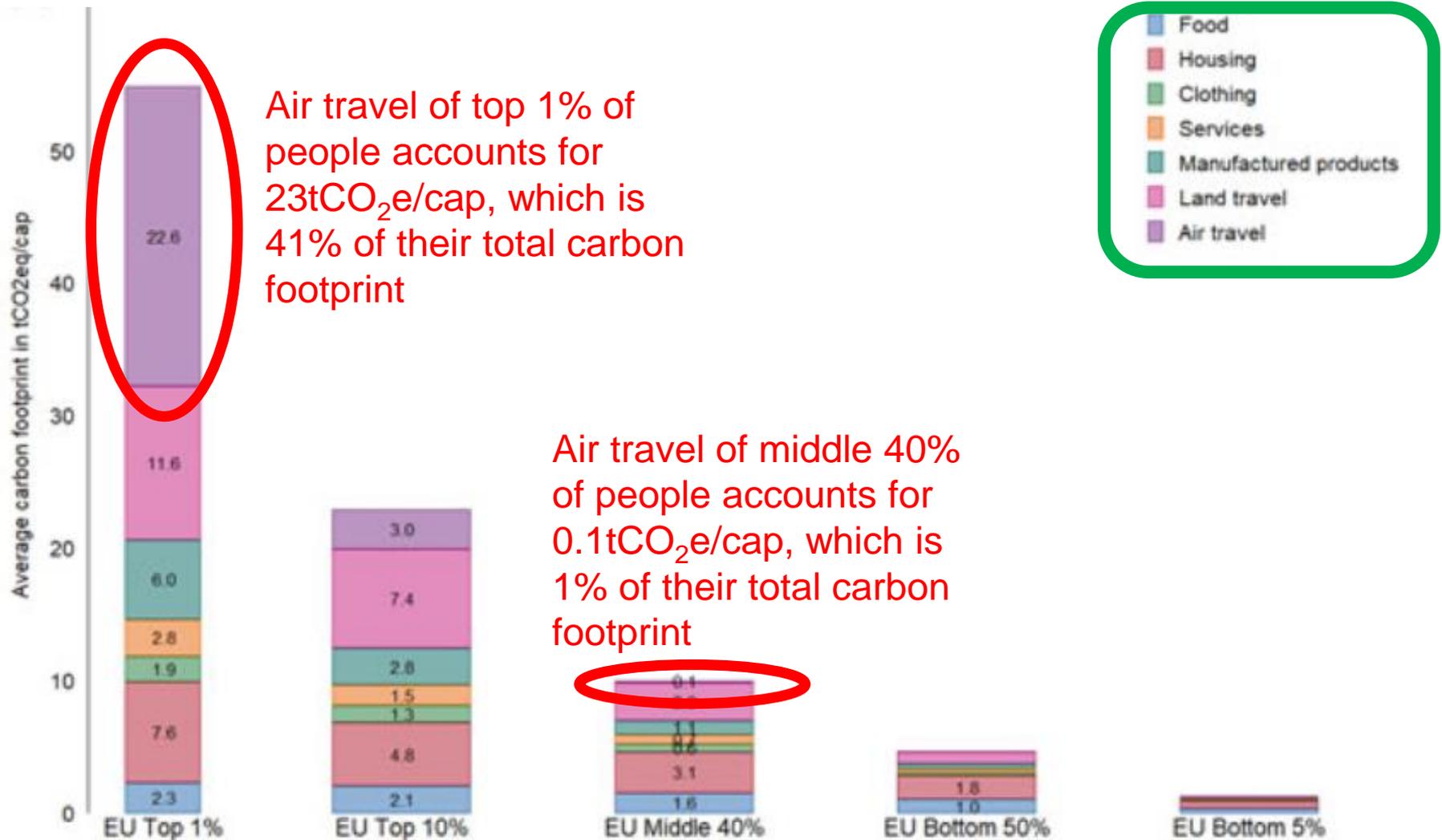
So far we have been talking about an averages.....

# Inequalities in the size of household carbon footprints in the EU



# Inequalities in the size of household carbon footprints in the EU

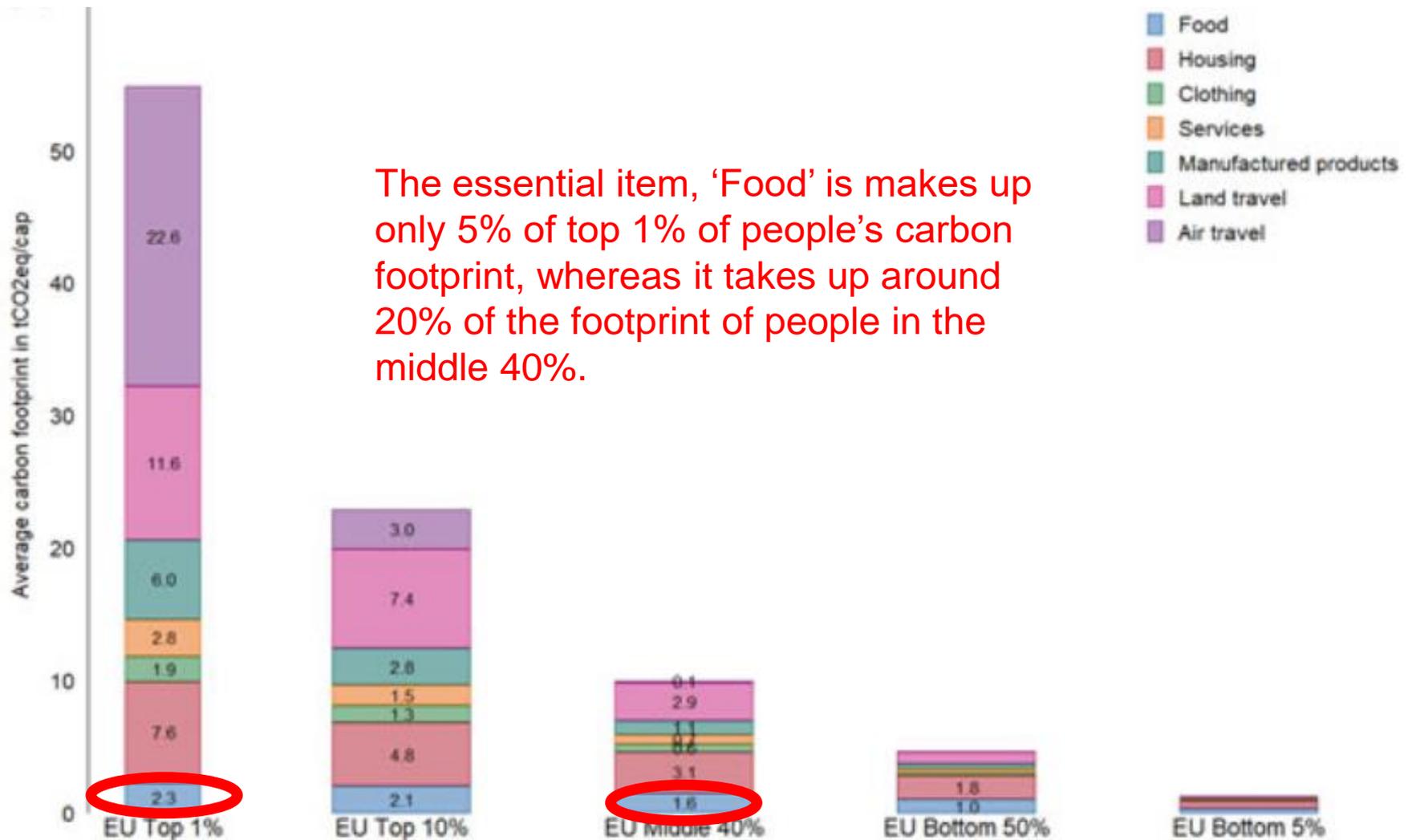




## Average carbon footprint distribution by consumption category in the European Union

Source: Ivanova, D. and R. Wood (2020). "The unequal distribution of household carbon footprints in Europe and its link to sustainability." *Global Sustainability* **3**.

<https://doi.org/10.1017/sus.2020.12>

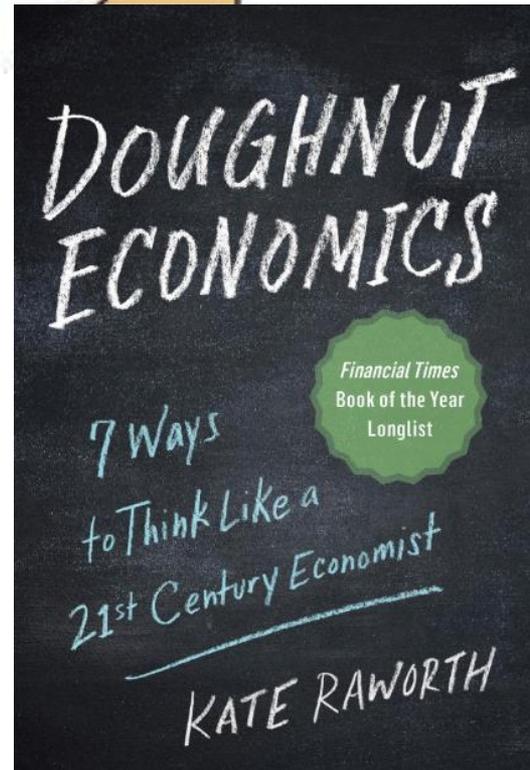


The essential item, 'Food' is makes up only 5% of top 1% of people's carbon footprint, whereas it takes up around 20% of the footprint of people in the middle 40%.

## Average carbon footprint distribution by consumption category in the European Union

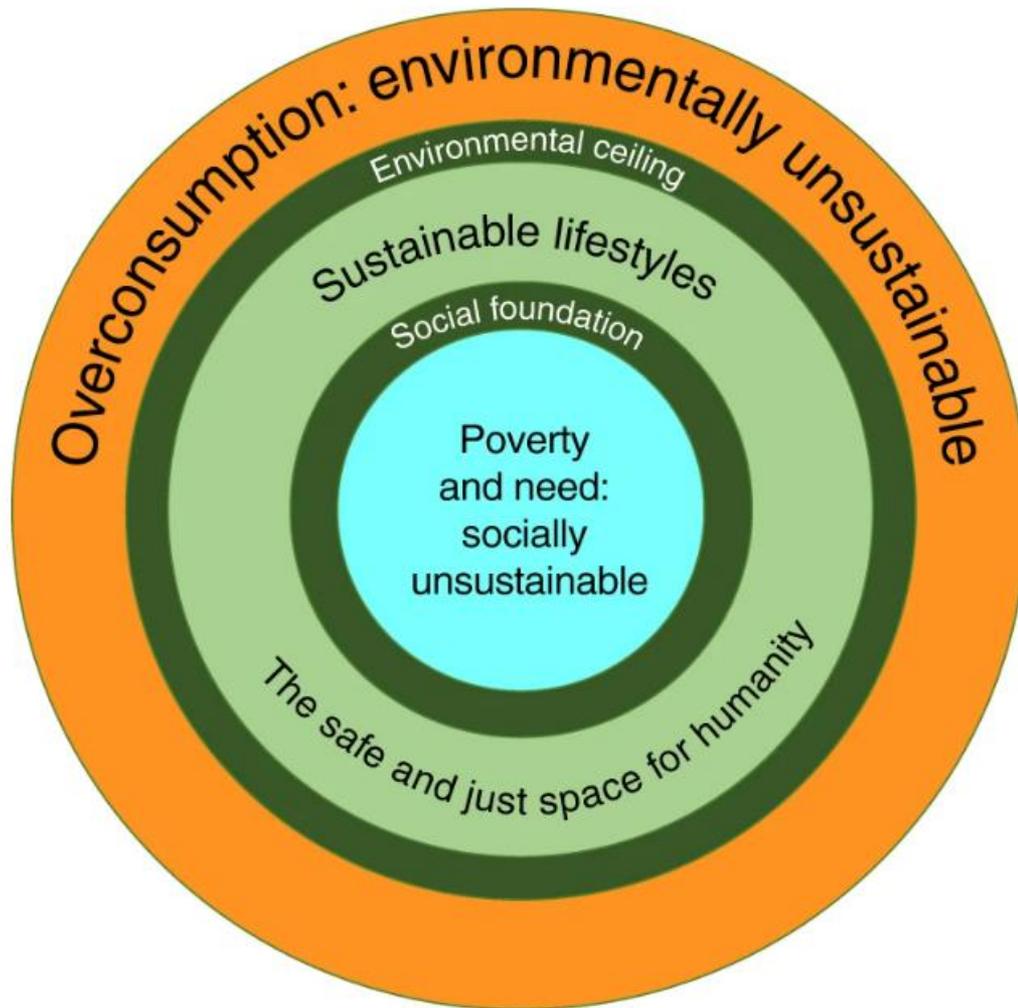
Source: Ivanova, D. and R. Wood (2020). "The unequal distribution of household carbon footprints in Europe and its link to sustainability." Global Sustainability **3**.

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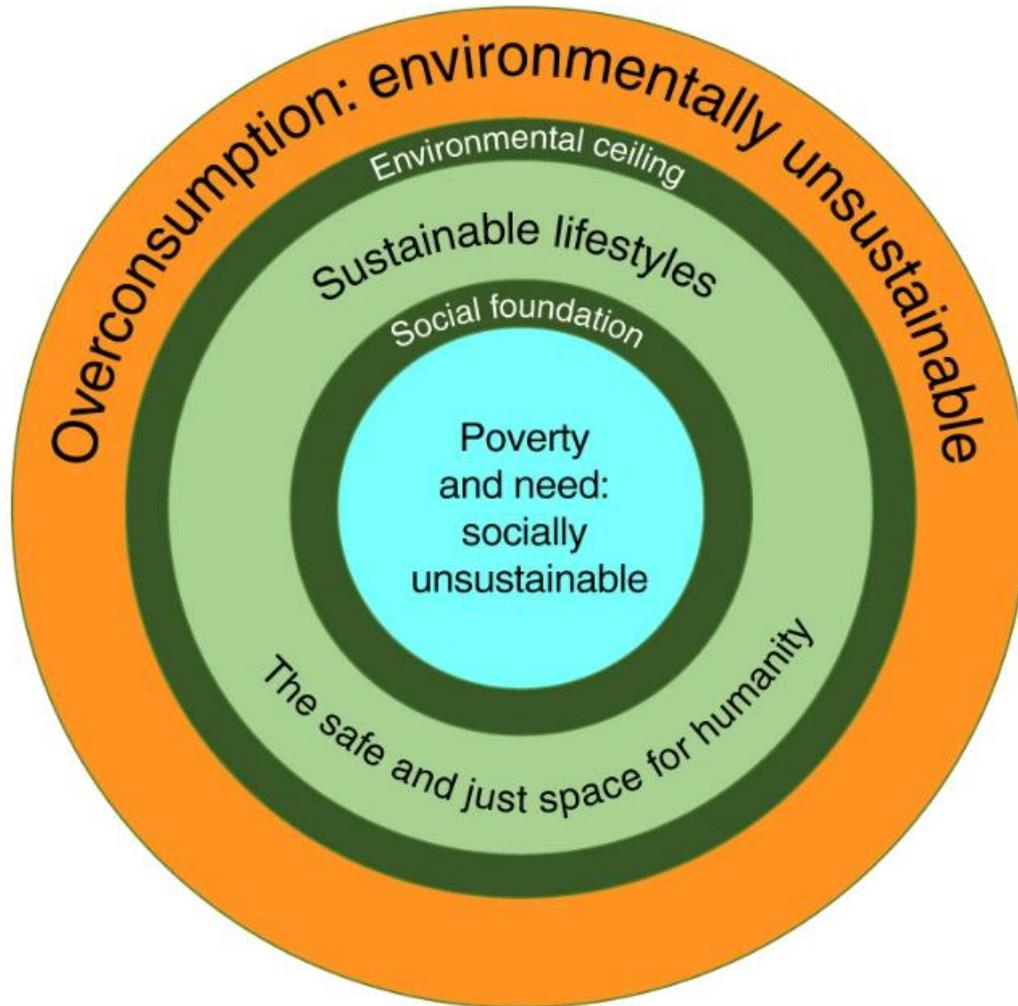
# The safe and just space for humanity

Sustainable lifestyles



Sources: Wiedmann, T., M. Lenzen, L. T. Keyßer and J. K. Steinberger (2020). "Scientists' warning on affluence." Nature Communications 11(1): 3107. Raworth, K. (2012). "A safe and just space for humanity: can we live within the doughnut." Oxfam Policy and Practice: Climate Change and Resilience 8(1): 1-26.

# The safe and just space for humanity



Sustainable lifestyles are situated between an **upper limit of permissible use** (“**Environmental ceiling**”) and a lower limit of necessary use of environmental resources (“**Social foundation**”)

Sources: Wiedmann, T., M. Lenzen, L. T. Keyßer and J. K. Steinberger (2020). "Scientists' warning on affluence." Nature Communications 11(1): 3107. Raworth, K. (2012). "A safe and just space for humanity: can we live within the doughnut." Oxfam Policy and Practice: Climate Change and Resilience 8(1): 1-26.

# Sufficiency Lifestyles

*'A good life for all within planetary boundaries'* (O'Neill et al (2018))

- Sufficient nutrition
- Sufficient access to energy
- Sufficient access to education
- Sufficient accessibility to work and leisure activities
- Sufficient living space per capita
- ....

# Sufficiency Lifestyles

- Currently there is no country that achieves sufficiency.
- Although nations like the US and UK satisfy basic needs, their resource use is unsustainable.
- In contrast, countries such as Sri Lanka are within sustainable resource consumption per capita, but do not meet basic needs.

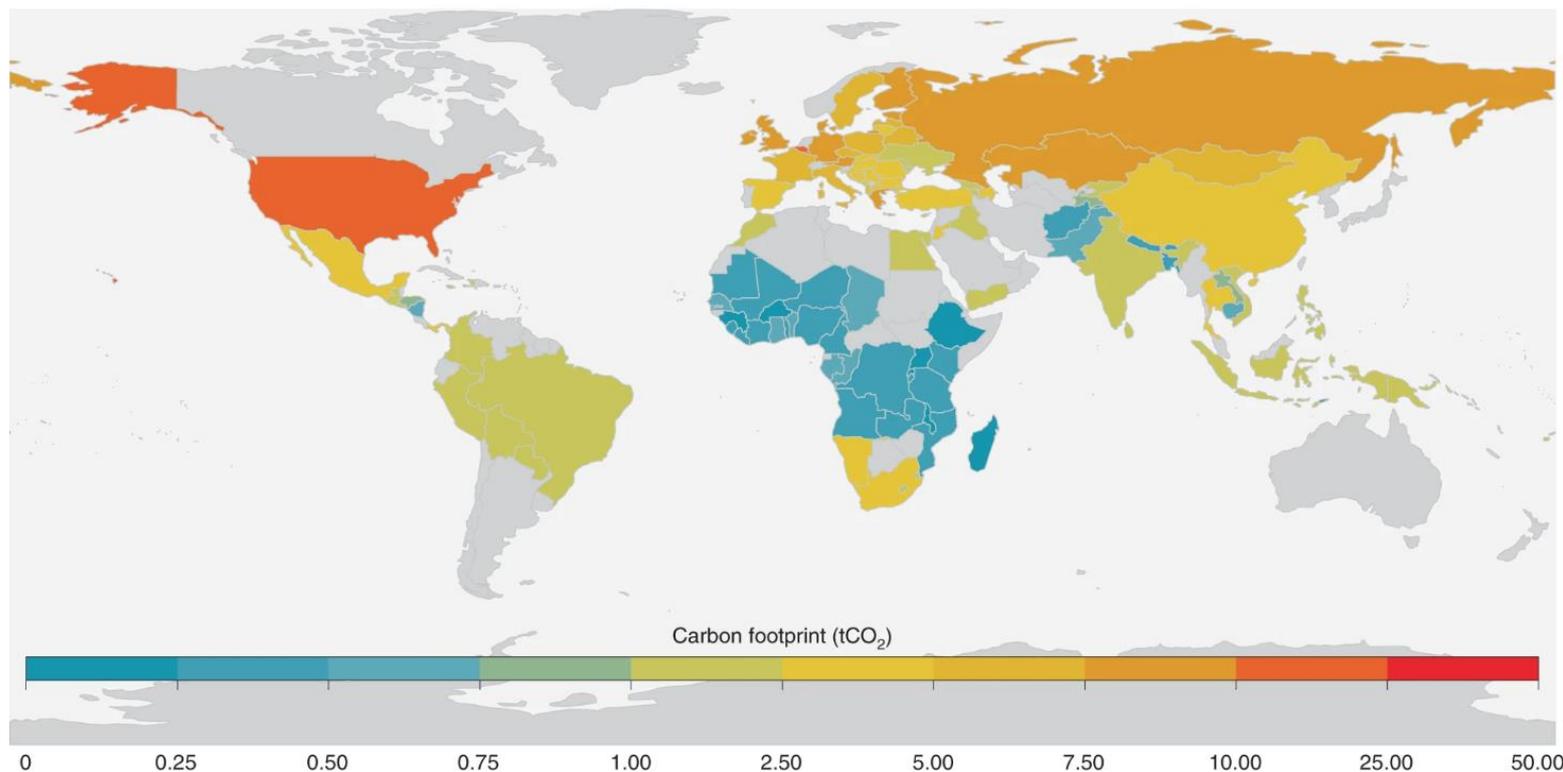




# Lifting people out of poverty is not high carbon

*“...the majority of people living below poverty lines have yearly carbon footprints of less than 1 tCO<sub>2</sub> .....*

*lifting more than one billion people out of poverty, leads to only small relative increases in global carbon emissions of 1.6–2.1% or less.*



Source: Bruckner, B., K. Hubacek, Y. Shan, H. Zhong and K. Feng (2022). "Impacts of poverty alleviation on national and global carbon emissions." Nature Sustainability **5(4): 311-320.**

**Costa Rica** has high levels of wellbeing with a relatively low GDP and minimal pressures on the environment.



Map data ©2023 INEGI

<https://www.google.co.uk/maps/>

Costa Rica – Investing in Social and Ecological Wellbeing  
<https://weall.org/resource/costa-rica-investing-in-social-and-ecological-wellbeing>

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# Thank you!

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