



**Green Economy and Sustainable Development:
Bringing Back the Social Dimension
CONFERENCE**

**Climate Change, Double Injustice
and Social Policy**

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Double injustice

Those groups and populations likely to be most harmed by climate change are the least responsible for causing it and have the least resources to cope with the consequences

- Well known at global level, but also applies within countries, rich and poor

Study UK here, in two stages:

Part A: normal Kyoto-style calculation of nationally *–produced* emissions

Part B: post-Kyoto calculation of all emissions resulting from *consumption* within UK

(A rather narrow paper – see BA report *Climate Change and Public Policy Futures* for wider analysis)

The complex chain

- The logical chain is a long one:

Economic Activity →

Energy consumption →

GHG Emissions →

GHG Concentrations →

Global Temperature →

Regional Climate Change →

Impact on Human Habitats →

Social Wellbeing

- *Mitigation* policies address first three; *adaptation* policies address last two (roughly speaking)

Climate change and the policy environment: Single country framework

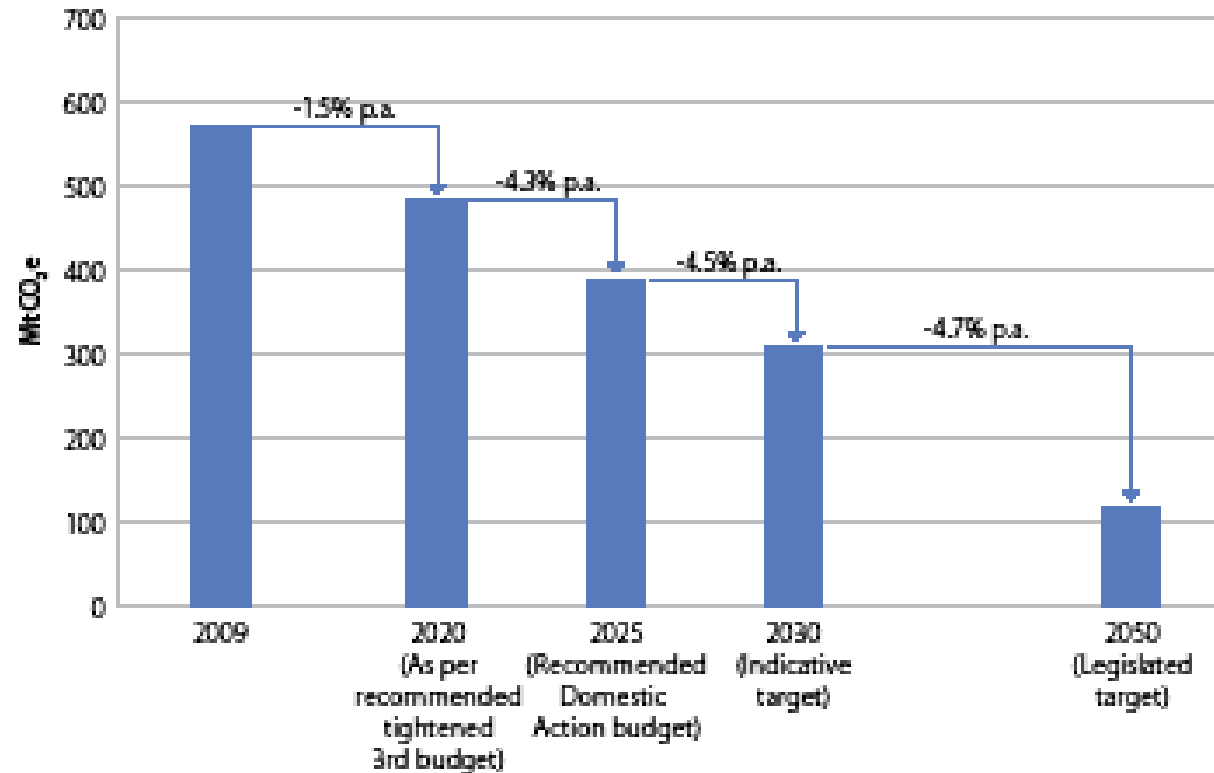
- Direct impacts of climate change itself, distinguishing
 - impacts in the UK
 - the results in the UK of impacts overseas
- The impacts of climate change *policies*, distinguishing
 - adaptation policies
 - mitigation policies
- This paper concentrates *only* on the last – mitigation policies - most important in short-medium term

Distributional consequences of mitigation policies in UK

- UK seen as 'climate leader' in mitigation
 - This may not last...
 - Material in paper on explaining cross-national differences
- Reduction goals are very ambitious
- Plethora of policies: many load increased taxes charges on domestic energy - and this intended
- This is very regressive: eg. +2% of lowest income families' income
- *And* makes very optimistic assumptions

Official UK GHG targets

Figure 7: Rate of reduction of greenhouse gas emissions, excluding international aviation and shipping (2009-2050)



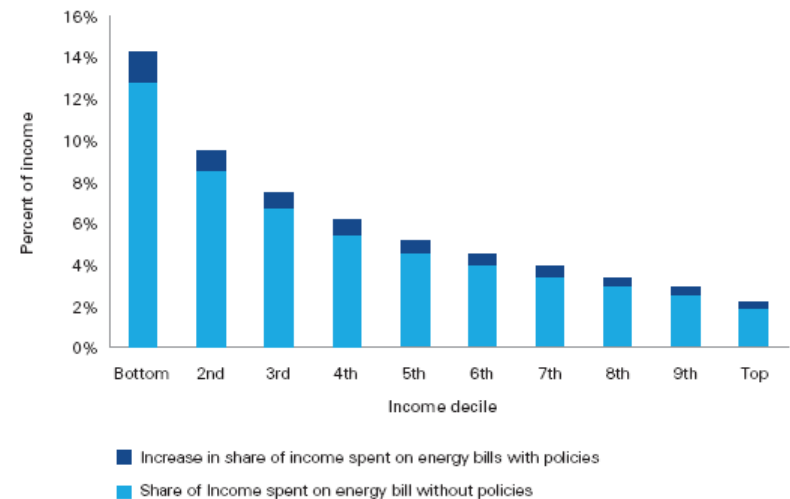
Source: NAEI 2010, CCC analysis.

DECC estimates

- Distributional impact in 2020 sharply regressive
- Yet DECC predict average energy bills just 1% higher in 2020 due to efficiency and renewables, whereas electricity prices likely 33% higher...

Chart 19

Increase in energy bills in 2020 for different income deciles



Source: Department of Energy and Climate Change (2009)

Social concerns

- Concerns of political backlash
- Fuel poverty rising very fast
- Distributional injustice

Economists say: 'use targetted social programmes to compensate low income losers'

- But this very difficult to do

The REAL reason fuel bills are going through the roof? Crackpot green taxes you're never even told about

Daily Mail

By [Dr Benny Peiser](#)

Spurred by the Government's stubborn but wrong-headed commitment to renewable energy, so-called green stealth taxes are already adding 15-20 per cent to the average domestic power bill and even more to business users.

Compensation is difficult

- CES study of UK modelled ‘winners and losers’ from equal carbon allocation scheme -overall progressive
- Yet still find many ‘low income losers’, eg:
 - large families in rural, hard-to-heat houses,
 - ‘empty-nesters’ in large houses and houses without gas central heating,
 - retired under-occupied urban households
- Difficult to target energy-efficiency schemes on such households – and conflicts with street-by-street retrofitting
- Conclusion: hard to compensate rising energy costs via social benefits: heterogeneity of households and dwellings

Other social policy alternatives

- Uprate all benefits, minimum wage etc by low-income price index
 - IFS: this higher than average 2000-10, and will be driven higher by oil, food prices
- Social pricing of energy –lower charged for initial ‘basic need’ units
 - Would mean de-liberalisation and regulation
- These would help: all imply bigger state role
- More radical measures likely needed, but first look at post-Kyoto emissions

PART B: POST-KYOTO: FROM PRODUCTION TO CONSUMPTION

- But this only half the story
- Move beyond Kyoto from greenhouse gases *produced* in the North to those embodied in Northern *consumption*
- Globalisation fostering a widening gap
- OECD report for 2000:
 - OECD excess 1.95bt CO₂
 - Non-OECD deficit 1.1bt CO₂

Part B: The problem with Kyoto targets

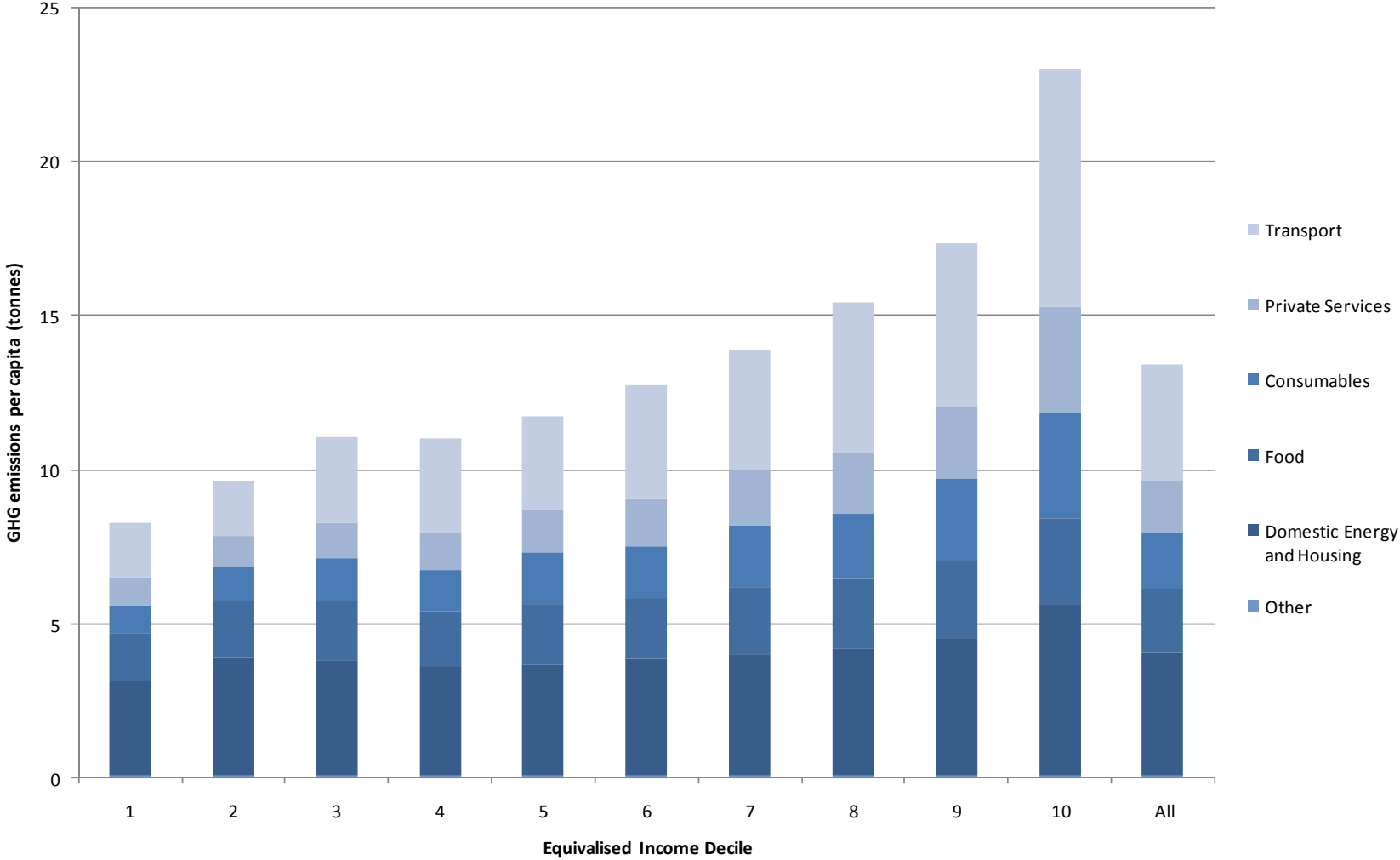
Our estimates of 2006 UK consumption-based emissions:

- CO2 emissions **33% higher** than produced
- all greenhouse gases **51% higher** (16.2 tonnes per head v 10.7 tonnes)
- one of the biggest gaps in the world, due to deindustrialisation in Britain and the high import ratio

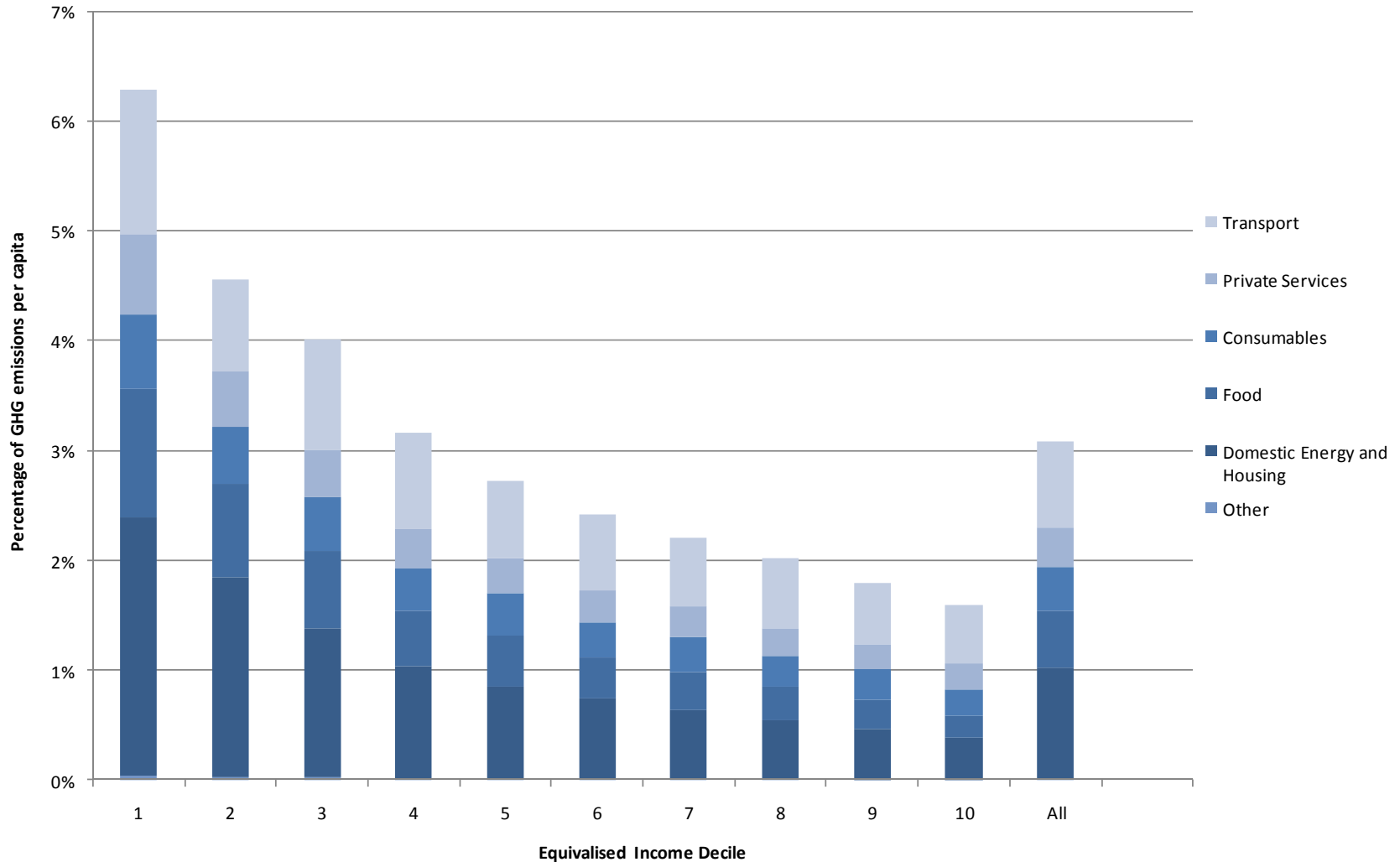
Does the double injustice apply to emissions from total consumption?

- Study this in Nef-CASE study by marrying
 1. Stockholm Environment Institute's (SEI) *Resources and Energy Analysis Programme* (REAP) - an input-output model, with
 2. *Expenditure and Food Survey* on distribution of 80 consumption categories, both for 2005
- 80% of emissions are *indirect* – embodied in food, housing, other travel, consumables, private services etc

Emissions by income decile



Emissions/income by deciles



But as a share of income the opposite

- Convert per capita emissions into per capita emissions per £100 income
- The slope of the income decile line is reversed:
 - Inequality of decile incomes (11:1) far exceeds ratio of emissions (2.8:1)
- Ratio of emissions/£: decile 1/ decile 10
 - Total 4:1
 - Food, energy housing 6:1
 - Consumables, services 3:1
 - Transport 2.5:1

Conclusion: regression results

- Income by far most important factor
 - increase of equivalised income of £5000 per year results in an 8.6% reduction in emissions as a share of income
- Single householders emit most per person
- Workless households (retired, unemployed and unoccupied) experience higher ratios of emissions to income
- Degree of regressivity greatest for energy and food
- Conclusion: any general rise in carbon price will hurt low incomes, small and workless households most

Social policy for a post-Kyoto world: some initial thoughts

- To target a much broader range of embodied emissions requires broader carbon taxes and/or upstream cap-and-trade
- ETS useful since targets designated emissions across EU
- To go beyond this requires border levelling
 - UNEP-WTO joint report 2009 positive about some trade measures to counter effects of different environmental regimes?

Eco-social investment

- Further development of shift in social policy from compensation to investment
 - Street by street retrofitting of housing stock
 - Major investment in public transport, cycling
 - Direct regulation of consumables, vehicles etc
 - Encouragement of pro-environmental behaviours and consumption patterns
- Requires *major* upfront public expenditure on infrastructure investment, subsidies, plus regulation and green taxation and elements of national planning
- A decisive break with neo-liberalism
- And induces *real* fiscal competition with ‘traditional’ social programmes

Reduce consumption by reducing working time?

- Take out productivity increases in leisure not consumption?
 - Average hours worked per year in 2003: US 1817, Netherlands 1429
- US model of tight carbon reduction policies up to 2050:
 - reduces real GDP by 4.1% compared with BAU, but household ‘full consumption’ (including value of leisure) falls by only 0.3%
 - Dale Jorgenson et al *The distributional impact of climate policy*, B.E. Journal of Economic Analysis and Policy 10.2 2010.

New time policies

- New time policies:
 - eg. Belgian Time Credit Scheme: workers accumulate rights to career breaks etc
- But risk of rising poverty for low paid
- Also growing time inequality
 - high income groups would have a greater capacity to reduce work hours without harmful effects
 - Some households are both income-poor and time-poor (Burchardt); working time reduction would worsen this dilemma for low income families

A radical eco-welfare state

- Back to redistribution of income/wealth:
 - Excess luxury consumption emissions
 - Reduce positional competition
 - Enhance social solidarity
- Radical policy integration: *income, time and carbon*
- Thus a need for further policy integration is part of a green growth strategy, let alone a beyond-growth strategy

6. THREE SCENARIOS

Distinguish according to future potential for economic growth in the *developed* world:

- a) growth is the solution;
- b) 'green growth': growth can be decoupled from emissions
- c) growth is the problem.

In practice in Europe all countries subscribe to variants of the second position, eg. UK commitments to decarbonise economy whilst maintaining growth.

A. 'Irrational optimism': more growth is the solution

- Ridley : “The probability of rapid and severe climate change is small; the probability of net harm from the most likely climate change is small; the probability that no adaptation will occur is small; and the probability of no new low-carbon energy technologies emerging in the long run is zero”.
- Policies:
 - Lomborg: Faster global growth will enable coping through adaptation
 - Techno-fixes, including geo-engineering
- Close to mainstream US federal government :
- Hardly a coherent response to CC. But buoyed with optimism in self-regulating systems they do not need to be.

B. Green growth

Ecological modernisation

- ‘Decouple’ carbon emissions from economic activity.
- ‘Policy integration’ across environmental, economic and social decision-making: examples in social policy given above
- Harness interests of business and national competitiveness to support radical restructuring of the economy
- ‘Energy security’ now driving a reversal of previous energy policy
- Financial crisis 2008 and recession ->proposals for a ‘Green New Deal’

Ecological modernisation and welfare states

- Dryzek: ‘social democratic welfare states and coordinated market economies ... are better placed to handle the intersection of social policy and climate change than the more liberal market economies with more rudimentary welfare states’
- Duit: six ‘thick eco-states’ combining high levels of government involvement with high scores for civic involvement: Denmark, Norway, Sweden, Finland, Germany and Austria
- Yet, the UK a leader!

C. Degrowth and radical transformation

- Jackson: the ‘myth of decoupling’.:
 - To stabilise climate change requires below 4b tonnes pa by 2050, one fifth of the target in the Stern Review.
 - Yet global population growth (0.7%pa) and past rates of income growth (1.4%pa) would require a 7% decoupling a year – in sum a *twenty-fold* - improvement in average carbon intensity
 - To equalise global incomes 11.2% per year improvement in decoupling.
- ‘There is as yet no credible, socially just, ecologically sustainable scenario of continually growing incomes for a world of nine billion people’ (Jackson 2009: 86).

A radical eco-welfare state

- Prosperity does not require growth
- Nef modelling of zero growth economy
- Radical policy integration: income, time and carbon
- But needs to overcome deep drivers within capitalism:
 - ‘it is easier to imagine the end of the world than to imagine the end of capitalism’