

Necessities and luxuries: how to combine redistribution with sustainable consumption

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Chapter in [What's Next for Sustainable Development](#)

Introduction

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: 1) the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given; and 2) the idea of limitations. (Brundtland Report, WCED 1987: 43)

The Brundtland Report has bequeathed the most quoted definition of sustainable development, one that persists to this day. It quite properly puts the concept of 'needs' at its centre but, remarkably, says nothing more about what needs are, their ontological character, how they can be defined in particular social contexts, or how their satisfaction can be robustly measured across different contexts. The first part of this paper briefly summarises some key features of a theory of human need and demonstrates its relevance to contemporary debates about the Sustainable Development Goals.

The second part introduces *inequality*, both between and within nations, and its central role in shaping responsibility for, and the impacts of, climate change. Some have labeled the intermeshing of hyper-inequality with the reality of the Anthropocene the *Plutocene* (Ulvila and Wilen 2017). The relationships between inequality and unsustainability are not simple and I discuss four contradictory issues here. To conclude I sketch out how national social policies must transform into eco-social policies if justice is to be successfully pursued.

The third part turns to the patterns and growth of consumption in rich countries, the missing piece of the climate mitigation jigsaw. It makes the case for *fairly recomposing consumption* and supports the idea of a consumption corridor bounded by minimum and maximum incomes or consumption bundles. To do this the distinction between 'necessities' and 'luxuries' must be resurrected. I discuss how this might be practically achieved in a democratic society using forms of deliberative dialogue. I then go on to propose three further national-level *eco-social policies* to recompose consumption in a fair way.

1. Human needs, the SDGs and necessary emissions

The concept of need is central to the Brundtland project. It would not make sense for the Brundtland report to have written '*Sustainable development is development that meets the wants/preferences of the present without compromising the ability of future generations to meet their own wants or preferences*'. The wants of people have no definable limits, whilst by definition the preferences of future generations cannot be known. The emphasis on needs in the report is welcome – but it says nothing more about what needs are. I have argued consistently that we need a theory of human need to fill this gap and to challenge the hegemonic theory of welfare today – welfare economics and preference satisfaction. This theory is set out in the following places and is brutally summarized here in four theorems (Doyal and Gough 1991, and Gough 2015, 2017a and 2017b).¹

¹ Holden et al (2018) provide a concise summary of much of the literature on needs in chapter 2 of their book.

Human needs are universal. All individuals, everywhere in the world, at all times present and future, have certain basic needs. These must be met in order for people to avoid harm, to participate in society and to reflect critically upon the conditions in which they find themselves. This is not the same as subjective feelings like anxiety or unhappiness. It refers to functions not feelings. Human needs possesses five theoretical features that aid us in identifying *sustainable wellbeing*: they are objective, plural, non-substitutable, satiable and cross-generational.

These features, especially the last, are of great importance to the Brundtland framework since environmental limits will progressively impose dilemmas of intergenerational equity. We can assert with much confidence that the *basic* needs of future generations of humans will be the same as those of present humans. To avoid serious harm and to participate and act within future human societies people will require the same preconditions: not just survival, but health and critical autonomy. This amounts to a remarkable – and pretty obvious – degree of knowledge about the constituents of future peoples' wellbeing. Compared to the indeterminacy of future generations' preferences or happiness - or of Sen's capabilities - a theory of need provides some firm foundations on which to build sustainability targets for public policy.

Universal needs differ from specific 'need satisfiers'. In a critical epistemological shift, universal needs must be distinguished from need *satisfiers* which are variable and local. Need satisfiers comprise the goods, services, activities and relationships that contribute to need satisfaction in any particular context. The needs for food and shelter apply to all peoples, but there are a large variety of cuisines and forms of dwelling that can meet any given specification of nutrition and protection from the elements. It is essential to draw a sharp distinction between universal needs and specific satisfiers. Without it, need theory could justly be accused of being paternalist, intrusive and insensitive to context and culture. The set of need satisfiers in a social context can be called *necessities*. This sets up a distinction between necessities and 'luxuries' or surplus goods.

Need discourse directly challenges consumer preferences in a way that is provocative and difficult. How can such a discourse be pursued in a democratic society? I argue this can only be achieved by forms of dialogic democracy, such as *citizen forums*, which bring together citizens and experts in a space as open, as democratic, and as free of vested interests as possible. To identify social need satisfiers entails a system shift from aggregating preferences to solving collective problems. Need satisfiers will be identified in a conscious collective process – quite different to the isolated, individual process of revealing preferences in markets.

Prioritising needs entails rethinking social preconditions. We can then begin to think through what political, economic and social institutions would better facilitate meeting needs and 'safeguard the ability of future generations to meet their own needs'. In O'Neill's (2011, p. 33) words: 'Each generation needs to pass down the conditions for livelihood and good health, for social affiliation, for the development of capacities for practical reasoning, for engaging with the wider natural world and so on'. This paper does not address these issues except for some suggestions in the last part. But I believe it can help clarify the bewildering complexity of the Sustainable Development Goals (SDGs) adopted by the UN in 2015.

The SDGs provide a collective global view of the social, economic and political preconditions for sustainable development. This ambition has been described as 'breath-taking': a list of seventeen goals and 169 targets, it is arguably the most comprehensive global agenda

adopted since the UN Charter in 1945. Yet the SDGs muddle up the distinction between needs and societal and institutional preconditions for need satisfaction. There is a strong case for separating out concepts and measures pertaining to individuals and concepts and measures pertaining to collectivities. Examples of the first are nutrition, health and education; examples of the second are gender equality, sustainability, inclusiveness and peace. The latter cannot apply to an individual; the former can. Some of the concerns surrounding the SDGs might be assuaged if this distinction is clarified (see Gough 2017b: 53-56 for details).

Need satisfiers cannot be simply translated into 'necessary emissions'. Assuming a list of necessities can be drawn up for a particular society at a particular time, can we then measure their environmental impacts to determine how sustainable they are? In terms of climate change can we reason from need satisfactions to *necessary emissions*? The short answer is that there is no linear relationship between the two, indeed much climate policy is designed to transform this relationship. Drawing on comparative research I develop a meta-framework in my recent book, *Heat, Greed and Human Need: Climate change, capitalism and sustainable wellbeing* (Gough 2017b).

This contends that there are only three coherent strategies to decarbonise affluent societies:

- C1. *Ramp up eco-efficiency*: the energy- and emissions-efficiency of all economic activity.
- C2. *'Recompose' consumption*: reduce consumption emissions by switching from high- to low-carbon goods and services, without necessarily cutting overall consumption expenditure
- C3. *Degrowth*: reduce then stabilise absolute levels of consumer demand, moving towards a steady state economy.

The second and third strategies are designed to apply only to rich countries to begin with. But prioritising need satisfaction also requires that all three strategies take account of their *distributive effects within* societies – their impact on minimum levels of need satisfaction and wellbeing and the degree of inequality above this level. This means qualifying the three strategies as follows:

- C1. *Fair eco-efficiency*: ensuring, at the very least, that poorer and more vulnerable groups do not suffer from climate mitigation policies and that inequalities in income and need-satisfaction are not widened.
- C2. *Fair recomposition of consumption*: ensuring that a 'consumption corridor' is pursued between minimum consumption standards, allowing every individual to live a good life, and maximum standards, ensuring a limit on every individual's use of natural and social resources in order to guarantee a good life for others in the present and in the future. Need theory plays a crucial role here in enabling a distinction to be drawn between *necessities* and *luxuries*.
- C3. *Fair degrowth*: ensuring that the biophysical case for degrowth is not implemented at the expense of the ethico-social case as a path to improved wellbeing and its fairer distribution.

The next section considers how to introduce equity criteria into the eco-efficiency C1 scenario and the following section develops ideas and proposals on how to implement a fair recomposition of consumption in the C2 scenario. This chapter does not address the C3 degrowth scenario.

2. Inequality, distribution and emissions: Three dilemmas of the Plutocene

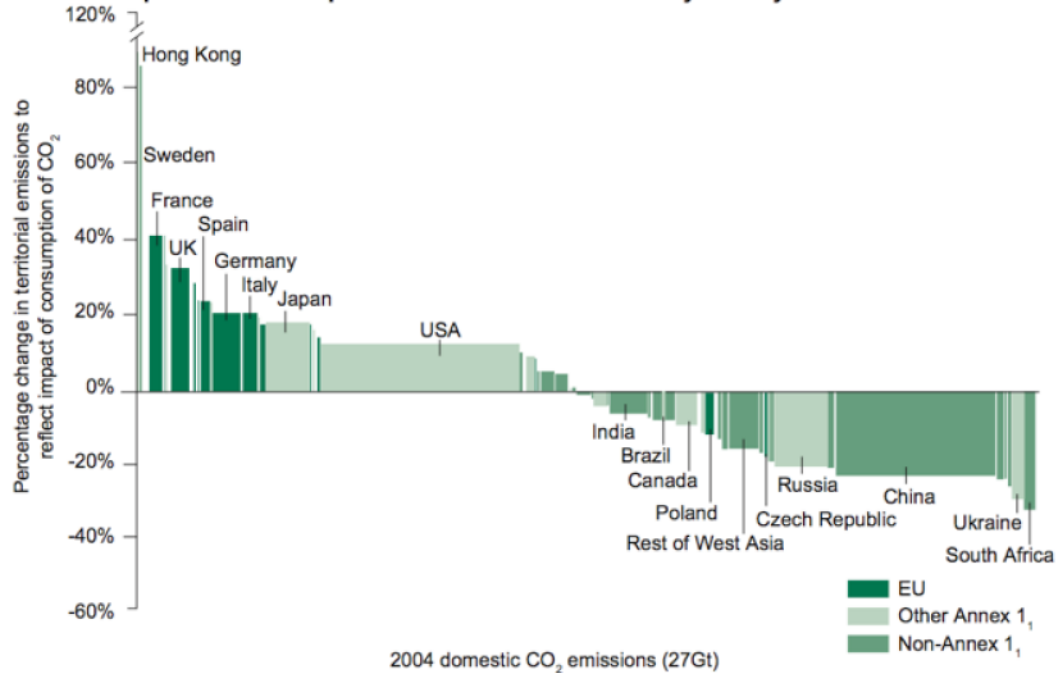
Climate change impacts unequally on different nations, groups and classes. And the contribution of different nations, groups and classes to GHG emissions and climate change is also highly skewed. Probing these issues reveals three contradictions between the economic, environmental and social domains in the present era. The section concludes by arguing that tackling these dilemmas requires augmenting traditional redistributive social policy with new forms of eco-social policy.

2.1. The double injustice

Those nations, classes and groups least responsible for past embodied emissions are most likely to be adversely affected by climate change in the near to medium future. In previous reports (2007) the IPCC has concluded that climate change will impact most heavily on tropical and subtropical regions, where standards of living are in general lower. In its 5th Report, the Commission is less willing than previously to draw together these risks into an overall global pattern of climate vulnerability. However, it does repeat that risks are 'generally greater for disadvantaged people and communities in countries at all levels of development' (IPCC, 2014, p. 1178). In the developed world, lower-income households are more likely to live in higher-risk areas, marginal lands and floodplains; they have fewer resources to cope and have much lower rates of insurance cover; they also suffer from poorer health and fewer resources which in turn undermines their resilience. In critical moments of climate-related disaster this social dimension is brutally revealed, as with the impact of Hurricane Katrina in New Orleans in 2005. The gravity of a 'natural' disaster is never purely natural. Social protection policies, safety nets and public services can offset some of the effects.

Turning to *responsibility* for emissions, it is important to define who emits. The bulk of the *cumulative* stock of CO₂ in the atmosphere has been contributed by the rich industrialised world: the burning of fossil fuels has precisely been a major source of their wealth. In recent years the annual emissions of emerging market economies, most notably China, have rocketed and overtaken those of the developed world, which have remained stable. China is now the world's largest annual emitter of CO₂. However, this trend is much muted when we measure national emissions, not on a territorial basis but according to their '*consumption footprint*'. *Consumption-based* emissions of the OECD countries are higher than their territorial emissions, while those of the rest of the world are lower (Figure 1). This reflects the outsourcing of manufacturing and industry from the West to the East during the period of intense globalisation – and accompanying deindustrialisation in the West – since around 1980.

Figure 2—the impact of a consumption-based view on emissions by country.²⁷



1 Annex 1 to UNFCCC.

Note 1: Includes CO₂ emissions from production, process, transport and household sources only (27Gt in 2004); excludes non-CO₂ emissions due to land-use-change.

Note 2: Based on an MRIO (multi-region input/output) model allocating emissions to regions of consumption.

Source: Carbon Trust Analysis; CICERO/SEI/CMU GTAP7 MRIO Model (2004).

Source: The Carbon Trust

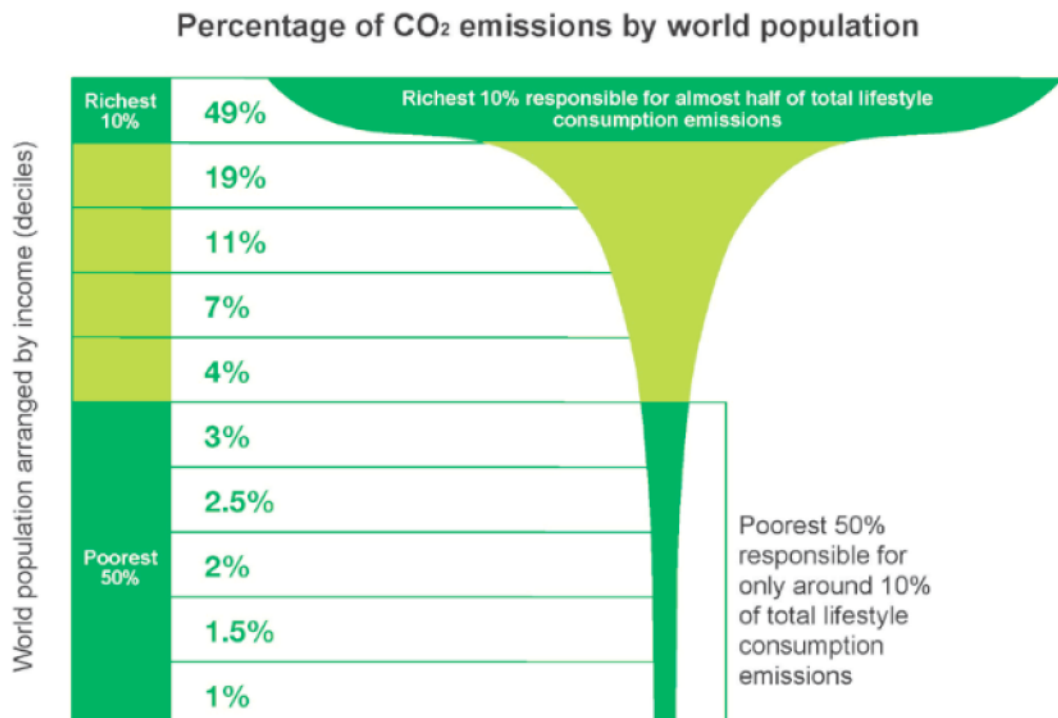
Figure 1. The impact of a consumption-based view on emissions by country

Source House of Commons (2012) (copyright acknowledged)

In addition, there are wide 'class' differences in incomes, wealth and emissions within every country, hence new 'class' forms of double injustice multiply. Bringing these two features together, Figure 2 illustrates the profound inequity in consumption-based emissions in the Plutocene.

Figure 2. Global distribution of consumption-based emissions

Source: Gore 2015, Figure 1.



2.2. Inequality within rich countries drives emissions

Growing inequalities within countries may also and independently push up emissions. Inequality increases status competition in society, an effect first noted by Thorstein Veblen in *The Theory of the Leisure Class* published in 1899, and restated with cross-national evidence by Wilkinson and Pickett in *The Spirit Level* (2009). Inequality spurs competitive consumption, emulation effects and excessive consumerism. It creates material aspirations that cannot be scaled to everyone in a sustainable manner. It fosters competition for 'positional' goods that is both counterproductive and unsustainable. More recent research shows rising inequality is also associated with longer hours of work and rising debt levels, both of which stimulate consumption and emissions (Frank, 2011; Pickett et al., 2014; Bowles and Park 2005; Laurent (2015); Koch and Mont 2016).

Related to this, inequality hinders collective action. Higher inequality strengthens the power of the rich to make decisions, set agendas, and inculcate selfish values. The rich will have the incentive and the means to substitute private amenities for public ones, which will further reduce their commitments to public provision. Other research shows that inequality undermines the health, resilience and capacities of poorer communities, which multiplies the social damage due to environmental shocks. Inequality downgrades environmental concerns by forcing short-term time horizons on lower income groups. (Neumayer, 2011) (Marmot, 2005), Laurent, 2015; Jorgenson et al 2016).

Others however argue the opposite, that inequality can actually reduce emissions due to two factors. First, average propensities to consume and emit decline as incomes rise (Ravaillon et al (2000)). Second, the basic need satisfiers or necessities of life – food, housing, domestic energy and basic transport – are almost everywhere *more* energy- and emissions-intensive than other goods. Table 1 tabulates the *expenditure elasticity* of different goods and services in the UK against their GHG emissions intensity. It uses expenditure elasticity - the ratio of the percentage change in expenditure to the percentage change in household income - as a behavioural indicator to distinguish 'necessities' from non-necessities or 'luxuries'. It reveals an important paradox: necessities are higher-carbon than 'luxuries'. The critical basic goods of home energy, food and essential transport that account for around one half of all expenditure on average, are carbon- and GHG-intensive, while almost all non-necessities, measured in this way, are lower carbon.

Table 1: Categories of personal consumption by necessity and emission content, UK 2009

Source: Chitnis et al (2014): Tables 5, A.5

	<i>High emission (>1 tonne CO₂e/£000)</i>	<i>Low emission (<1 tonne CO₂e/£000)</i>
'Necessities' (<i>expenditure elasticity <1</i>)	All domestic energy (electricity, gas, other fuels) (31.4%) Food (15.0%)	Other housing (2.7%) Communication (1.4%) Alcohol/tobacco (0.8%)
'Non-necessities' (<i>expenditure elasticity >1</i>)	Vehicle fuels (5.8%) Other transport (11.7%)	Clothing and footwear (3.0%) Furnishings (5.8%) Recreation and culture (10.1%) Restaurants and hotels (5.8%) Private health (0.6%) Private education (0.3%) Miscellaneous (4.9%)

Note 1: The figures in brackets show the shares of total GHG emissions accounted for by each item.

Note 2: A more refined concept of necessitousness is introduced in the following section.

This implies that higher inequality in a country would, all other things being equal, reduce consumption emissions (Gough 2017b). At the extreme, the newly emerging plutocratic class in the US and elsewhere simply have too much money to spend and consume, however many planes, yachts and mansions they own. By commandeering most of the benefits of growth in recent years they have denied poor and middle-income groups any ability to improve their consumption of necessities. Though socially regressive and repugnant, such hyper-inequality may save on emissions!

The theoretical literature thus arrives at no consensus. However evidence is growing that rising inequality, as measured by, for example, the income share of the top 10%, independently drives up consumption emissions in rich countries: rising inequality drives competitive consumption and weakens solidarity and collective action to restrain emissions. In middle and low income countries the opposite relation holds: where inequality is high a large share of the population lives essentially on the fringe of the carbon economy, thus reducing overall emissions (Grunewald et al 2017; Jorgensen et al 2016). In the rich world and taking other factors into account, rising inequality appears to drive up emissions. Since the rich world has higher consumption emissions than most of the middle and low income countries, this relationship matters more than the reverse relationship in the other countries.

2.3. The triple injustice

Finally, *climate mitigation policies* within countries may themselves exacerbate inequalities. Studies reveal potential *synergies* between policies to stabilise climate change and to enhance human wellbeing, again measured by health. These include the direct benefits of climate control, such as reducing the direct impacts of drought, flood and heat, and *co-benefits*, such as reducing air pollution, encouraging active travel and reducing harmful levels of consumption of red meat.

However, studies also reveal potentially grave *conflicts* between human wellbeing and climatic stability. For example, most plans to reduce emissions by 2030 rely heavily on *bioenergy* plus carbon capture and storage (BECCS). Bioenergy is energy derived from biological sources or biomass - any organic material which has stored sunlight in the form of chemical energy. But expanding bioenergy could threaten basic needs: by taking land away from food production it threatens SDG goal 2 – ending hunger and achieving food security for all, and SDG 6 - universal and equitable access to adequate safe and affordable drinking water. It could also threaten biodiversity and place-specific livelihoods. Furthermore, using more land for bioenergy production will, other things being equal, raise the cost of food, reduce real incomes and have a major and regressive impact on poverty (SDG 1). Given that the share of expenditure devoted to basic food varies from 7% in the USA to 70% in Zambia, a major expansion of biomass could worsen both global poverty and global inequality (Farley et al., 2015).

Across the world, measures to increase the price of carbon – an essential component of effective carbon mitigation – will be regressive in the first instance, bearing more harshly on lower income households and localities, as Table 1 implies (Gough et al 2011). More detailed studies show that small and ‘workless’ households (retired, unemployed or ‘unoccupied’)

also spend a higher share on energy. There is evidence too that lower income households on average spend more time at home and thus have a greater energy needs (Druckman and Jackson, 2008; Gough et al, 2011). So within rich countries too carbon pricing will worsen the distribution of income: not a good position to be in when inequalities are rising. This clash between social need, unequal incomes and the market pricing of energy can lead to 'energy poverty' or 'fuel poverty'. For example, policies designed to improve energy efficiency in poor households can actually increase fuel poverty when they are financed by raising gas and electricity tariffs (Hills 2012, Gough 2013).

2.4 Some implications for eco-social policy in the rich world

The standard economics response to these distributive impacts is to 'compensate the losers'. Yet there are profound problems with compensation, especially when compensating households for rising energy costs. First, the variables affecting domestic energy efficiency cannot easily be addressed by existing social transfer programmes, since they encompass factors such as the energy efficiency of dwellings, urban-rural differences and connection to energy networks. Second, the social security costs would be expensive and they would rise year by year as more ambitious carbon reduction targets kick in. More people would be subject to means-testing, so facing a 'poverty trap' - high marginal tax rates if their incomes increased; yet despite this assistance substantial numbers of low income losers would remain, enough perhaps to spark a backlash against all climate policies. Third, the compensation costs would soon exhaust the extra revenue raised by higher carbon taxes leaving nothing to spare for improvements in energy efficiency and other low-carbon innovations (Gough 2017b, ch 6). Similar arguments apply in other systems of provision such as transport.

Furthermore, the message from Table 1, that most necessities are more emissions-intensive than most luxuries, implies that simply redistributing income to low-income households would, *ceteris paribus*, raise rather than lower total emissions. Is there then an equity-sustainability dilemma? The evidence suggests that this can be overcome, that *ceteris* is rarely *paribus*. First, in some countries, such as Norway and Sweden, carbon intensities for housing and domestic energy are much lower than in the UK, reflecting the extensive presence of district heating, biomass, hydro-electricity and better insulation in the Nordic countries (Kerkhof et al. 2009). Different forms of technology and infrastructure can profoundly affect the eco-efficiency of specific sectors and thus the potential trade-off between equity and sustainability pictured in Table 1. Second, recent research on household emissions in the US suggests the trade-off is small. Sagar (2017) concludes that if the US had the same income distribution as Sweden – a huge change – CO₂ emissions from private households would be only 1.5% higher. This is manageable if new eco-social programmes are put into place. These findings help reconcile the apparent equity-sustainability dilemma in Table 1 with the conclusion of section 2.2 above that inequality drives up emissions in rich countries.

The consensus among social policy experts is that compensation plans are both technically and politically very difficult to achieve. Since compensation policies will not be sufficient and could be counter-productive, new forms of 'eco-social policy' within each strategy are required that serve both equity and sustainability goals. The model of social policy needs to change, as illustrated below. Instead of reactive and countervailing social policies, there is a need for *proactive, integrated 'eco-social' policies*:

Climate mitigation policies -> distributional dilemmas -> redistributive social policies



In the important field of housing and domestic energy, this points to two basic eco-social solutions. First, *social energy tariffs*: introduce lower tariffs for initial units of electricity or gas consumed, and higher tariffs for successive units. This would recognize the basic need component of the first block of household energy and the progressive choice element in successive units. The total average price of domestic energy would continue to rise over time, as part of the carbon pricing strategy, but the distribution of the burden would be skewed more to higher consumption households and luxury use of energy. It would be difficult to administer in the privatised energy system of most countries today and is opposed by energy suppliers.

Second, and most important, a massive roll-out of '*Green New Deal*' programmes (NEF 2008). These would reduce carbon emissions by investing in renewable energy and deploying radical conservation measures, whilst boosting demand and employment opportunities, via, for example, creating and training a 'carbon army' of workers to achieve the reconstruction and house retrofitting programme. Germany has the most ambitious programme of this kind in Europe (Power and Zulauf, 2011). Yet the German Feed-in Tariff (FiT) programme recreates some new distributive dilemmas: it clearly benefits the top 30% of households and richer farmers (Hüther, 2013). Given the impact on general electricity prices the overall impact remains regressive. However, in a dynamic context, the FiT has proved invaluable in retrofitting houses and in building up Germany's solar panel industry.

In conclusion, new forms of triple injustice can be continually recreated in unequal societies. To deal with these a more fundamental strategy is required.

3. Eco-social policies to recompose consumption

3.1 Consumption and welfare

The distinction between a C1 and C2 approach has parallels with national income accounting. This seems counter-intuitive, given that national income accounting is notoriously hopeless as a measure of wellbeing and ignores the entire household economy, civil society and the still broader 'core economy'. However, national income accounting has one great merit: it provides three distinct methods for calculating the value of an economy's gross domestic product or GDP, which should deliver the same answer. These methods are:

- to sum the monetary value added by all enterprises in the economy
- to sum the incomes generated in the economy
- to sum expenditures in the economy on final outputs

These distinct methods in turn imply three distinct targets for public policy to act upon:

1. the quantum and efficiency of production: broadly the scope of economic policy
2. the distribution of incomes: broadly the scope of social policy
3. the composition of consumption: the target of a novel range of policies that I will call 'recomposition'.

The goals of efficiency and growth remain the mainstay of economic policy. After the Second World War, a 'social settlement' in the developed world qualified capitalism with the auxiliary goal of equity and redistribution: the policy domain of 'welfare states'. The urgent need now is for a new social settlement adding a third goal: sustainable consumption. This would address the composition of national expenditure: between private consumption, public consumption and investment, and within each of these categories. Two critical dimensions in this debate would be the environmental impact of different expenditures but also their 'necessitousness', whether they are essential, desirable or wasteful. This takes us back to need theory.

This third goal is not as novel as it seems. In practice, post-war welfare states have been more complex and differentiated than the common opposition of efficiency and equity implies. It is more helpful to see social policy comprising three sets of activities, as in Table 2.

Table 2. Ideal generic goals and activities of social policy

Welfare goals	Welfare policies
S1 Redistribution of income	Guarantee a minimum income floor; reduce inequality
S2 Social consumption	Provide vital need satisfiers and discourage 'bads'
S3 Social investment	Develop human and social capabilities

Source: Gough 2017b, Table 5.1

Alongside social transfers (S1), social democratic welfare states deliver social consumption services (S2) and social investment policies (S3), which together account for about one half of public social expenditure. In addition, unrecognised by expenditure accounts, there is a raft of other interventions relevant to meeting needs, such as labour market policies of all kinds and regulatory policies impacting firms, households and other actors. Despite ongoing cuts, privatisation, contracting out, commodification and deregulation, welfare states continue to provide, finance and regulate for an alternative, broadly needs-based delivery of money, services and capabilities. Thus, right from the start we can note that social policy is heavily involved in recomposing consumption (C2).

I am proposing an expansion of public debate and intervention around *private* consumption. This is a more radical step. It appears to challenge a basic freedom of modern consumer societies. It challenges a fundamental principle of welfare economics, that individuals are the best judges of their own preferences or wants, and that what is consumed should be determined by the private consumption preferences of individuals. It immediately raises concerns about interference by experts, officials or politicians in the intimate lives of citizens. How can such a programme be envisaged in a democratic society?

A starting point is to recognise the lack of realism of the orthodox economic theory of consumers as rational and informed individuals with ordered sets of preferences uninfluenced by external factors. This model has long been rejected by behavioural economics that recognises gaps in knowledge, the importance of inertia and the role of 'satisficing' in consumer behaviour and thus countenances 'nudging' and changes in choice architecture to alter consumers' incentives and behaviour. But this too is insufficient. Sociologists have shown that behaviours are shaped by wider 'social practices', such as daily showering or patterns of food purchasing, reflecting different identities and social norms. Beyond these are political economy explanations that recognise the pervasive power of corporations and advertising to engineer novel and ever-expanding consumption commodities. And finally, there are still broader systems of provision, such as the spatial layout of cities, largely outside the scope of consumer influence.

It is not surprising that by contrast many writers on sustainable consumption speak of ‘an iron cage of consumerism’ imprisoning consumers (Jackson 2009). This is too strong an image: new market players can enter and generational shifts in tastes can occur. But there can be no doubt that corporate power, system ‘lock-in’ and the interaction between the two profoundly undermine the neo-classical justification for untrammelled consumer behaviour. This is increasingly recognised in contemporary policy areas, such as the public provision and regulation of medical services, and the blitzkrieg of regulations, taxes and shaming that surrounds smoking today.

3.2 Making the case for a ‘consumption corridor’

Now the imperative need to restrain and reverse environmental degradation has brought consumption back onto the agenda. To recompose consumption fairly entails making a distinction between goods and services that are necessary for a basic level of wellbeing, and those that are surplus to this requirement. By prioritising the former, need theory provides a bridge to relate social, global and intergenerational justice (Gough 2015a). To achieve a safe and just space for humanity requires addressing not only basic needs, minimum incomes and necessities, but also riches, luxuries and maximum incomes. In the language of Giulio and Fuchs (2014), we must pursue the idea of a sustainable ‘consumption corridor’ between *minimum* standards, allowing every individual to live a satisfactory life, and *maximum* standards, ensuring a limit on every individual’s use of natural and social resources in order to guarantee a good life for others in the present and in the future. I will look at each in turn.

A decent minimum consumption standard. Social policy research provides us with a sound basis for identifying *necessities* in any particular social context. Since Peter Townsend’s work on poverty (1979), there has been wide acceptance that inability to *participate* in accepted social activities is the defining feature of poverty or social exclusion. But what participation entails will be conceived, specified and measured differently in different societies. This can be identified using citizen focus groups advised by various ‘experts’. For example, the 2014 MIS (Minimum Income Standard) study in the UK involved 12 focus groups in which members of the public from a range of social backgrounds were tasked with producing lists of items that households would need in order to reach ‘an acceptable minimum standard of living’. An impressive consensus has built up on what this consumption bundle consists of. The dual strategy methodology is now being overtly applied to estimate ‘decent living’ standards across many EU member states (Storms 2013; Gough 2017, chapter 7).

Devising a maximum income line: defining luxuries. Herman Daly (1977) was an early advocate of instituting a maximum income as part of a steady state economy, an idea he continues to repeat: ‘If you have a limited total, and you also have a minimum income, then that implies a maximum somewhere’ (Daly 2018: 90). Since then calls for a maximum income or ‘riches line’ have grown though often without a coherent ethical or sociological basis. But new thinking among political philosophers, sustainability economists and others is gradually emerging. Ingrid Robeyns (2018), for example, makes the case for a ‘non-intrinsic limitarianism’ – the belief that it is not permissible to have more resources than are needed to fully flourish in life. To justify this she considers three arguments: the arguments of unmet urgent needs, of democracy and legitimacy, and of ecological sustainability. I will consider each in turn.

First, riches should not be accrued at the expense of unmet basic needs. Medeiros's (2006) *redistributive* method to calculate a maximum income line elegantly operationalises this principle. Beginning with the minimum income line it calculates a riches line 'which delimits the accumulated resources necessary for the eradication of poverty'. It calculates what sum of money it would take to move everyone above the acceptable income threshold, and then considers at what salary all higher earnings would provide that sum. Using this method a recent estimate for the UK by Hirsch (2017) arrives at a riches line of about £150,000 per person per year. If all incomes above this rate were taxed at 100% the money raised would be sufficient to bring all UK citizens up to the 'minimum income standard' – a needs-based standard considerably higher than the official poverty line. This has some intuitive plausibility: it is the income at which the top rate of tax commences, and is the salary of the UK Prime Minister.

The second argument for establishing a maximum limit would require a more democratic, collaborative and disaggregated approach to defining luxuries. It would apply the dual strategy method to discussing conditions for *flourishing* in a specific national context. Planned research projects tend to focus on size of home, material goods in the home, savings/insurance, leisure activities, type of car and possible life choices. Citizen forums comprising different income groups and classes would be tasked with reaching a consensus on what bundle of goods and services would enable a flourishing or prosperous life. If this can be agreed, then we could identify a *maximum* bundle and a *maximum* income/wealth line above this level. Such possessions would be seen as luxuries and riches and would be seen to lack legitimacy.²

For our purposes it is the third test which is crucial: what bundle of consumer commodities contributing to flourishing or prosperity would be possible within current planetary boundaries? For example, what consumption levels and patterns would stay within a safe emissions level? To determine this level a more demanding dual strategy would be needed, whereby sustainability experts provide indicators of the carbon and GHG footprints of different consumption items to inform and guide citizen discussions on what was and was not acceptable. It is highly likely that this ecological maximum limit would lie below, possibly well below, both the redistributive and the legitimacy limits discussed above.

To devise and implement a luxury or riches line is a demanding task for many reasons. To move to 2 tonnes of emissions within existing socio-technical structures would deprive citizens of a vast range of goods and services - cars, imported foods, a range of clothing and diets etc - that they have agreed are necessary for effective participation in modern life. In Finland, even people receiving minimum income benefits exceed ecologically sustainable lifestyles by a wide margin (Hirvilampi et al 2013). This is to be expected: C2 policies complement but don't replace C1 policies.

3.3 Eco-social policies to recompose consumption

Initiatives to recompose consumption will necessarily be collective and there is growing evidence that these will be most successful in sub-national communities, whether cities, towns or villages. Meaningful participation within localities encourages longer-term and joined-up thinking, bringing together singular technologies to provide 'transformative networks of innovation' (Steward 2012; Jackson and Victor (2013). Decarbonising our

² We intend to begin pilot studies in 2019 to test whether this is the case.

economies and our way of life can never be achieved by simply new technology: it requires a network of transformations that are more readily conceived and perceived on a smaller human scale, such as CRAGs (Carbon Rationing Action Groups) and transition towns in the UK (Howell, 2012; Whitmarsh, 2011, Seyfang and Haxeltine 2013).

But in view of overwhelming power imbalances, consumption lock-in and growing inequality, it is evident that recomposing consumption will require, in addition, some hefty top-down state interventions. It will need a range of novel C2 programmes to recompose consumption in a fair way: an enlarged suite of 'eco-social policies' that simultaneously and explicitly pursue both equity/justice and sustainability/ sufficiency goals. These are discussed in detail in my book (Gough 2017b). I highlight just three here: smart VAT, wider social consumption, and reduced work-time.

Taxing high-carbon luxuries: smart value-added tax. In all OECD countries except the USA there exists an explicit tax on consumption—value-added tax (VAT)—that raises about a fifth of all tax revenues and is a major funder of social programmes. The VAT rate in most EU countries today varies between 20% and 25%, but in all countries there are exemptions and lower rates applied to certain goods and services. The argument for a 'smart VAT' is to introduce deliberate variations in the rate, higher to discourage bad consumption and lower to encourage desirable consumption (Fell 2016). The proposal has mainly been advocated on health and well-being grounds, to improve healthy eating and discourage obesity. But it could also be amended to take account of sustainability. Thus high-GHG goods that harmed well-being would attract the highest VAT rates, while low-carbon goods that improve well-being would be taxed at lower or even negative rates (amounting to a subsidy). To decide what goods are virtuous and what harmful Fell proposes regular deliberative dialogue in focus groups informed by environmental and social experts. Smart VAT provides a broad framework within which other proposals to tax high-carbon non-essentials could fit, such as a frequent flyer levy or a global tax on business-class flights (Chancel and Piketty 2014).

Widening social consumption. There are several reasons for raising the share of state social consumption as part of an eco-social strategy. First, tax-financed social consumption such as health services, social care and education is inherently redistributive: allocation according to need, risk or citizenship, not market demand, automatically serves redistributive social goals—even if the tax system is neutral rather than progressive. Second, research suggests that this saves carbon. For example, the US healthcare system directly accounts for 8% of emissions in the USA, compared with 3% of UK emissions directly stemming from the NHS. This is due both to the greater macro-efficiency and lower expenditure shares of health in the UK, but also to lower emissions per pound or dollar spent, due to better allocation of resources and procurement practices and to explicit carbon-saving programmes (Gough 2017b).³

Reducing paid work time. A redistribution of time would contribute to recomposing consumption and deliver eco-social benefits. It would enhance 'discretionary time' - time left over after the necessary time spent in wage labour, unpaid household labour and personal care - and contribute to autonomy and wellbeing (Goodin et al 2008). Moreover evidence is growing that RWT can make a major contribution to a sustainable environment

³ The idea of Universal Basic Services generalizes this approach, though not on carbon grounds (IGP 2017). There is a case for public provision or guarantees of access for a wider range of life's necessities, beyond the staples of the welfare state, including for example food, housing and transport. This, rather than Universal Basic Income, would contribute to sustainability and greater equality (and efficiency).

and climate (Schor 2005, Coote and Franklin 2013; Gough 2017b). Since 1975, when they had similar hours of work, the US has reduced average hours by 4 per cent and Germany by 22 per cent. All other things being equal, Germany has deployed its productivity dividend in a less environmentally harmful way than the United States. RWT achieves this in two ways: it can change the time and expenditure budgets of households in a lower-carbon direction (the *composition* effect) and it weakens the 'work and spend' cycle, which locks employees into a trajectory of fixed hours and rising consumption (the *scale* effect). Both contribute to our C2 goal and the latter provides a transition to the C3 goal. But both need to be accompanied by supportive economic, labour and social policies to ensure that lower-income households do not suffer, that the transition is fair.

One way or another, the *composition of consumption* must enter political debate and the policy arsenal in an explicit way. Social policy should not be concerned only with equity and distributive issues. In the age of the Anthropocene, social policy must be about changing patterns of consumption as well as redistributing incomes.

Conclusion

Green growth, or raising eco-efficiency, will not suffice in the face of dangerous climate change for two reasons: it cannot succeed alone in reducing the cumulative stock of greenhouse gases fast enough and it pays little or no attention to issues of fairness and justice, either between countries or within countries. This chapter reverts to a concept in the Brundtland Report on sustainable development – that of common human needs – which I argue provides the crucial foundation for a just transition to a sustainable low-carbon world. After establishing a theoretical framework to define and operationalise human needs, the first section concludes by distinguishing three very broad strategies within rich countries to limit climate change in a just way: fair eco-efficiency, fair sustainable consumption, and fair degrowth. This chapter focuses only on the first two. The second part introduces inequality, to reflect the influence of the rising inequality of income and wealth on the distribution of consumption-based emissions between and within countries; a phenomenon some have labeled the *Plutocene*. This environment intensifies certain dilemmas between the goals of justice/equity and sustainability, which require new forms of eco-social policy to overcome.

The third section makes the case for 'recomposing consumption' by returning to need theory. Necessities can be distinguished from luxuries and this enables us to envisage and target a fair 'consumption corridor' between minimum and maximum consumption levels. To achieve this in a democratic society, I argue, will require new forms of deliberative citizen forums calling upon expert advice. To this end three further eco-social policies are advocated to shift rich countries towards more sustainable consumption practices. None of this will be easy, but recomposing consumption in rich countries could provide a strategic and more just bridge between a dangerous present and the seemingly impossible future of degrowth.

Practical proposals

1. Establish a public statutory body independent of government with the remit to pursue *sustainable and socially just* practices, monitor policy formation across departments, and evaluate and publicly comment on progress and its obstacles. How to do this will vary and we need cross-national studies here.

From a UK perspective this could be based on the Sustainable Development Commission (SDC), abolished in 2010. Other UK models are the UK Climate Change Committee, the Equalities and Human Rights Commission, and the Welsh Commission for Future Generations.

2. To achieve equitable and just eco-efficiency (C1):
 - a. Bring back into plural forms of collective ownership (state, municipal, cooperative etc) all privatised basic utilities, including energy and water.
 - b. Revamp Green New Deal proposals starting with social housing, low efficiency housing and housing in deprived areas.
 - c. Introduce social tariffs for energy and water.
3. Eco-social policies to recompose consumption (C2):
 - a. Expand the scope and extent of public service delivery of basic need services. Aim for Universal Basic Services as an alternative vision to Universal Basic Income
 - b. Establish deliberative citizen forums to try to achieve consensus on a) sustainable maximum incomes, b) sustainable maximum bundles of consumer goods
 - c. Introduce smart VAT with higher rates on unsustainable luxuries
 - d. Facilitate and encourage through collective bargaining and individual options opportunities to reduce paid work time

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