

# *Life vs. Growth: How heterodox economics should help turn the tide on planetary disaster capitalism*



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University of Lausanne (starting August 2020)

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# A recruitment agenda

We desperately need heterodox economists to engage with climate & ecological crises.

1. Convince you of urgency of crises.
2. Demonstrate that “green growth” will not work.
3. If degrowth is necessary, what does it mean?
4. Implications for development & global south.

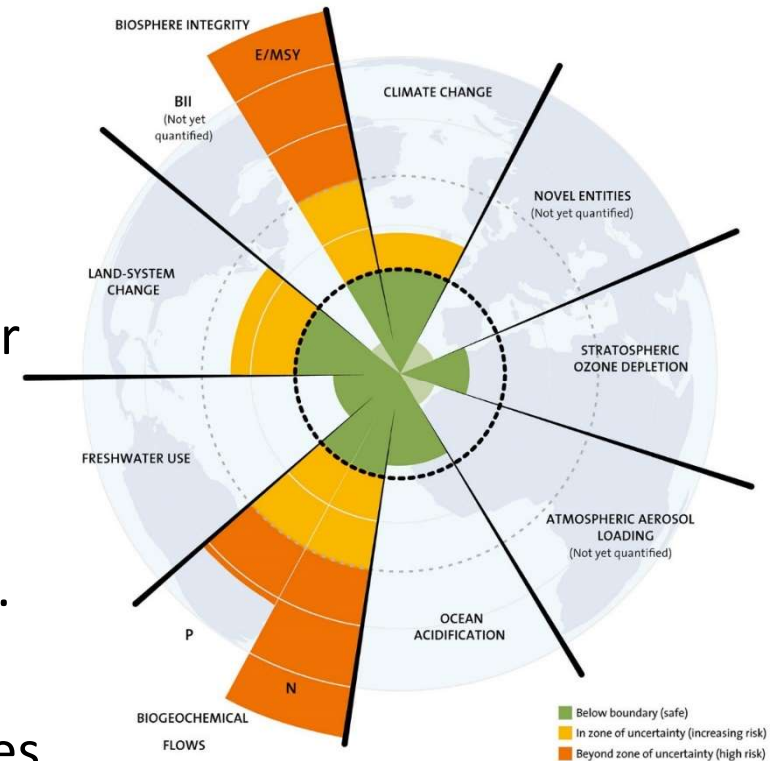


# Climate & ecological crises

- We are facing multiple intertwined environmental crises which are:
  - Of planetary scale
  - Accelerating
  - Irreversible
  - Linked to the resource use & waste of our economies
  - Put the possibility of civilized human societies at risk within this century
  - Can still be prevented during this decade.

- Main ones are:

- Climate change = global warming. Includes ocean acidification
  - IPCC reports & UNEP Emissions Gap Report
- Biodiversity & ecosystem loss (6<sup>th</sup> mass extinction)
  - IPBES , WWF Living Planet Report



Planetary Boundaries  
Steffen et al 2015

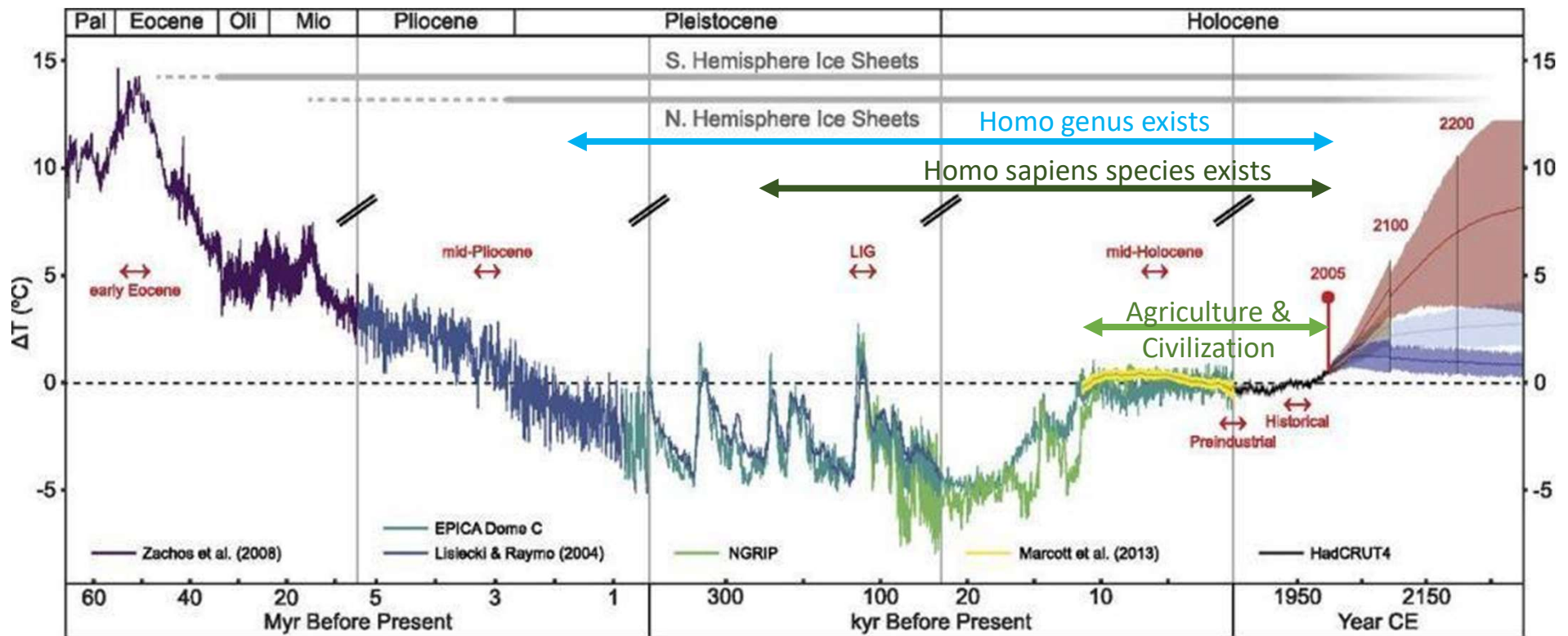
Global warming means rolling back the planetary climate clock to temperatures never experienced by Homo Genus.



50 million years by 2150, on our current trajectory



3 million years by 2030, on our current trajectory.  
By 2040 if we immediately & massively reduce emissions.



Burke et al 2018, PNAS

# 2 core facts for economists

## 1. **Economic growth is driving environmental breakdown (climate & biodiversity).**

- “Scientists Warning on Affluence” Wiedmann et al 2020 Nature Communications.
- “Biodiversity policy beyond economic growth” Otero et al 2020 Conservation Letters

## 2. **Proposals that growth can be decoupled from environmental impacts are a reality-free zone.**

- “Is green growth possible?” Hickel & Kallis 2019 New Political Economy.
- “A systematic review of the evidence on decoupling of GDP, resource use and GHG emissions” 2020 in Environmental Research Letters
  - “Part 1: bibliometric and conceptual mapping” Wiedenhofer et al
  - “Part 2: Synthesizing the insights” Haberl et al

# Two quotes

“A potentially fundamental incompatibility between economic growth and systemic societal changes to address the climate crisis is rarely considered. We conclude that the existing wealth of empirical evidence merits **braver conceptual advances** than we have seen thus far. “

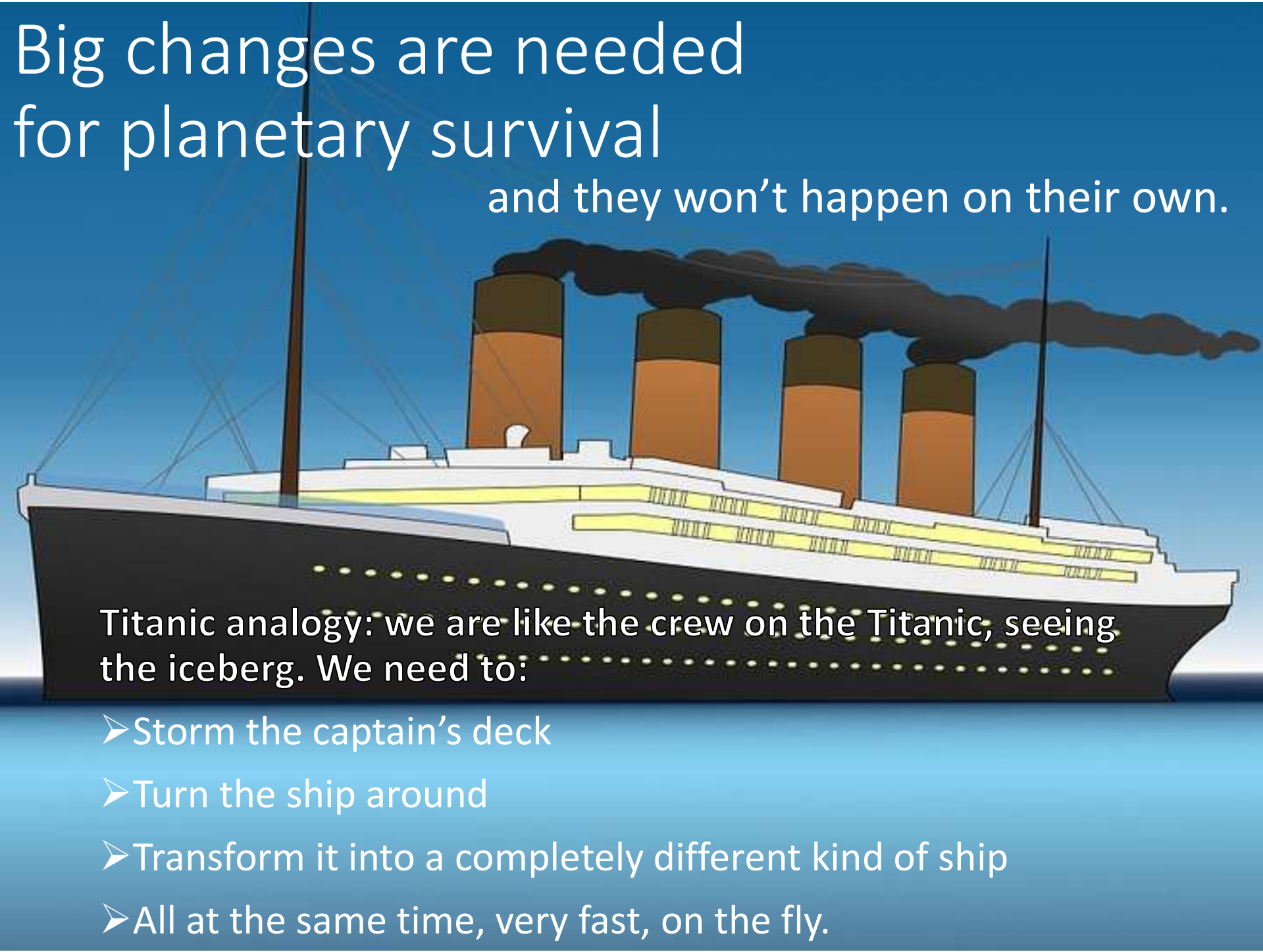
Wiedenhofer et al, ERL, 2020

“We conclude that large rapid absolute reductions of resource use and GHG emissions cannot be achieved through observed decoupling rates, hence decoupling needs to be complemented by **sufficiency-oriented strategies and strict enforcement of absolute reduction targets**. More research is needed on interdependencies between wellbeing, resources and emissions.”

Haberl et al, ERL, 2020

# Big changes are needed for planetary survival

and they won't happen on their own.

A stylized illustration of the RMS Titanic sailing on a blue sea under a clear blue sky. The ship is shown from a side profile, moving towards the right. It has a black hull, a white upper section, and four prominent orange-brown funnels with black tops. Thick black smoke is billowing from the funnels. The ship's decks are visible with yellow railings. The background is a solid blue sky.

Titanic analogy: we are like the crew on the Titanic, seeing the iceberg. We need to:

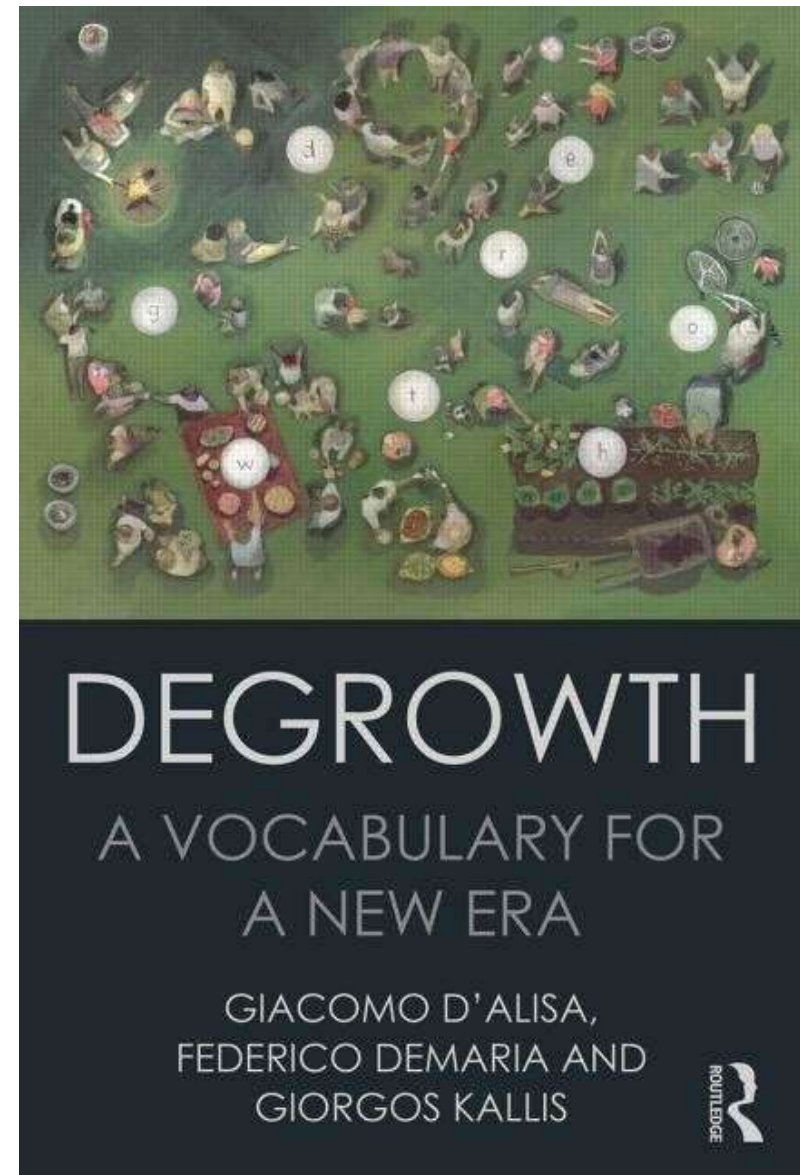
- Storm the captain's deck
- Turn the ship around
- Transform it into a completely different kind of ship
- All at the same time, very fast, on the fly.



# Degrowth: what does it mean?

- Full frontal attack on growth-based ideology & economics.
- We might not be able to decouple environmental impacts from economic growth, but we *can* decouple social progress & well-being from it (Steinberger et al 2020).
- Based on ideas of equity, political ecology, feminist economics, economic democracy: social progress as separate from growth.

Kallis, G. et al. Research on degrowth. *Annu. Rev. Environ. Resour.* **43**, 291–316 (2018).





# What are the problems with growth? And how can you help?

- Growth accrues to the wealthy and increases inequality (Piketty & Co).
- Growth is structurally required by capitalism as a stabilization mechanism against crises (Blauwhof 2012, Richters & Siemonheit 2019).
  - Our societies are not safe in the absence of growth: we have to deliberately growth-proof our economies (Büchs & Koch 2017).
- Growth, seen as a proxy for social progress, prevents action on social (and environmental) protection.
  - Best to target those directly (Universal Basic Services, Anna Coote).
- Need to understand growth imperative built into exploitative & extractive supply chains, aka provisioning systems.
  - Fine & Bayliss “Systems of Provision,” applied to car dependency by Mattioli et al 2020.

# Systems of Provision as an analytic tool for planetary breakdown

**Table 1**

Main strategies of legitimization for road building.

Strategy	Variant	Summary	Application & purpose
1a - Appeal to economic growth	Neoclassical	'road building is necessary to accommodate economic growth'	Used in times of economic growth
1b - Appeal to economic growth	Keynesian	'road building is required to stimulate economic growth'	Used in times of economic crisis
2 - Appeal to popular consumerism	–	'car infrastructure is required by consumer preferences'	Appeals to the political right
3 - Road building as a means to regional development and social inclusion	–	'car infrastructure is required for region X to grow and 'catch up' with the rest of the country', or to facilitate social inclusion	Appeals to the political left
4 - Road building as a solution to the problems caused by increasing motorization	–	'the answer to current transport problems is road building'	Fuels self-reinforcing cycle of road building, traffic growth and congestion, through induced demand
5 - Appeal to technical expertise	–	'road building is sanctioned to be in the public interest'	Removes road building from public/political debate

# A political economy anatomy of lock-in

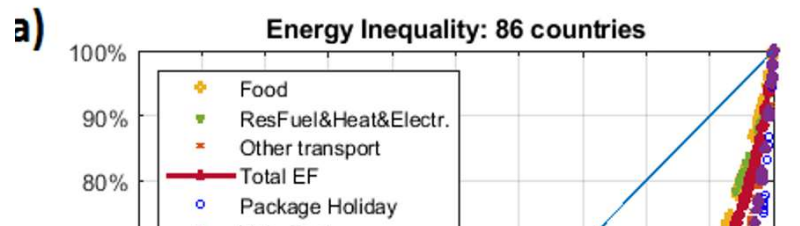
<i>Cause:</i>		1 Automotive Industry	2 Car Infrastructure		
<i>Effect:</i>					
1 Automotive industry			Car infrastructure enables the sale of more cars, by providing space to accommodate them. The status of roads goes from shared public spaces to motorised flow spaces, literally driving other modes out, and enhancing the value of car ownership.		
2 Car Infrastructure		The automotive industry plays a key role in lobbying coalitions which pressure government to invest public resources, and co-opt public space, to make room for cars.			
5 Car Culture	The car industry actively supports the development of car culture, both deliberately, through advertising and marketing, and tacitly, through the built-in redundancy in the vehicles they sell, and the effects this has on people's daily practices.	Car infrastructure creates practices, habits and cultural trends (e.g. it is normalised as a symbol in children's toys).	Land use patterns, both for residential and work developments, normalise car transport, ensuring that alternatives are portrayed as marginal.	Poor public transport networks encourage more people to adopt car-centric lifestyles.	

*Mattioli, Roberts, Steinberger & Brown, 2020, Energy Research and Social Science*

# Growth vs well-being (1): distribution

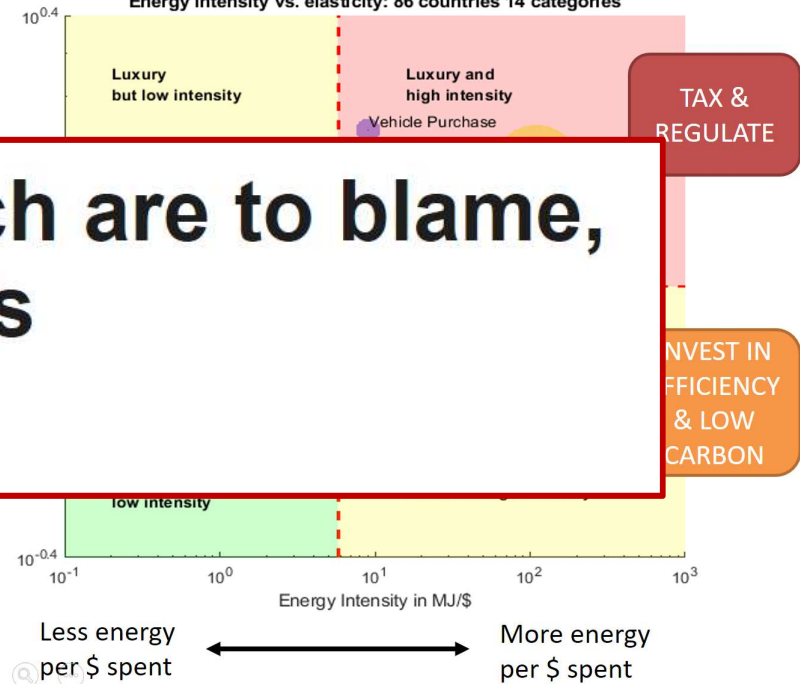
- Need to stop considering growth, and even “magnitude of consumption,” as a pre-requisite for human progress.
- Issues of distribution are inter- and intra-nationally dominant.

*Oswald et al 2020 Nature Energy*



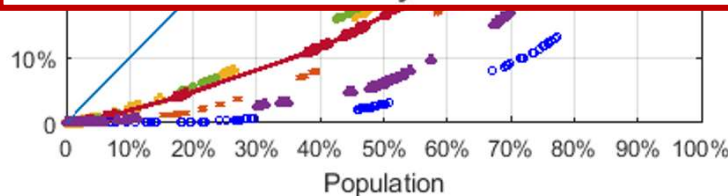
Consumed  
more by  
rich people

**Energy intensity vs. elasticity: 86 countries 14 categories**



**Climate change: The rich are to blame, international study finds**

By Roger Harrabin  
BBC environment analyst

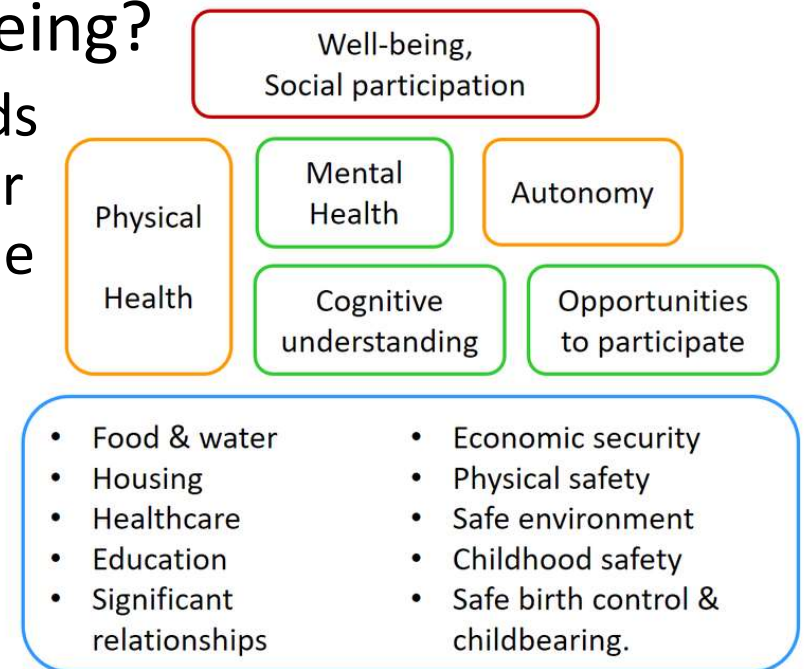


# Growth vs. well-being (2): how much energy do we need?

- Past increases in economic, energy and emissions growth have not led to increases in life expectancy: Steinberger et al 2020.

- How do we understand well-being?

- Based on theory of human needs of Doyal & Gough: finite number of satiable and non-substitutable human needs.
- Human needs are universal across space & time, how they are satisfied (=“satisfiers”) can change.



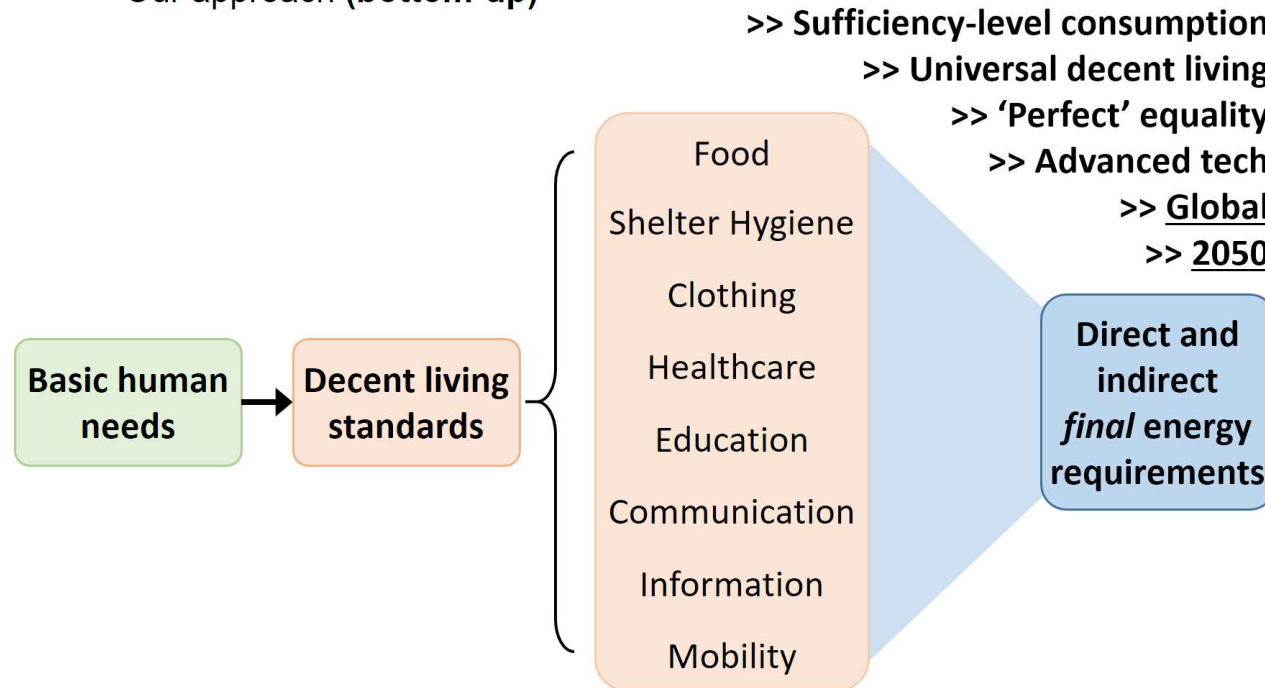
Evidence? O'Neill et al 2018, Nature Sustainability

# We can estimate and model universal well-being energy demand.

- Based on the work of Prof Narasimha Rao of Yale.
- Estimate energy services required for decent living, and their efficient (entire lifecycle) energy footprints.

From **basic needs** to **materials & services** to **energy consumption**

>> Our approach (**bottom-up**)





Slide removed since unpublished  
results

# Conclusion?

- We need the heterodox community to come on board the fight against planetary breakdown, NOW.
- Development and degrowth are not opposites: they are co-requisites.
- Degrowth has not yet engaged enough with financialization, globalization, international trade relations (incl. debt). This can be core contribution of Heterodox Economists.
- There is a huge audience for this research among social movements and progressive political parties (Green New Deal). It's crucial to engage.

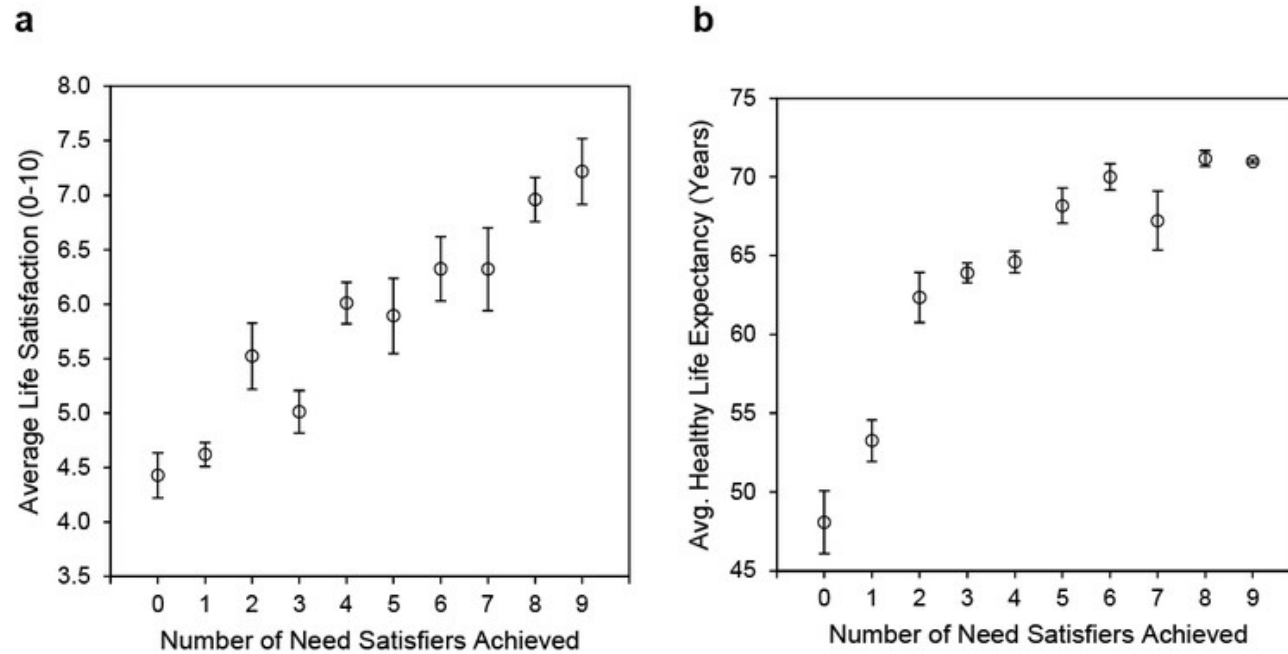


ENVIRONMENT OCTOBER 13, 2019 / 3:09 AM / 3 DAYS AGO

## Scientists endorse mass civil disobedience to force climate action

Matthew Green 5 MIN READ

LONDON (Reuters) - Almost 400 scientists have endorsed a civil disobedience campaign aimed at forcing governments to take rapid action to tackle climate change, warning that failure could inflict “incalculable human suffering.”



**Supplementary Fig. 1.** Average values of (a) life satisfaction, and (b) healthy life expectancy, for countries based on the number of needs-related social thresholds achieved. Error bars give the standard error of the mean. The countries included are the same as in Fig. 2 of the main text ( $N = 109$ ).