

# Climate change, inequality and social policy

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**First CISP seminar, LSE**  
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# New seminar series

Studies relationship between

- environmental pressures, specifically **climate change**, and
- the '**social dimension**' of inequality and human wellbeing

Brings together these areas of study and action, to facilitate an **interdisciplinary dialogue** between them and develop an agenda for research and policy

Opening premise:

- **climate policy** should be equitable and oriented to human wellbeing
- **social and economic policy** should be precautionary and sustainable.

# Today's seminar

Overall introduction to the field, with findings and policy ideas, in three parts:

1. Climate change and human wellbeing
2. Inequality
3. From social policy to eco-social policy

*Heat, Greed and Human Need: Climate change, capitalism and sustainable wellbeing* (Edward Elgar 2017)

# 1. CLIMATE CHANGE AND HUMAN WELLBEING

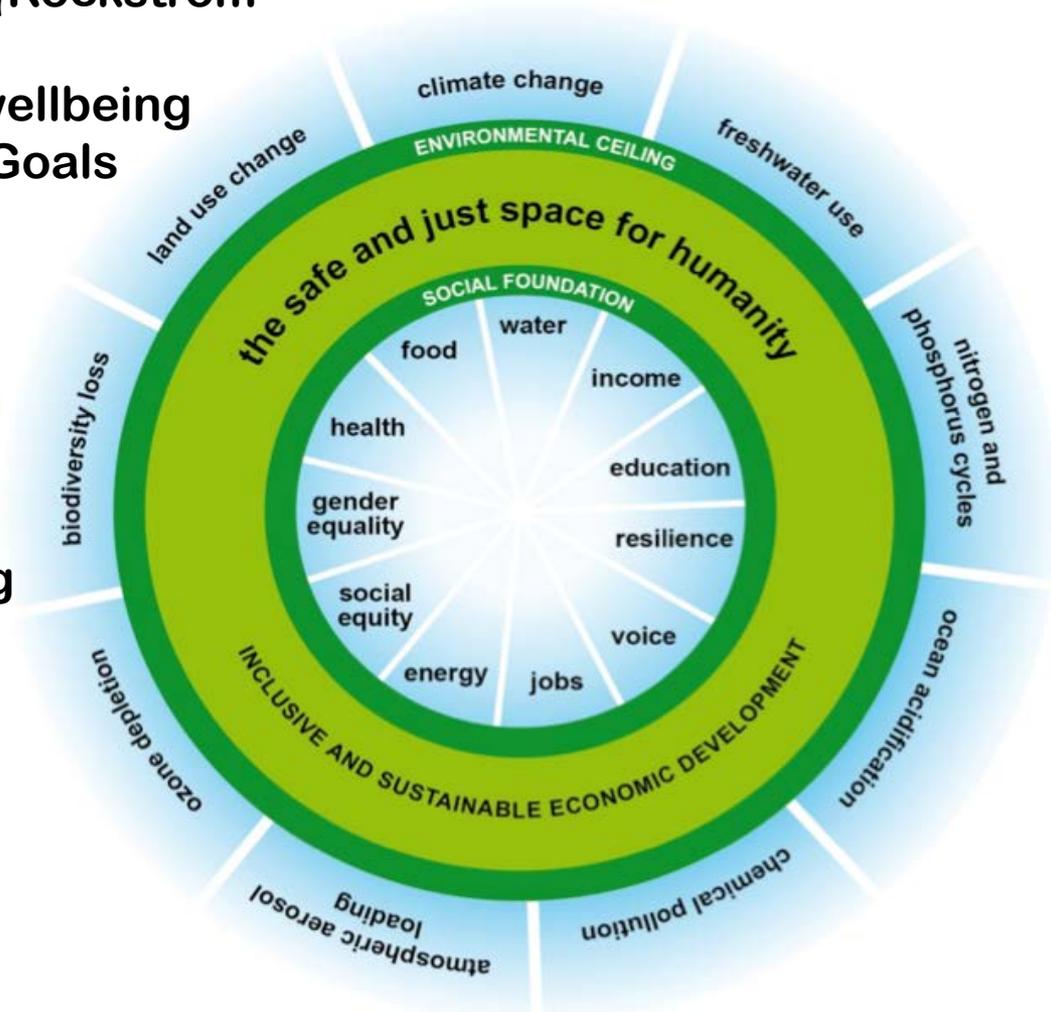
Rowarth's 'lifecycle':

- **Outer:** 9 planetary boundaries (Rockström *et al* 2009)
- **Inner:** Components of human wellbeing (UN Sustainable Development Goals 2015).

The most urgent global task:

**to live within the 'lifecycle'**

- everyone above social foundations which guard against social deprivations without exceeding planetary boundaries
- so that **future generations** do not fall below these social foundations

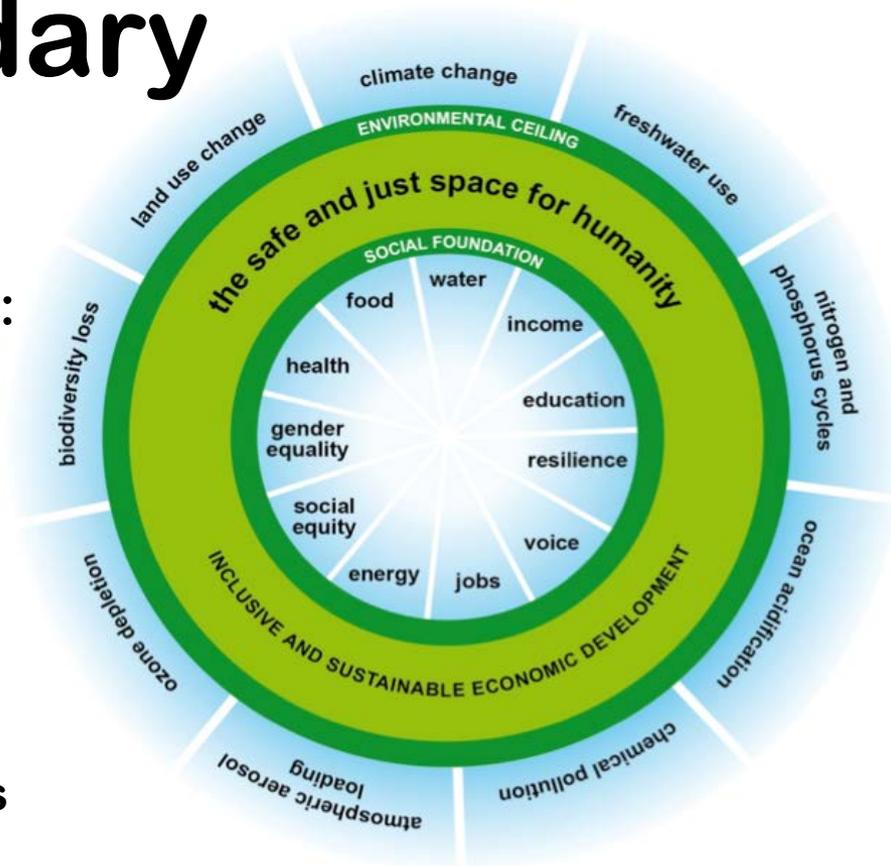


# The outer boundary

**Three of the nine** critical Earth-system processes already crossed:

- Biodiversity loss
- Nitrogen cycle
- Climate change

‘Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of **severe, pervasive and irreversible impacts** for people and ecosystems. Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions’ (IPCC, 2015)



# The inner boundary

## Sustainable Development Goals, UN 2015



# From outer to inner boundary

Policies: **Mitigation**, **geo-engineering**, **adaptation**

Economic activity  
Energy consumption  
Greenhouse gas emissions  
(Absorption by GHG sinks)

GHG cumulative concentrations  
Global temperature rise  
Regional and local climate change

Impacts on human habitats and on human wellbeing

# Rethinking the ‘social dimension’

Important to **distinguish between**:

- money income
    - e.g. Poverty
  - non-monetary aspects of wellbeing
    - e.g. Nutrition, health, education
- (average levels and distribution matter in both)
- and societal pre-requisites for meeting human needs
    - e.g. Gender equality, sustainability and peace.

The SDGs **muddle** them all up.

# Non-monetary concepts of wellbeing

## Subjective wellbeing

- ‘Happiness’, life satisfaction
  - Problems: adaptive preferences; cultural differences make spatial and temporal comparisons impossible

## Objective wellbeing

- Capabilities/functionings, basic needs
  - Measures include Human Development Index (HDI)

**Objective measures** are a better way to encompass wellbeing over **space and time**

# Universal human needs

## The theory

- Basic human needs are **universal**. If they are not satisfied then serious harm results

## Major **contributions** to need theory

- Nussbaum and central human capabilities
- Eudaimonic psychology and psychological needs
- Theories of human need
  - (Gough, Cambridge Journal of Economics 2015)

# What are basic needs?

Broad consensus that these needs are **universal**:

- Participation/ relatedness/ belonging
- Health
- Autonomy, which covers:
  - Cognitive and emotional capacity
  - Competence
  - Critical autonomy

**Universal pre-requisites (intermediate needs) include:**

- nutrition and water, housing, safe environments, health care, security in childhood, physical and economic security, safe birth control, appropriate education...and more

# Why are human needs relevant to climate change?

**Because** human needs are

- universal
- objective
- plural and non-substitutable
- satiable
- cross-generational,

they provide a **metric** for comparing and judging wellbeing across the world and into the future.

As such, they are crucial for understanding **inter-generational justice**.

# How are needs satisfied?

In **context-specific** ways, through:

- Goods, services, activities and relationships that satisfy basic needs

**Needs satisfiers** are highly variable over space and time and cannot be specified *a priori*. They require:

- distinct local collective methods to define and measure
- **deliberative dialogue** through groups of citizens – informed by ‘experts’

The needs - satisfiers **distinction is crucial** because it avoids viewpoints that are paternalistic, or insensitive to time, place or culture

# How will climate change affect satisfaction of human needs?

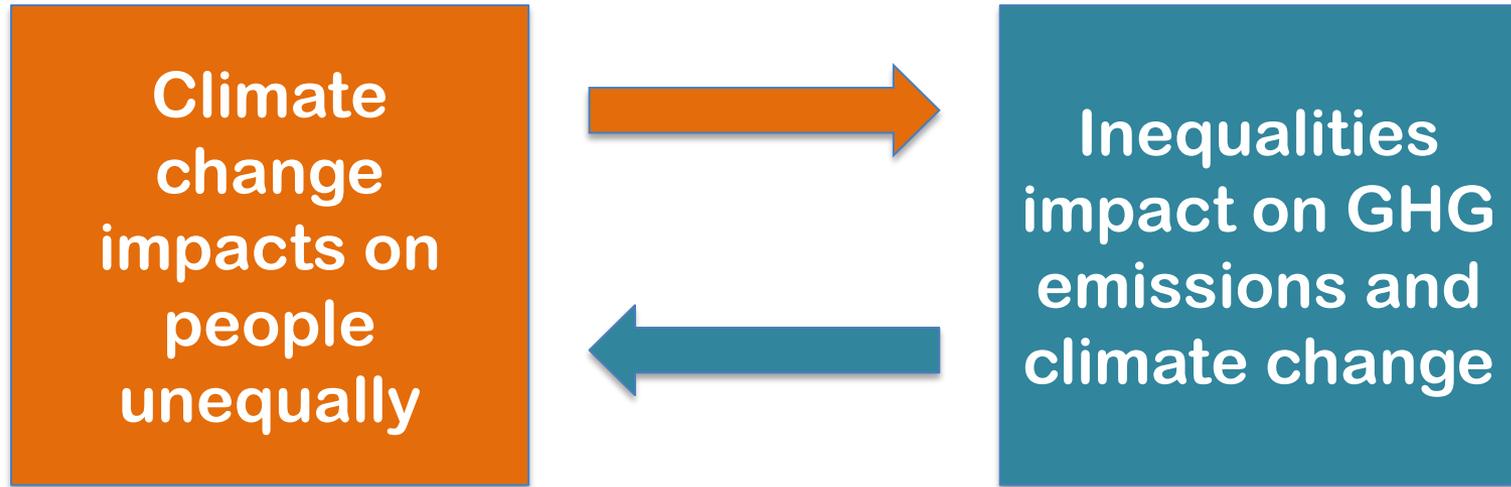
IPCC says likely impact mainly **negative** on:

- Global food security
- Human health
- Livelihoods and poverty
- and on many other aspects of human life.

There are **also** second-order and third-order impacts

Risks are 'generally greater for disadvantaged people and communities in countries at all levels of development'. So **inequality** matters...

## 2. INEQUALITY



To understand **how inequalities affect climate**, it is again important to distinguish between

A. Monetary measures

B. Non-monetary, disaggregated measures

# A. Monetary measures: Global income inequality

## *Inter-national* inequality

- increased through 20<sup>th</sup> century, diminishes in 21st

## *Intra-national* inequality:

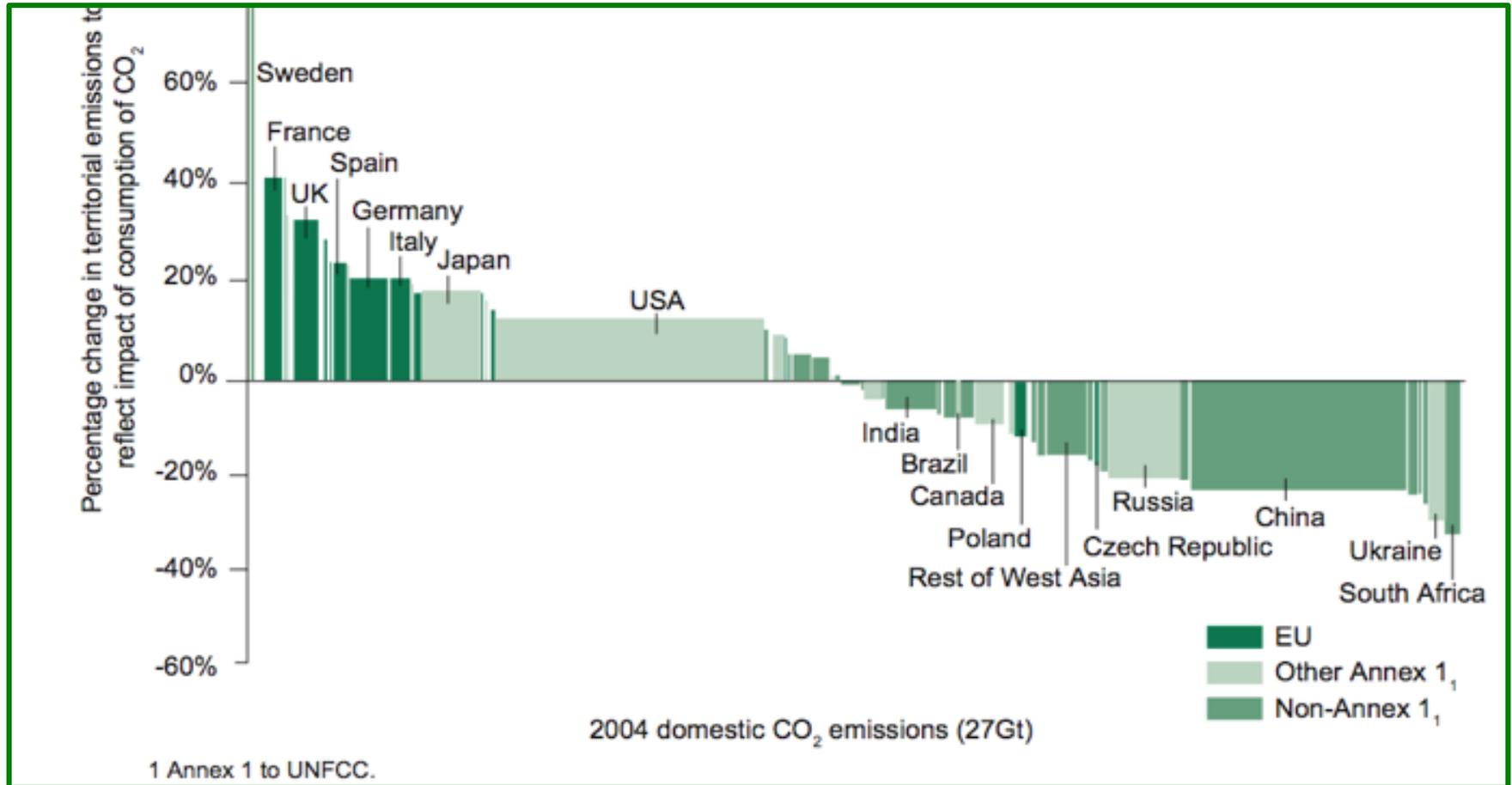
- Fell until 1970s, then increased (with Anglosphere diverging from EU and Japan)

## Global distribution of all incomes:

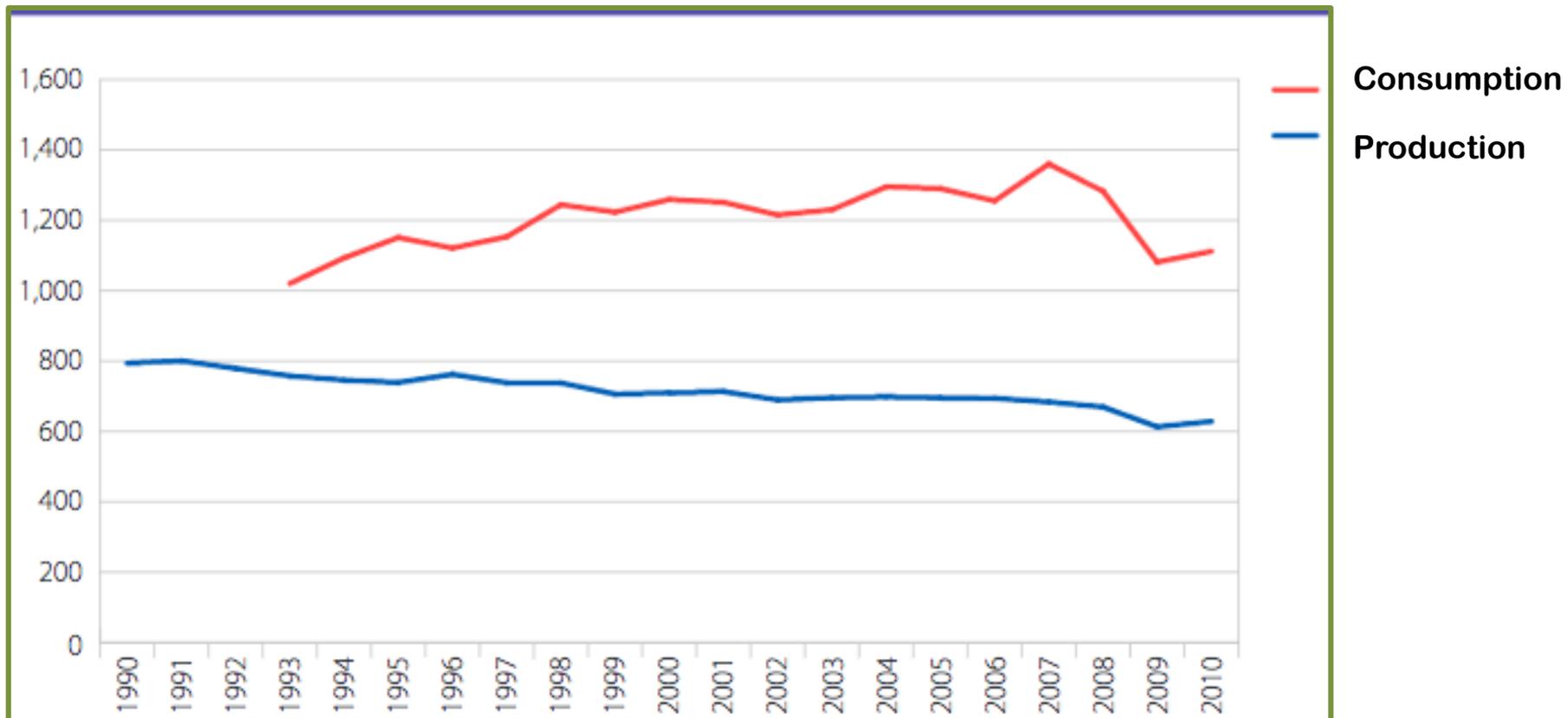
% of population	Share of all incomes
Top 1%	18%
Top 10%	53%
Bottom 50%	11%
Bottom 10%	1%

This can be used to compute distribution of **emissions**

# But distinguish consumption-based from production-based emissions

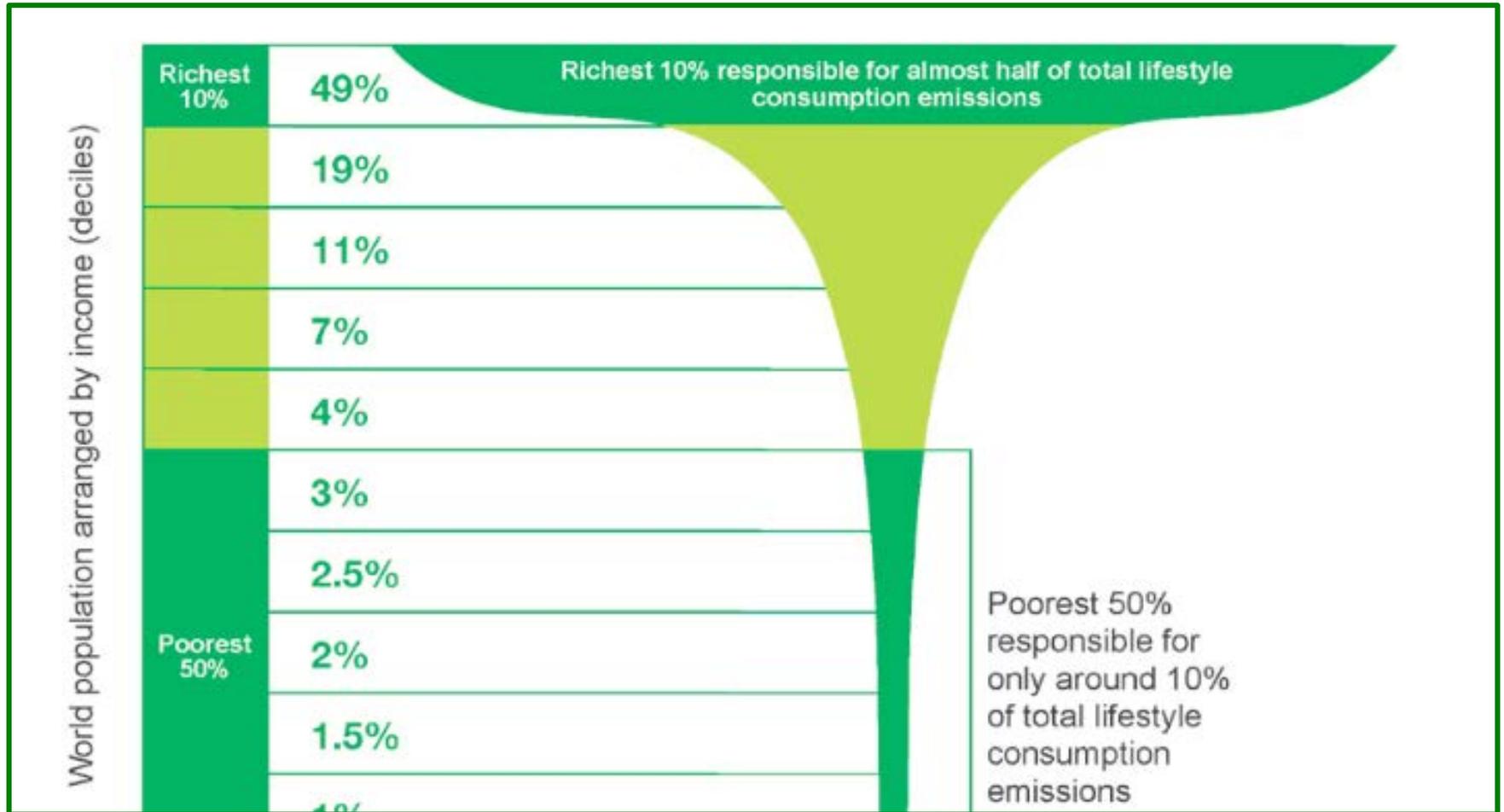


# UK consumption and production emissions 1990-2010



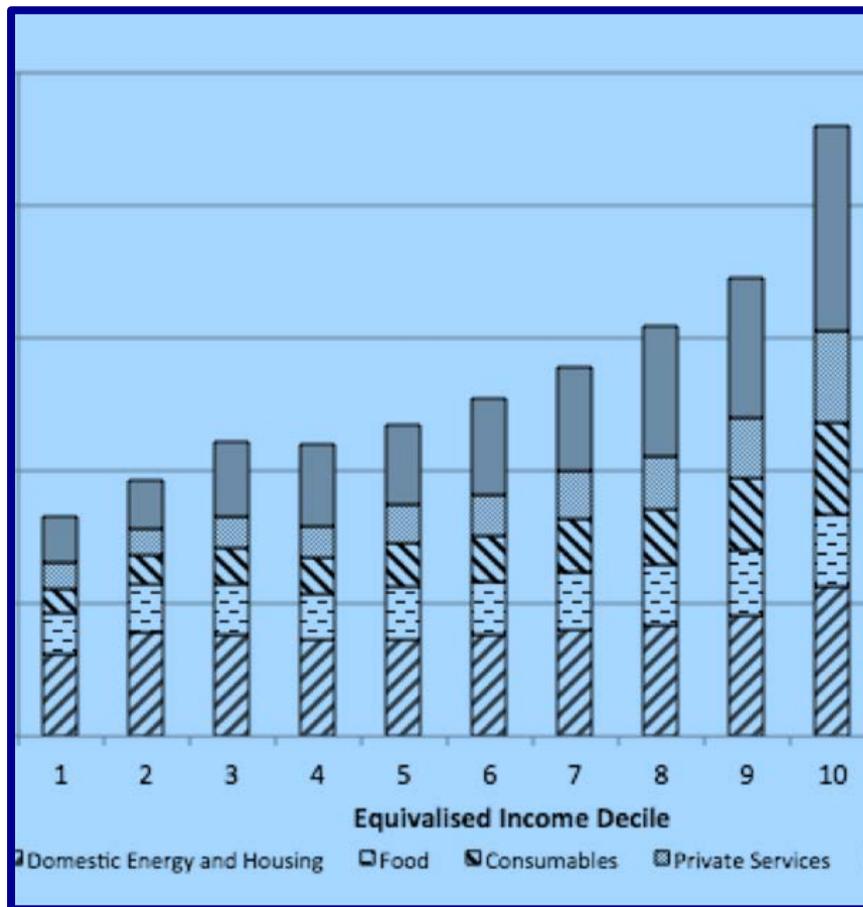
(The rest of this analysis focuses on consumption...)

# Consumption-based emissions by global income decile



# UK consumption-based emissions by income decile 2006

- Emissions rise with income, but not at such a fast rate
- The difference between rates (income 'elasticity' of emissions) varies from 0.5 to 0.6
- This is lower than previous assumptions



# Does more intra-country inequality raise emissions? Competing theories

## YES

### Veblen effects:

- inequality increases status competition and excessive consumerism (Frank, Wilkinson and Pickett)
- recent rise linked to hours of work and debt

### Inequality hinders collective action:

- the rich substitute private amenities for public, reducing commitments to public action (Neumayer)
- undermines capacities and political access of poorer communities (Marmot)

## NO

### Rising inequality reduces overall emission elasticities (Ravaillon)

- the super rich cannot spend all their money; the poor are deprived of access to basic goods
- socially regressive but lower emissions

### Inequality associated with outsourcing of production:

- thus weakens power of industrial interests (Gassebner *et al*)

# What's the evidence?

Comparative evidence from Grunewald *et al.*

- **Lower-income** countries:
  - higher inequality associated with lower carbon emissions
  - larger numbers remain outside the carbon economy
- **High and upper-middle** income countries:
  - rising inequality associated with higher carbon emissions
- The dividing line is around the income levels of upper middle-income countries such as Mexico, Brazil, Romania and South Africa.

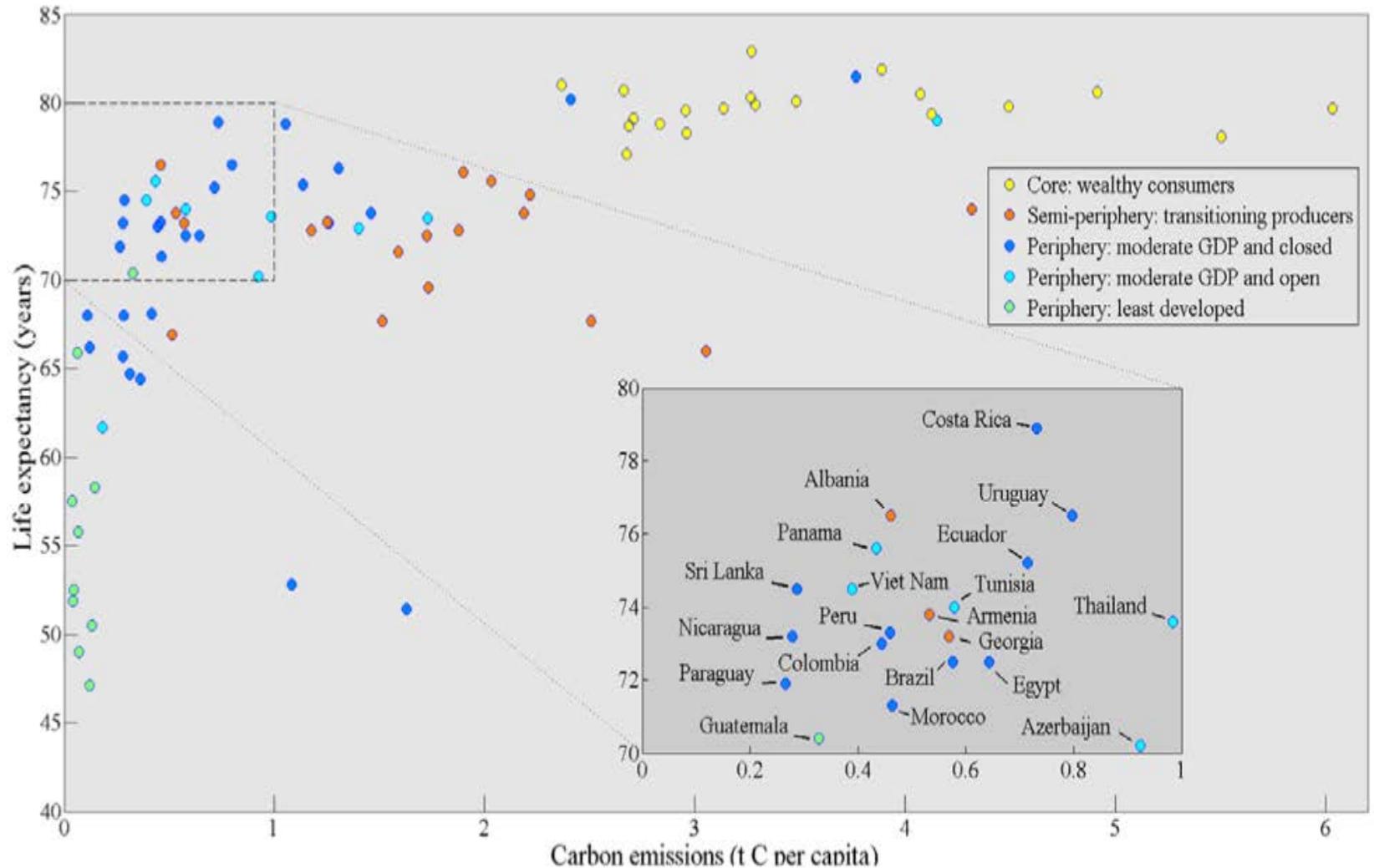
**Conclusion:** in OECD countries, inequality drives up emissions. Sometimes called the '**plutocene**'.

# B. Non-monetary measures:

## Carbon and human need satisfaction

- Most research uses the Human Development Index or life expectancy to compare against carbon emissions
- ‘Goldemberg’s corner’ countries offer some hope of a **non-OECD pathway** to sustainable welfare...
- In some recent research, same pattern holds when measuring carbon against other basic needs:
  - Access to water, sanitation, electricity, education, adequate nourishment, infant mortality.

# Cross-national relationship between consumption-based carbon and life expectancy: 'Goldemberg's corner'



# From basic needs to just emissions

Substantial controversy over emission costs of meeting global human needs.

Many factors affect the link between needs and emissions:

## 1. Eco-efficiency of **production**

- including required investment and collective infrastructure

## 2. Patterns of **consumption**, affected by:

- Geography, climate, inequality, cultural preferences, social institutions

# Conclusions: equality and needs

- In rich countries, hyper-inequality **worsens** environmental damage, including climate change
- Meeting **basic needs** is far less damaging than pursuing growth of GDP
- The ‘emissions intensity of human welfare’ **varies** greatly across countries
- This points to two main strategies to reconcile equitable and sustainable wellbeing with sustainable emissions
  - Ramp up eco-efficiency of production
  - Improve the **‘welfare efficiency’ of consumption**

# 3. ECO-SOCIAL POLICY

‘Social policy’ can be defined in many ways, but at its core are:

- **Redistribution**: policies to alter the distribution of incomes
  - Predistribution: wages, factor incomes, employment
  - Redistribution via taxation and transfers
- **Social consumption**: provision or subsidy of collective need satisfiers
  - Health services, education, social care, certain aspects of housing etc

Social policy thus relates to both monetary and non-monetary wellbeing, and to both their aggregates and their distribution

# Do advanced welfare states conflict with environmental sustainability?

## YES

‘The same mechanism that defuses the socio-economic inequalities inherent in capitalist development ensures the inclusion of an increasing number of people in **environmentally problematic** production and consumption processes’ (Koch)

## NO

- **Co-benefits**
- **Social** consumption
- Provides a platform of **security** enabling citizens to take longer-term, more reflective choices about consumption and work

# Co-benefits

Health **benefits** of climate mitigation policies (Lancet Commissions):

- Shift from motorised transport
  - Reduced air pollution
  - Cardiac and other health benefits
- Shift from protein-intense diets
  - Cardiac and other health benefits

But also potential **conflicts**:

- Bioenergy and food security

A major synergy is **reducing consumer demand**

# Potential distributional conflicts in reducing consumer emissions (1)

Mitigation policies can **harm** equity and welfare

- Carbon pricing (however achieved) is **regressive**. This could result in reducing consumption of necessities, but not luxuries
  - Higher energy bills may do little to dampen heating and electricity demand of **larger properties**
- Mandated programmes for energy companies to aid poorer and less well-housed groups (e.g. ECO) paradoxically **increase rather than reduce** fuel poverty - because these are paid for by raising energy bills (Hills Report)

# Potential conflicts in reducing consumer demand (2)

Most 'necessities' are **high carbon**:

	<u>Low emission</u> (<1 tonne CO2e/£000)	<u>High carbon</u> (>1 tonne CO2e/£000)
<u>Necessities</u> ( <u>expenditure elasticity &lt;1</u> )	<u>Alcoholic beverages/tobacco</u> (0.7%) Communication (1.2%)	All domestic energy (electricity, gas, other fuels) (26.9%) Food (12.9%)
<u>Non-necessities</u> ( <u>expenditure elasticity &gt;1</u> )	Clothing and footwear (2.6%) Other housing (2.3%) Furnishings (5.0%) Recreation and culture (8.7%) Restaurants and hotels (5.0%) <u>Health</u> (0.5%) Education (0.3%) <u>Miscellaneous</u> (4.2%)	All transport (vehicle fuels, other transport) (22.5%)

# Implications for policy

To reduce consumption-based emissions in a context of great inequality:

- Carbon mitigation alone not enough
- Redistribution of incomes not enough
- Must also **'recompose' consumption**
- This entails rethinking what are **'necessities'**, as distinct from luxuries or surplus goods
  - This questions 'consumer sovereignty'

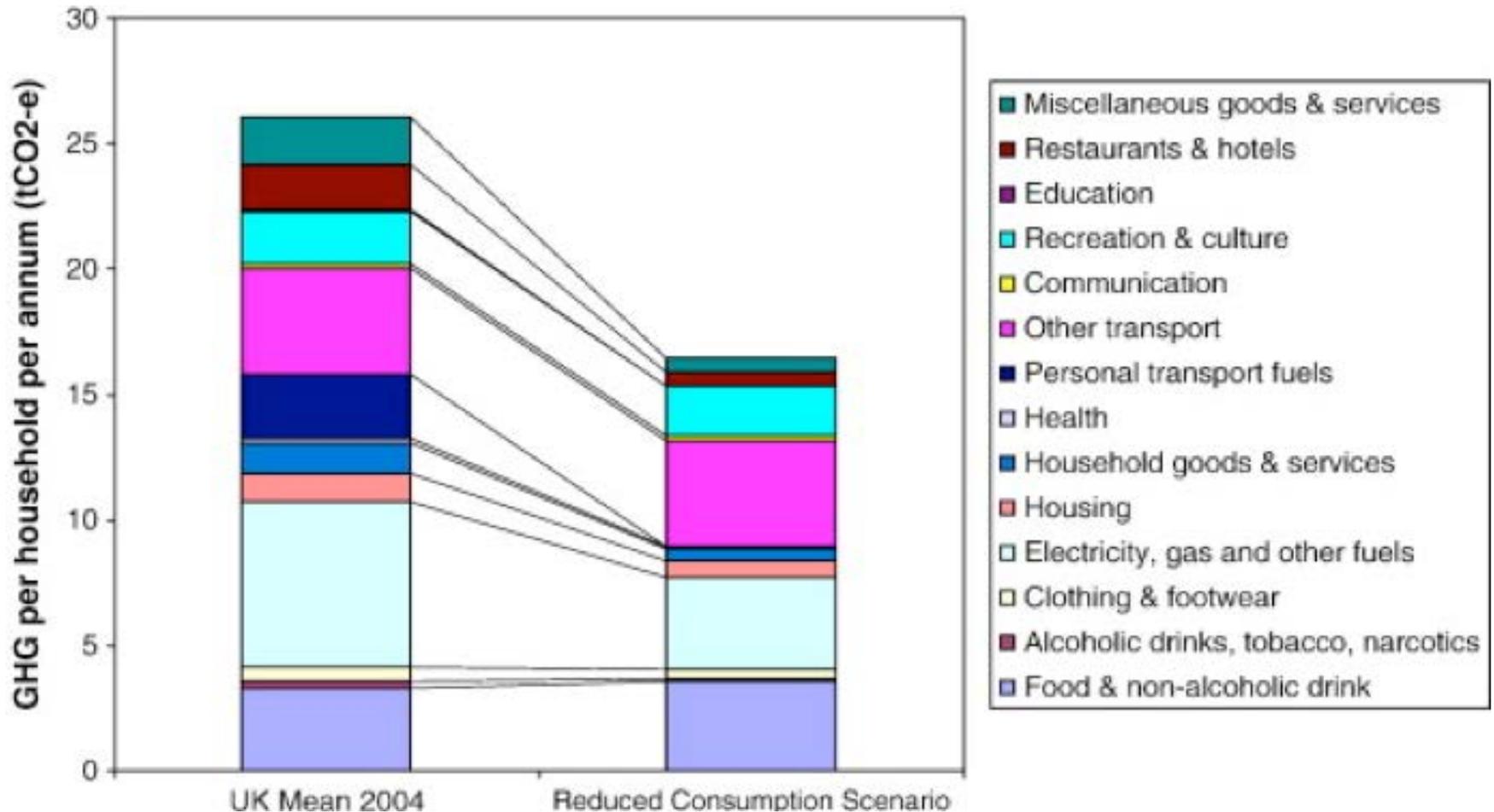
Back to **need theory...**

# Researching need satisfiers and ‘decent living standards’

Need theory identifies satisfiers by **combining** ‘codified’ and ‘experiential’ knowledge, using citizens’ groups, informed by experts

- UK **Minimum Income Standards** (MIS) research at Loughborough University shows for example that:
  - except for families with children, private cars are luxuries and not necessary for a **decent standard of living** – citizens could use public transport plus taxis instead
- This approach now being adopted **across the EU**
- The same methodology can be used to deliberate on **low-carbon** ‘decent living standards’ (Druckman and Jackson)

# Decent living with lower carbon? UK in 2004



# Climate change, inequality and social policy: conclusions

1. The 'safe and just space for humanity' entails an idea of human wellbeing based on **universal human needs**
  - The SDGs can provide a basis, but not enough
2. **Unequal incomes** are the major determinant of emissions
  - Especially consumption-based emissions
  - Meeting needs is more egalitarian and less destructive than meeting consumer preferences
3. **Social policy/low carbon synergies are possible**
  - But require (beyond redistribution and social consumption) a recomposition of consumption
  - This entails a citizen-based audit of necessities and luxuries

# Climate change, inequality and social policy

We must add a **third domain** of intervention alongside the two components of social policy

- redistributing incomes and wealth
- providing collective need-satisfiers
- **Recomposing consumption**

This eco-social approach can pursue **synergies** between equity/wellbeing and sustainability, while also identifying and addressing **potential conflicts**

# Recomposing consumption: Suggested 'eco-social' policies

## 1. **Tax** high-carbon luxuries:

- consumption tax (Frank)
- smart VAT (Fell)

## 2. **Social** tariffs

- For electricity, gas, water

## 3. **Control** advertising and product placement

- especially when it's directed at children

## 4. **Ration** carbon

- downstream household carbon allowances

# Further suggested eco-social policies

## 5. **Widen** social consumption

- improves equity
- also reduces emissions (cf US and UK health care)

## 6. **Decarbonise** welfare states

- from cure/compensation to prevention
- from downstream to upstream interventions
- ‘greening’ public estates

## 7. **Reduce** paid work time

- from consuming ‘stuff’ to more ‘leisure’
- ‘scale effect’ alongside a ‘composition effect’

# Conclusion: from production to **consumption + redistribution**

- Green growth: today's dominant strategy to mitigate climate change
- To improve the eco-efficiency of production is a worthy goal, but
  - it ignores equity and distribution issues
  - it reinforces wellbeing = income, prosperity = growth
  - it won't be enough!
- This introduces **two further strategies**:
  - To recompose consumption
  - To reduce aggregate demand

Thank you

THN	THN (adjusted)	Sustainable Development Goal	SDG thresholds for 2030
Basic needs	Physical health	Goal 3: Ensure healthy lives and promote well-being for all	Detailed set of targets re mortality, epidemics etc
	Mental health	Goal 3, especially 3.4 : Promoting mental health and well-being	
	Cultural understanding/ teachers	Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	Ensure that all youth and at least [x] per cent of adults, both men and women, achieve literacy and numeracy
	Critical autonomy	?	
Intermediate needs	Nutritional food	Goal 2: End hunger, achieve food security and improve nutrition	End all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children
	Clean water	Goal 6. Ensure availability and sustainable management of water and sanitation for all	Universal and equitable access to safe and affordable drinking water, and adequate and equitable sanitation and hygiene, for all
	Protective housing	Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	Access for all to adequate, safe and affordable housing and basic services. Upgrade slums
	Energy	Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	Universal access to affordable, reliable and modern energy services
	Non-hazardous work environment	<i>Goal 3.9: Substantially reduce number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination</i> <i>Goal 8.5: decent work for all</i>	
	Economic security	Goal 1. End poverty in all its forms everywhere	Poverty defined as less than \$1.25 per person per day
	Appropriate health care	Goal 3: Achieve universal health coverage, including reproductive health care	
	Appropriate education	Goal 4: Inclusive and equitable quality education; promote lifelong learning opportunities Education and life-long learning	Universal primary and secondary enrolment; equal access to other forms of education
	A secure childhood	<i>Goal 16.2: End abuse, exploitation, trafficking and all forms of violence against and torture of children (elsewhere references only to girls?)</i>	
	Significant relationships/ social affiliation	?	
	Physical security	?	

THN	Gough 1994	SDG goals
Societal preconditions	Procedural preconditions	<p>Goal 5. Achieve gender equality and empower all women and girls</p> <p>Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels</p>
	Material preconditions	<p>Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all</p> <p>Goal 10. Reduce inequality within and among countries</p> <p>Goal 17. Strengthen the means of implementation and revitalise the global partnership for sustainable development</p>
	Sustainability	<p>Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</p> <p>Goal 12. Ensure sustainable consumption and production patterns</p> <p>Goal 13. Take urgent action to combat climate change and its impacts (recognising primary role of UNFCCC)</p> <p>Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development</p> <p>Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss</p>