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CLIMATE CHANGE, SOCIAL POLICY AND GLOBAL GOVERNANCE

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Abstract

This paper considers the challenge to global social policy posed by global climate change. It sets side by side global social policies and global climate change policies, and surveys the governance of each. The first part summarises global social policy in recent years, distinguishing a) the policies and practices pursued in the global arena, and b) the structures of global governance and the role of significant global actors. The second part repeats this at greater length for global climate change. The third part then considers the relationship between these two sets of policies/ practices and governance structures, in particular the potential conflicts between the pursuit of social justice and environmental sustainability. It identifies two possible responses – compensation and co-benefits - and maps these onto current global actors, before concluding with a radical vision of eco-social policy.

Keywords: global social policy, climate change, carbon mitigation, global environmental policy, sustainable development, equity

"The two great challenges we face are overcoming poverty and managing climate change. If we fail on one, we will fail on the other" (Lord Stern 2009: 4)

"We are all in the same boat, but some of us have much nicer cabins than others" (Ackerman et al 2012, xii)

Introduction

Those of us who study social policy, and global social policy, must now address a new global threat, that of climate change. In May 2013 global atmospheric concentrations of carbon dioxide, as measured atop Hawaii's Mauna Loa volcano, reached 400 parts per million, up from around 280ppm before the Industrial Revolution. According to Prof Sir Brian Hoskins "The last time in the Earth's history when we saw similar levels of CO2 in the atmosphere was probably about 4.5 million years ago when the world was warmer on average by three or four degrees Celsius than it is today".[2] The challenge of climate change is, in the words of the Stern report (2007), 'big, global, long-term, cumulative, and uncertain'. It has been described as posing a 'truly complex and diabolical policy problem', a new all-encompassing social risk. It is not only global but intergenerational in its impact, threatening the human welfare of future peoples both born and unborn.

This paper adopts a global perspective – it sets side by side global social policies and global climate change policies, and surveys the governance of each. In charting the role of major global actors, I adopt a list common in the international relations literature: nation states, international governmental organisations (IGOs), the corporate sector, the global environment movement, and expert groups (O'Neill 2009, chapter 3).

In the first part I summarise Deacon's (2007) view of global social policy in recent years, distinguishing a) the policies and practices pursued in the global arena, and b) the structures of global governance and the role of significant global actors. The second part repeats this at greater length for global climate change, surveying both the policies and the global governance of climate change. The third part then considers the relationship between these two sets of policies/ practices and governance structures, in particular the potential conflicts between the pursuit of social justice and environmental sustainability. I conclude by identifying potential synergies and strategies to achieve them. The paper provides a conceptual mapping of two domains of global public policy, together with analysis and evaluation.

This is a vast topic – but not encompassing enough. Left outside the remit of this paper are global economic management and development policies and *their* governance. Since these remain the dominant drivers of the global system, this gap must be borne in mind in what follows. In between these three governance areas – economic management and development policy, social policy, and climate change policy – two other areas of global discourse and policy have emerged in the last three decades: 'social development' or 'human development', and 'sustainable development'. I will need to say something about each of these as well, especially the last which is the most all-embracing idea.

Meadowcroft (2005, 2012) was one of the first to notice certain parallels between social and environmental policies, contending that over the last four decades an 'environmental state' or 'eco-state' was emerging alongside the welfare state in some OECD countries. He argued that both social and environmental problems involve market externalities – a gap between private and social costs - which it requires collective action to overcome. In another time and discourse, Polanyi (1944/1957) considered both Labour and Land or Nature to be 'fictitious commodities' which required social counter-movements to restrict their commodification. For these reasons scholarship is slowly

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[2] http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_10-5-2013-16-39-30

growing around the development and interrelationship of welfare states and environmental states, though the latter have lagged for a generation or more behind the former (see Gough et al 2008).

Environmental policy and governance covers a wide range of issues, many of which are intra-national: in the case of such problems as lead in petrol or protection of domestic nature reserves the distance between the preventive programme and the beneficial outcome is relatively close in time and in space facilitating collective counter-measures. However others are 'transboundary', crossing or spilling over country borders. O'Neill (2009: 34-36) distinguishes eleven major groups here: climate change, stratospheric ozone pollution, transboundary air pollution, biodiversity loss, deforestation, desertification, persistent organic pollutants, hazardous waste trading, rivers and lakes, whaling, and marine ecosystems. These all require some form of international agreement to prevent, mitigate or rectify.

Of these, climate change is particularly intractable because of its time scale, cumulative nature, intersection with numerous other environmental problems, such as biodiversity loss, desertification and degradation of marine ecosystems, its intersection with other policy areas, such as the economy, and its impact on the global socio-economic system. Several scholars have defined it as a 'wicked' or 'diabolocal' problem that defies resolution because of its enormous interdependencies, uncertainties and conflicting interests of major actors (Head 2008, Garnaut 2008). This paper narrows its environmental scope to climate change alone; thus it is tackling the most intractable and egregious challenge in global environmental management.

Global Social Policy

Social policy can be defined most loosely as 'the practices of governments and other agencies that affect the welfare of populations', but this leaves the goals of such practices unspecified. The goals of social policy are many and various but can be distilled as meeting basic needs, protecting against risks, developing human capacities and promoting human wellbeing in an equitable way. They frequently appeal to notions of social justice. Bob Deacon has pioneered the study of global social policy, arguing that 'since about 1980 we have witnessed the globalisation of social policy and the socialisation of global politics. By the last phrase is meant the idea that agendas of the G8 are increasingly filled with global poverty or health issues' (Deacon 2007: 3). Studying this field covers two broad areas: first, the emerging pattern and governance of critical global actors in the field of social policy; and second, the emerging supranational policies and mechanisms of global redistribution, global social regulation and global social rights.[3]

Global governance of social policy

Deacon's picture is one of great fragmentation, complexity and contestation. There are several fault lines. The first is between the United Nations family of IGOs and the Bretton Woods family (the IMF, World Bank and now the WTO). Both sets of institutions originated during and after the Second World War, but their goals, powers and governance structures are quite different. The Bretton Woods institutions are concerned with the governance of the international capitalist economy and have few formal powers over global social policy. But their impact has been huge: the IMF has dictated the terms and conditionalities for loans and credits across the world. The Bank has similarly imposed numerous conditions on aid and loan flows, and moreover has set itself up as the 'Think Bank' for global social policy across the entire range of social issues. Since it is far less constrained, far better financed and far more unified than the UN family, it successfully dominated thinking on global social policy for the 80s and 90s and continues to play a major role.

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[3] I omit here his third aspect of global social policy – the impact of global actors on domestic social policies.

Second, within the UN family there is a plethora of organisations tasked with aspects of global social policy. The litany of acronyms include: ECOSOC, UNDESA, UNDP, ILO, WHO, UNESCO, UNICEF, FAO, UNRISD, and many more. This makes for fragmentation, and contrasts with the simplicity and power of the Bank-IMF-WTO triumvirate.

Third are country groupings representing nation states and their different interests in the global governance of economic and social issues. The basic fault line has been between North and South: the G7/G8 and the G77 (actually now the G132). The OECD also represents the 'West' plus some emerging capitalist economies. Within this group there are divisions on some issues between the global hegemon, the US, and the EU. The rise of the new global powers, notably China, but also including Brazil, India, the dynamic capitalist economies of East Asia and others, led to the formation of the G-20 major economies and the BASIC group (Brazil, South Africa, India and China).

Finally there are all the non-state actors that exert an influence on global social policymaking. By far the most important, in my view, are multi-national corporations, including financial institutions, which still dominate the world economy, but these receive little attention from Deacon (cf Farnsworth 2004). Others include the burgeoning international NGOs (INGOs), religious organisations, big philanthropy, and global social movements such as the Jubilee 2000 campaign to cancel third world debt.

It is a hallmark of his case that the governance of global social policy cannot be understood without taking account of the interrelation of all these actors and the networks between them. At the same time he has been criticised for privileging state and inter-state institutions within these networks (Yeates 2008). This is an accusation which applies as much to myself in this chapter.

Global social policies

Deacon usefully distinguishes here three categories of social policy: the '3 Rs' of redistribution, regulation and rights. The picture can be summarised as follows.

Redistribution. Following the heyday of neo-liberalism in the eighties and nineties, there have been some positive developments. These include increased international development aid combined with some debt cancellation, the human development agenda and the adoption of Millennium Development Goals (MDGs) for 2015 covering a wide range of social needs, a recognition of global public goods, and some small steps on international taxation. In terms of social results, levels of human development have narrowed between the South and the North and several MDGs, notably poverty reduction, have been met or are on target to be achieved. These are historical achievements. But against this, inequality has increased across all world regions (apart from Latin America, which started from the highest levels) and this has harmed improvements in human development as measured by the Human Development Index (HDI)– reducing it by one quarter from what it would otherwise be, according to the UNDP (2011). Moreover, the focus on the poor together with the ideology of minimal government has spread minimalist, targeted social programmes, weakened universal provision and ignored all the lessons to be learned from established Northern welfare states (cf. UNRISD 2010).

Regulation: The picture painted here by Deacon is rather minimal, with the spread of global labour standards (ILO) and health and health care targets and standards (WHO), not being complemented by global corporate, financial and tax regulation (as of 2007).

Rights: Deacon is rather downbeat about the spread of global social rights, noting a few advances but recognising two setbacks: the lack of effective enforcement mechanisms, and a Southern backlash against certain labour and other rights, regarded as Western cultural impositions or as

subterfuges to maintain trading benefits.[4] This second point raises big questions about the origins and ethical priority of human rights, a discourse that Sen, for example, has been keen to broaden. Yet the fact remains that the last half century has witnessed a rapid extension of social rights, in general and for specific groups, such as women, children, the disabled and ethnic minorities. Though driven by civil rights they have all encompassed social and welfare aspects. Blackburn (2011) refers to 'the extraordinary predominance of human-rights discourse in the second half of the 20th century', one which should be recognised as a progressive force, but which needs to be situated within the structural inequality and injustice generated by the process of capitalist accumulation.

Deacon summarises all this as 'stumbling towards the global 3 Rs'. More solidaristic, social democrat ideas are gaining some ground after the decades of strict neo-liberalism. But he notes that this progress must always be set in the context of two factors: first, the constraints of the structure of the global economy and the role of global business, and second, the pursuit of domestic interests by powerful nation-states, notably the US. His book was published in 2007, so to these I would now add a third constraint: the ongoing impact of the 2008 global financial crisis which is probably only half way through its course as I write.

Climate Change and its Global Governance

The challenge of climate change: a brief note

The best current estimates of the global threat are dire and are well known (see Metz 2010 for a clear and comprehensive analysis). The target agreed at the COP 17 (Conference of the Parties) meeting in Durban is that the rise in global temperature since the industrial revolution should not exceed 2°C. Yet current trends in GHG emissions look more consistent with a median temperature increase of 3.5-4°C (Bassi et al 2012). Such temperatures would redraw the physical geography of the world and generate vast movements of population with a high risk of conflicts and war (Stern in Kaul et al, 2009: 136). The World Bank (2012) has recently lent its weight to these forecasts. It agrees that the globe is on a path to heat up by 4 degrees at the end of the century if the global community fails to act on climate change. This would trigger 'a cascade of cataclysmic changes that include extreme heat-waves, declining global food stocks and a sea-level rise affecting hundreds of millions of people'. (Metz 2010 provides a clear, comprehensive and authoritative account of the challenges of climate change).

There is an asymmetry between *responsibility* for this global warming and its predicted damaging *impacts*. The gap in current per capita emissions between nations is wide, still more so if historical emissions of countries over the last century is taken into account. (Standards and measures of responsibility are disputed, but most analysts who have studied the problem from a normative perspective have concluded that the *minimum* standard of distributive justice between nations is to aim for equal emissions per head across the globe (Baer 2011)). As regards *impacts*, the consensus remains that tropical regions of the world, which are predominantly developing countries, will be more negatively impacted than temperate regions. On balance these responsibilities and impacts combine to create a 'double injustice', a point regularly made on a world scale by the BASIC and G77 groups of countries. One illustration of the contemporary imbalance: if all 40 million drivers of SUVs

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[4] One promising new development in social rights is the 2012 ILO Recommendation to establish National Social Protection Floors, which would establish nationally defined sets of basic social security guarantees to secure income and health protection aimed at preventing or alleviating poverty, vulnerability and social exclusion (Deacon 2013).

in the US switched to fuel-efficient cars the savings would alone offset the emissions generated in providing electricity to 1.6 billion people in the South (World Bank 2010: p.3).

But the situation is changing rapidly. China now accounts for 29% of global CO_2 emissions, almost double that of the US, and its emissions per capita have risen remarkably to within the EU range. It is a feature of climate change governance that both emissions per head and *total* national emissions, influenced as they must be by population size, count. Thus the North-South duality in global social policy is fundamentally qualified in the global politics of climate change. A third world grouping of fast growing capitalist economies is emerging between North and South; in the absence of any suitable acronym I shall label these countries the 'East'.

However, an important qualification should be noted here: the export of industry to the developing world in the recent phase of globalisation has relocated significant emissions from the North to the East. Thus at one extreme the emissions by UK consumers far exceed emissions from production in the UK national territory – by 23% in 2009. At the other extreme China's consumption -based emissions are only one half of its production-based emissions. This transfer has been a great help in enabling the UK to reach and exceed its Kyoto targets. There is a growing case for monitoring national emissions using consumption accounting, but at present the Kyoto basis of territorial emissions is still regularly used (Gough 2013a).

The global governance of climate change

This paper takes for granted that the present international climate regime has been built on multilateral foundations and that multilateral agreements between states will continue to be the core of what climate governance there is, notwithstanding widespread agreement that it is in a state of crisis (Falkner et al 2010). 'States are still the primary gatekeepers of the global order' (Christoff and Eckersley forthcoming). Thus this survey begins with the predominant multilateral institution of climate change governance, the UN Framework Convention on Climate Change (UNFCCC).

Rio 1992 and the UNFCCC. The UN Rio Earth Summit in 1992 provided a radical statement of principles intended to guide global environmental and climate change policy. These included the 'precautionary principle' (Principle 15), the 'polluter pays' principle (16) and Principle 7 on 'common but differentiated responsibilities' between developed and developing countries (Christoff and Eckersley 2013). These were prescient articles which have not in practice been adhered to. The Summit also established the UNFCCC, significantly governed by the UN General Assembly. This remains the key framework for multilateral action on climate mitigation and adaptation (Falkner 2010). So far almost every nation has signed up to become a party to the treaty, and these meet every year in 'Conferences of the Parties' (COPs), the major ones shown below in Figure 1.

Figure 1. International climate change negotiations: key dates
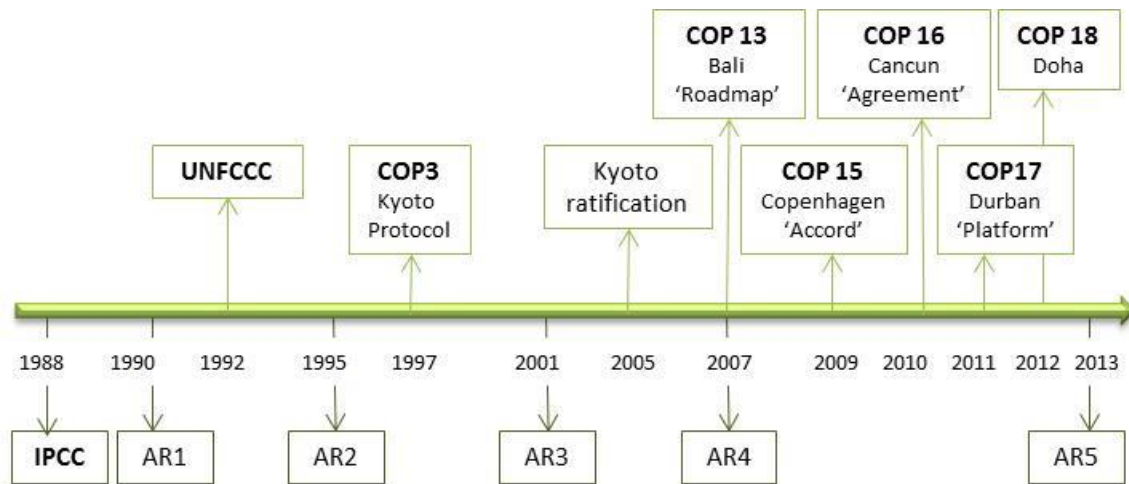
Source: Bassi, Rydge and Stern 2012

Intergovernmental conferences of nearly 200 governments, surrounded by a vast noisy collection of business representatives, interest groups, INGOs, social movements and community groups cannot provide a mechanism for resolving such momentous disputes. The usual result is the 'law of the least ambitious program': 'where international management can be established only through agreement among all significant parties involved… collective action will be limited to those measures acceptable to the least enthusiastic party' (Foryn 2007). Little has been achieved and there is no active promotion of sustainable development goals, partly due to the opposition of developing countries on similar grounds to those noted above re global social regulation, but most notably due to the opposition of the global hegemon – the US (see below).

The Intergovernmental Panel on Climate Change (IPCC) was established in 1988[5] to provide a clear scientific view of the current state of knowledge about climate change. It has so far produced four voluminous Assessment Reports (AR in Figure 1 above), the last in 2007, and the fifth is expected in 2013-14. According to Jacobs (2012) it is a unique, unprecedented and extraordinary body: It 'gathered together almost every climate scientist in the world across a range of disciplines, to produce consensus reports on the nature of the problem, the evidence on what was happening now, and what you could do about it now'. For Biermann (2011) 'governance by scientific assessment' is unique to climate governance. This is all the more remarkable given that scientific understanding of cause and effects and the possibility of prediction is very difficult in climate change, due *inter alia* to the complexity of the global climate system, the inherent problems in predicting the effects of a unique, rapid, one-off shift in the parameters, and the long causal chain linking global warming to human welfare. Of course the IPCC is continually challenged by powerful, well-funded 'climate denial' interests and in parts of the media. But contrary to widespread opinion in the West, this sceptical current has not made great headway in terms of public opinion across much of the world with the notable exception of the US (Gough 2013b). The scientific integrity of the IPCC is not (yet) seriously impugned.

The Bretton Woods institutions. Turning to other intergovernmental actors, the Bretton Woods institutions have played a mainly minimal or negative role until very recently. The World Bank, despite its introduction of environmental impact assessments for all projects, continues to direct the bulk of its lending to wards unsustainable development (Clapp and Dauvergne 2011). Article XX of

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[5] By WMO (World Meteorological Organization) and UNEP (the UN Environment Programme) which was established earlier in 1972 to coordinate United Nations environmental activities and assist developing countries in implementing environmentally sound policies and practices.

the WTO permits member states to use regulations to restrict trade if they are necessary for the protection of human, animal or plant life or the conservation of exhaustible resources. The WTO has worked together with UNEP on how far this article can be used to justify protection of national climate change programmes in trade negotiations (UNEP-WTO 2009). But essentially 'the parties to the UNFCCC have been at pains to avoid any rule collision by adapting the climate change regime to the goals and principles of the trading regime' (Christoff and Eckersley forthcoming). This echoes Bernstein's (2001) 'compromise of liberal environmentalism', whereby environmental governance since the 1970s has been progressively predicated on the promotion and maintenance of a liberal economic order (cf. Newell 2012).

National groupings. These have played an important role - in the case of the US a consistently oppositional one. Because it is still the global superpower, this has blocked and qualified numerous global agreements; for example, it was able to persuade other countries to accept the Flexible Mechanisms as a condition for its joining Kyoto. It has also played a role in shifting global policies towards 'marketised climate governance' (see below; Paterson 2011). The EU has equally consistently played a relatively progressive role in global climate negotiations, in setting domestic emission targets more ambitious than Kyoto and in putting in place the EU Emissions Trading System. The BASIC and G77 groups of countries regularly reject any use of climate change arguments to circumscribe their economic development programmes. The BASIC group has the potential to represent the third category of fast growing economies with fast growing emissions, but at present it is a fragile coalition - the interests of China, Brazil and India are very divergent.

Business interests. Business interests are very important, and potentially a positive, contributor to the global politics of climate change, in a way not paralleled, I would argue, in global social policy. Carboniferous energy producers and high emission industries, such as aluminium, cement, steel, etc are well organised to block climate change targets, policies and programmes which would undermine their business opportunities and profitability. They continue to play a blocking role in the US, Canada and Australia (Christoff and Eckersley 2011). Until recently, the Global Climate Coalition, a business organisation dominated by US multinationals allied with oil exporting countries like Saudi Arabia, worked to slow down negotiations and block action (Paterson 2011).

But these 'brown capitalist' interests are now opposed by a growing force advocating green growth and 'green capitalism' (Falkner 2008). There are now powerful business advocates for mitigation and adaptation programmes across the world. The motives for greening business range from pre-empting government regulation and avoiding reputational damage, through minimising risks of climate change to future business (as in agriculture or insurance), to securing first mover advantage in developing green industries. Corporate responses include new forms of private cross-border regulation, such as the Forest Stewardship Council and Fairtrade Labelling, and extending 'corporate social responsibility' practices to reducing carbon footprints, as Walmart are doing (Newell and Paterson 2010, chapter 3; O'Neill 2009, chapter 7). Whereas global social policy must in large part question private interests and market solutions, the climate change agenda provides unprecedented opportunities for profitable new industries, financial instruments and markets.

The evidence thus far suggests that this can be mobilised more easily in coordinated market economies, whether social democratic, as in the Nordic countries, corporatist, as in Germany and Austria, or more statist, as in East Asia and France (Gough 2013b).). Indeed this is the dominant paradigm in much of Europe, and especially Germany, where the 'ecological modernisation' thesis emerged. According to the OECD, it is also dominant in Korea and some other emerging economies. Yet even in the UK the Confederation of British Industries (CBI 2012) has issued a call for consistent support for 'green growth', arguing that the so-called choice between going green or going for

growth is a false one. 'In reality, with the right policies in place, green business will be a major pillar of our future growth'.

On the other hand, the involvement of capitalist players has supported a preference for market-friendly and supportive solutions rather than public regulation and carbon taxation. The former include cap-and-trade measures such as the EU Emissions Trading System (ETS) and the Clean Development Mechanism (CDM). This bias also reflects US hegemony and the dominance of neo-liberal thought during the key period in which global mechanisms were discussed and established (Paterson 2011). In the last two decades widespread carbon finance interests have spawned new companies, bank operations, markets and associations (Newell and Paterson 2010). Once established, emissions trading systems create opportunities for rent-seeking, gaming and vested interests which then lobby heavily for its continuation and for less restrictive implementation. Once these market-friendly policies become 'locked-in' it becomes very expensive to change direction towards carbon taxation and regulation (Hepburn 2009, Gough 2013b).

Social movements, INGOs, Green parties. The rise of global environmental governance has been pushed by a flourishing network of international NGOs, civil society actors and social movements across the world. These include the influence of green social movements and green parties (Dryzek et al 2003). Over the past four decades there has been an 'efflorescence of non-state activism' to fight against the exploitation of the earth (Lipschutz and Mckendry 2011). In particular large numbers of people mobilised across the world in 2005-09 leading up to the UN Copenhagen conference, motivated by an urgent moral concern to safeguard the planet. The international day of action preceding the Copenhagen conference in 2009 organised by 350.org has been dubbed 'the most widespread day of political action in the planet's history'. Many of these activists oppose the commodification of the earth and the financialisation of climate policies demanded by business interests, yet it can be argued that their activity has at least modified the nature of 'climate capitalism' (Paterson and Newell 2010).

Global climate change policy

This is too big an issue to summarise conveniently here. What follows is brief and selective, concentrating again on multilateral initiatives, and using the three R's framework.

Regulation. The third Conference of Parties held in Kyoto in 1997 adopted the 'Kyoto Protocol'. This recognises the responsibility of the North for accumulated past emissions via the principle of 'common but differentiated responsibilities' (IPCC 2007:33). It set mandatory greenhouse gas emission targets for developed countries during the first commitment period (2008 to 2012) and provided a framework for further climate negotitations . The Protocol entered into force in 2005, following Russian ratification, but was rejected by the US. This remains the only still binding international target for the reduction of emissions, but its direct impact on emissions has been small.

The process since then has been halting, divisive and relatively unproductive. Some progress has been made elsewhere. For example the REDD programme (Reducing Emissions from Deforestation and Forest Degradation) has been designed to create a financial value for the carbon stored in forests, offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development. The Clean Development Mechanism (CDM). was another innovation but it has been bedevilled by so many problems that at best only one-third of the projects funded have actually achieved any transfer of clean technology (World Bank 2010). COP17 in Durban agreed the 'Durban Platform for Enhanced Action' which extended the Kyoto Protocol up to 2017 and agreed to 'launch a process to develop a protocol, another legal instrument or an agreed outcome with legal force' by 2015, which would enter into force by 2020 (UNFCCC, 2012). This agreement is 'applicable to all parties', which is widely understood to mean that

developing as well as developed countries should take on binding commitments in the future (Jacobs, 2012). However, countries could still disagree on the extent to which the binding agreements need to be similar across countries whatever their level of development – the US is likely to lobby hard for this.

Rights. There has been no international recognition of the rights of 'climate losers' to be compensated by those who have thus far gained from the exploitation of carboniferous energy, despite campaigning from the Southern governments and rights-based organisations in the North (Ikeme 2003, Paterson 2011). There is also a case for a radical rights-based approach to thinking about the future wherein future generations have a fundamental and inalienable right to the non-substitutable services of nature and the current generation has a duty of intergenerational stewardship. But the International Court of Justice (ICJ) has thus far played an insignificant role, and has been hampered by divided opinion over whether there should be a separate International Court for the Environment.

Redistribution. There has been little progress in bringing about the enormous transfers from North to South required to enable developing countries to adapt to climate change and develop low-emission practices whilst maintaining economic and human development. Negotiations have effectively stalled on funding for the Green Climate Fund and disagreements continue over the share of public and private funding and whether public funds will be 'additional' to existing aid commitments (Bassi et al 2012). There is an urgent need to move the equity agenda forward, but this encroaches on the most sensitive areas of nation states' interests especially in the North: their respective contributions to both emission reduction and to financing climate adaptation in the South.[6]

Comparing global social and climate policy

Table 1: Summary of key governance institutions in the two domains

Institution	Global social policy	Global climate policy
UN - multilateral	Plethora and fragmentation: ECOSOC, UNDESA, ILO, WHO, UNESCO, UNICEF, FAO, UNDP, UNRISD etc	UNEP, UNFCCC (post-Rio92) -> COPs, important but weak: 'least enthusiastic party' game
Bretton Woods group	World Bank a dominant player	Lower key role, but UNFCCC adapts to WTO trading regime
Country groupings	G7 v G77 key division, but G20. Within North: US v some EU countries	G7 v G77 with BASIC group emerging to represent the 'East'. US a key blocker, US v EU
Interests: business	Blocking role of vested interests; CSR weak	GCC (US, Saudi Arabia) v EU. 'Brown business' v 'green business'. Pressure to develop 'market friendly' solutions.
Other non-state actors	INGOs, global campaigns (eg Jubilee 2000), provision by religious groups, new philanthropy, NGOs	INGOs, global campaigns, green parties
Scientific bodies	--	IPCC unique and important

Table 1 summarises the key governance institutions in the two policy domains. There are of course profound differences: three deserve mention. First, climate change is the classic global phenomenon and such governance as it has is inherently global, whereas social policies emerged and flourished in national contexts in the North and this pattern is repeating in the East and South. Global governance of social policy has emerged as part of the international development and transnational rights

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[6] See Climate Action Network: http://gdrights.org/wp-content/uploads/2013/06/CAN-ERF-discussion-paper.pdf

pressures, but this can block as well as complement national initiatives. A second difference is the role of scientific assessment: there is no parallel in global social policy to the unique role played by the IPCC in providing a consensual knowledge platform for policy-makers. Third, the role of business and financial interests differs: in social policy these have been traditionally negative or indifferent; in the governance of climate change they play a major role. However, the direction of impact depends on the division between 'green' and 'brown' interests and the national and international clout they can muster.

Comparing policies and outcomes is difficult. From one perspective global climate initiatives have been a success story: an international framework negotiated in 1992 and a protocol in 1997 – well before widespread concern about climate change took off (Jacobs 2012). Yet in terms of outcomes, there has been further and accelerating deterioration: 'The message is strong and clear … since the start of climate change negotiations in 1992 global emissions have more than doubled' (Bassi et al 2012). Neither the aggregate threat of climate change, nor the distributive allocation of responsibilities, has been effectively addressed thus far. In global social policy there has been some progress in global agreements on social rights and regulation and some progress notably in poverty reduction and human development goals, but little movement thus far towards a framework for global social security and social public goods. In neither domain is there anything approaching an international welfare or environmental state.

Combining social justice and sustainability: global governance issues

What are the prospects for combining these two policy domains? Can rapid reduction of GHG emissions be combined with green growth? Can green growth be combined with global poverty alleviation, human and social development and a more equitable and just world? In a word can we shift towards sustainable social development or a global 'green society', rather than a green economy (Cook et al 2012)? Where do present global actors stand on these issues and what are the prospects for future change?

These are big questions. The key concept straddling the two areas is that of *sustainable development*, famously defined by the Brundtland Report as 'development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (WCED 1987: 43). This entails two key concepts - needs and limits – the first of which situates social policy and human development at its heart, and it provides an optimistic vision of a common goal for all humanity, North and South (Baker 2006). But realising this in practice has proved extremely difficult. The Rio Declaration did try to balance a concern for strictly environmental principles with socio-economic concerns and generated some radical principles, but it was a tenuous bridge. For Vogler (2007) sustainable development was a political construct designed to facilitate a bargain across the deep structural divide of the North and the South. At Rio, the North did not want to recognise the role of high incomes and consumption in climate change while the South wanted to avoid the role of population, so what was left was technology, the role of human ingenuity in extracting more and more growth with fewer and fewer emissions.[7] Similarly there were deep divisions over who would contribute the aid to pay for the Rio decisions.

The compromise at the heart of sustainable development has led to the stagnation we observe in global policy and governance. The same applies to the later, and weaker, bridging concept of *green*

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[7] These are the three factors in the classic Ehrlich-Holdren identity I=PAT, where the environmental impact of any given factor such as climate change (I) is the product of Population P, average Affluence A and a Technological transformation factor T.

growth, advocated at the Rio+20, which again revealing deep divisions between North, East and South, and within each region, over its global social implications. It has acted as a 'floating signifier', amenable to forming a broad consensus but hiding very different interpretations (Jessop 2012, Cook et al 2012). Yet one purpose of this paper is to return to these issues to consider what social policy can contribute to clarifying and resolving this compromise.

There are several potential conflicts between a green economy and a fair or just society (Cook et al 2012). In the North, all measures to increase the price of carbon - an absolutely essential component of effective carbon mitigation - will tend to be regressive in the first instance, bearing more harshly on lower income households and localities. One explanation is that energy for heating and cooking absorbs a larger share of consumer expenditure among the poor (Büchs et al 2011, Dresner et al 2013, Gough 2013a). In the South, the REDD programme, some have argued, can undermine the indigenous use of forests and harm local livelihoods. On a global level, converting land to biofuel production has driven up the prices of essential foodstuffs and thus cut the real incomes of poorer peoples.

Dercon (2012) notes that the rural poor depend more on directly utilising environmental capital, thus policies to internalise their costs, while beneficial in the long run, will lower their returns. Nor is it the case that green sectors are necessarily labour intensive benefitting wage labourers. He concludes that unalloyed green growth may result in the poor being asked to pay the price for sustaining growth while greening the planet: it might engender 'green poverty'. Put starkly: might the double injustice which characterises global environmental relations be converted into a *triple* injustice, whereby the poor emit less, suffer more *and* bear the brunt of climate mitigation policies?

These problems demonstrate that building a global green economy needs to be married to building an effective global social policy if harmful and inegalitarian social outcomes are to be avoided. There are of course strong ethical arguments for marrying environmental sustainability to social justice, but there is not the space here to develop those (Baer 2011, Caney 2009, Eckersley 2004). Combining climate mitigation and social welfare is an ethical priority, as well as a likely political precondition if a fast switch to a green economy is to be achieved. But how can this be done?

I have suggested that there are three stages of integrating social policy with climate change policy: compensation, co-benefits and integrated eco-social policies (Gough and Meadowcroft 2011, Gough 2013a). A recent paper published by UNRISD has taken this further and applied it countries in the South (Cook et al 2012). This three-stage model is outlined below and in each case recent IGO reports on climate change are summarised to identify the roles they envisage for 'social policy'.

Social policy as compensation

The first level is to use social policy in a classical way to 'compensate losers'. Any realistic carbon mitigation programme must entail raising the price of carbon, whether through carbon taxes or a variety of cap and trade schemes. Yet all general taxes on consumption tend to be regressive, as noted above: in any pricing-based "efficient" green growth strategies the poor will suffer as consumers unless compensated (Dercon 2012). However compensation is difficult to do as attempts in the UK to tackle 'fuel poverty' testify. Winter Fuel Payments are paid to pensioner households and the Warm Home Discount reduces the energy tariffs faced by pensioners but both programmes are remarkably poorly targeted (Hills 2012). One reason is the sheer heterogeneity of fuel-poor households (Gough 2013a).

Compensation remains the dominant social proposal in IGO discourse. In *Towards Green Growth* the OECD emphasises market-based incentives and the leveraging of private finance. It pays little

attention to the social dimension, noting simply that negatively affected households 'need to be offset through well-targeted programmes… across the entire tax and transfer system' (OECD 2011: 85). This is a market liberal view of both climate mitigation and social policy, the latter being mainly compensatory. The IMF (2013) has persistently argued that fossil energy subsidies across the world are wasteful, distorting, unsustainable and unfair, and should be phased out to be replaced by 'targeted measures to protect the poor'. Yet such proposals have frequently met with mass opposition and street demonstrations. Despite official protestations, citizens doubt that the compensatory benefits will ever be realised. And in place of 'universal' subsidies the alternatives often entail targeted programmes likely to result in gaps, traps, corruption and stigma.

The World Development Report 2010 on *Development and Climate Change* favours much more finance to drive mitigation efforts in the South, though it recognises that 'a drive to integrate climate and development could shift responsibility for mitigation onto the developing world' (p.21). To protect the poor it recognises that policies must go beyond risk reduction and co-insurance ('governments will increasingly need to act as insurers of last resort') to include social investment, social protection programmes and social safety nets. It engages more seriously with the social dimension but in practice settles for a compensation strategy.

Social policy as co-benefits

The second strategy is to identify and foster co-benefits - 'win-win' policies which simultaneously meet social and environmental goals. In the UK and the North these would include retrofitting the housing stock with more energy efficient heating systems and much improved heat insulation, which would also reduce bills, increase comfort and expand green employment (Gough 2013a,b). Calls for a 'Green New Deal' extend this approach to include sustained public programmes to invest in renewable energy and deploy radical conservation measures (UNEP 2011, Barbier 2010, Nef 2010). Other examples of co-benefits would be to reduce car use and discourage excessive meat eating, both of which can harm health and certainly boost emissions (Gough and Meadowcroft 2011).

The co-benefit approach has much in common with a multi-sectoral preventive strategy, which prioritises 'upstream' programmes to prevent harm before it occurs, usually focusing on whole populations and systems, rather than the dominant 'downstream' programmes to cope with the consequences of harm (Coote 2012). This is an increasingly popular refrain in social policy discourse in northern welfare states, facing fiscal pressures in post-crisis economies, but it usually focuses on altering individual and family behaviours rather than more integrated upstream strategies. Cross-national evidence shows that coordinated market economies do better here than liberal market economies and are thus better placed to secure social and environmental co-benefits, as illustrated by the German integrated house retrofitting and micro-generation programmes (Gough 2013a,b).

Cook et al (2012), drawing on research at UNRISD, give several examples of similar co-benefit programmes in the South. Switching to renewable energy for cooking stoves can bring significant reductions in air pollution and improvements in human health. Other programmes include linking the Indian national workfare programme NREGA to develop environmental rehabilitation and green jobs. Another is the Brazilian *Bolsa Verde* programme which provides, within the cash transfer system, incentives for sustainable management and conservation of ecosystems. Some incipient examples of this strategy in IGO thinking are given below, but it remains marginal at present.

The UNEP Report *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication* (2011) goes some way towards this second strategy. It is upbeat that a green economy can reduce poverty across a range of important sectors, notably by creating green jobs and reducing unemployment. It estimates that fairness and sustainability can be achieved by meeting the MDG

targets and the International Energy Agency's (IEA) 'Blue Map' emissions reduction scenario (a rather conservative one) at a cost of $1.1-1.6 trillion annually at the outset, or about 2% of global product a year for the next four decades. UNEP claims this could be done through boosting private transfers but it would also need public financing, which could come from removing pro-carbon subsidies and scaling up the CDM and REDD+ programmes and the Global Environmental Facility.

The UNDP in its 2011 Human Development Report, *Sustainability and Equity: A Better Future for All,* also envisages a closer configuration of environmental sustainability and social justice. It confirms that country carbon emissions are strongly correlated with per capita income, but finds that this link is weaker – though still positive - with the HDI, and '*non-existent*' for health and education This provides support for the idea that many synergies are possible between sustainability and human development, if not with GDP growth *per se*. It also finds that inequality causes large aggregate losses in HDI, demonstrating further synergies with equity. The report focuses on identifying and building up areas where there are positive synergies between the two, such as providing universal access to energy, water and sanitation across the South. The most advanced example of the co-benefit approach is perhaps the UN's Sustainable Energy for All initiative, which has the three goals of providing universal access to modern energy, doubling the share of renewable energy globally, and doubling the rate of improvement in energy efficiency — all by 2030. But some doubt that this co-benefit programme can achieve both its human development and climate change goals simultaneously (Bhattacharyya 2012).

Towards eco-social policy

The above solutions all assume that green growth can work - that economic growth can continue while the world rapidly decarbonises. One implication of this assumption is that a growing quantum of resources will be available to fund social programmes to 'mitigate the mitigation' of climate change. However, the arguments of Jackson (2009) and others remain compelling – that it is not technically or arithmetically possible to reduce GHG emissions quickly to safe levels in a world of full-scale capitalist expansion coupled with population growth to at least 9 billion by 2050. His scenario would require a radical rethink of social policy to match the radical environmental challenges. Social policy would need to combine with environmentalism to forge a unified eco-social policy that can achieve ecologically beneficial and socially just impacts: by promoting new patterns of production, consumption and investment, changing producer and consumer behaviour while improving wellbeing, and ensuring a fairer distribution of power and resources.

In the North, this means taking seriously our responsibility for the historic development of carboniferous capitalism, accumulated GHGs and the major part of global warming thus far. Models of a 'steady state economy' would need to be explored (Daly 2008, Victor 2008). This would very likely entail some move away from the consumption of commodities towards de-commodified production – reducing working hours and commodity purchases, developing 'co-production' (comprising civic and household economies), and fostering preventive social behaviour (Gough and Meadowcroft 2011, Coote 2012).

Within this scenario potential eco-social policies in the North could include the following - though there is not the space here to explain or justify them (see Gough 2013a). First, some form of personal carbon rationing plus trading would award all citizens a tradable carbon allowance to be used when purchasing energy, petrol, flights and other high-carbon products and services. By effectively giving important commodities a parallel carbon price as well as a money price, and by allocating carbon allowances on an exactly equal citizenship basis, this would bring about relatively equitable reductions in consumption and emissions. Second, preventive eco-social programmes could further regulate consumption that is both harmful and carbon-intensive. Third, more basic

needs items could be provided publicly on a citizenship basis.[8] Fourth, an active time policy to progressively reduce hours of paid work could reduce consumption and emissions. In the context of the grossly unequal trends in income and wealth over the past three decades such a time policy would also require redistribution of wealth and income, returning us to one of the ostensible, if not always realised, goals of social policy (Gough 2013a).[9]

The UNRISD report characterises this as a 'transformative social policy' to promote new patterns of production, consumption and investment, change producer and consumer behaviour while improving wellbeing, and ensuring a fairer distribution of power and resources (Cook et al 2012: 11). This would require extending the current dominant conception of social policy. In recent decades social policy in both South and North has seen a shift from social protection to embrace social investment in such services as health and education. A truly sustainable social policy that complements a sustainable economy must extend further to embrace a wide range of 'social reproduction' and 'eco-maintenance' functions. The UNRISD report gives examples for developing countries of eco-social policies that can achieve ecologically beneficial and socially just impacts, in housing, transport, energy and agricultural production. But at present this is all a long way from the mainstream of global governance.

Some concluding reflections

Public policies to address social risks and climate change risks have different historical origins, system functions, political drivers and social implications. Yet there are commonalities between welfare states and emerging 'environmental states', notably that both address negative market externalities or the costs of commodifying fictitious commodities. Just as social policies emerged to counter the human and social costs of capitalist industrialisation, so environmental policies have emerged lately to counter the destruction of the environment. At this level, both involve new functions and competencies for national states.

However, in the case of planetary challenges such as climate change the risks are inherently global and require global, and thus importantly inter-national, responses. Here the parallels with national social policies are less convincing. Yet there are now global social agendas, as we have seen, such as the Millennium Development Goals and the ILO Social Protection Floor initiative. The purpose of this paper has been to consider their relationship to the suite of international climate change policies.

The goals of social policy are many and various but can be distilled as meeting basic needs, protecting against risks, developing human capacities and promoting human wellbeing in an equitable way. They frequently appeal to notions of social justice. The goals of climate change policy, and similar planetary level interventions, are to secure the planetary basis for human life and wellbeing in the face of gathering threats. Can these two sets of goals be simultaneously achieved? What are the conflicts and what are the opportunities for synergies?

Since the Brundtland Report (WCED 1987) such a synergetic approach has been represented by discourses of 'sustainable development' and more recently the 'green economy'. But these concepts

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[8] Our research shows that use of UK social services result in a much more 'equitable' distribution of GHG emissions than the purchase of private commodities (Gough 2011: 22)

[9] Given rapidly rising incomes and inequality in the South similar or alternative policies to restrain luxury consumption among the rich would also be necessary in the global South. Chakravarty et al (2009) estimate that by 2030 one half of all 'global high emitters' – half a billion people - will be living outside the OECD.

are inherently contested. Perhaps two major levels can be distinguished: those maintaining that a safe and equitable planet for human wellbeing can be attained within a global economy of green growth, and those who maintain that, beginning with the rich North, we must progressively shift towards a steady state or zero growth socio-economic system.

The first is the only realistic prospect today. Thus this paper takes for granted the structures of the global economy and the international state order and asks what has been achieved in terms of global social and climate change policy, what is being advocated and what in the system of global governance explains these. It goes on to consider how rapid and radical carbon and GHG mitigation programmes could be combined with equitable programmes of social and human development, and the role of global social policies in achieving these. Three combinatorial strategies are discussed – compensation, co-benefits and integrated eco-social programmes. In the perspective of urgent GHG reductions the best likely outcome at present is effective compensation for the distributional consequences of climate mitigation and the fast implementation of a range of co-benefit strategies.

The jury is still out on whether a global green growth strategy could achieve the necessary *absolute* reductions in GHGs within the minute time scale now available. But, following the precautionary principle, we should be prepared for the eventuality that green growth will not secure the essential planetary boundaries, in which case a more radical eco-social strategy will become essential. This would entail a profound transformation of national and global social policies, as well as economic and environmental policies. This of course does not mean that it will happen. But it will be the only way to secure even minimal levels of human wellbeing in that eventuality.

Bibliography

Ackerman, Frank, Kozul-Wright, Richard, and Vos, Rob (2012), Climate protection and Development (London: Bloomsbury).

Baker, Susan (2006), Sustainable Development (London: Routledge).

Barbier, Edward (2010), A Global Green New Deal (Cambridge: CUP UNEP).

Barrett, Scott (2003), Environment and Statecraft : The Strategy of Environmental Treaty-Making (OUP).

Bassi, S, Rydge, J, and N, Stern (2012), 'The global development of policy regimes to compbat climate change', (London: Grantham Research Institute, LSE).

Bernstein, Steven (2001), The Compromise of Liberal Environmentalism (New York: Columbia University Press).

Bhattacharyya, S.C. (2012), 'Energy access programmes and sustainable development: A critical review and analysis', Energy for Sustainable Development, 16 (3), 260–71.

Biermann, F. (2011), 'New Actors and Mechanisms of Global Governance', in J. S. Dryzek, R. B. Norgaard, and D. Schlosberg (eds.), The Oxford Handbook of Climate Change and Society (Oxford: Oxford University Press), 685-95.

Blackburn, R. (2011), 'Reclaiming Human Rights', New Left Review, 69, 126-38.

Büchs, M., Bardsley, N., and Duwe, S. (2011), 'Who bears the brunt? Distributional effects of climate change mitigation policies', Critical Social Policy, 31 (2), 285-307.

Caney, Simon (2009), 'Human rights, responsibilities and climate change', in C.R. Beitz and R.E. Goodin (eds.), Global Basic Rights (Oxford: OUP).

CBI (Confederation of British Industry) (2012), 'The Colour of Growth: Maximising the Potential of Green Business'.

Chakravarty, Shoibal et al (2009), 'Sharing global CO2 emission reductions among one billion high emitters', PNAS, 106 (29), 11884-88.

Christoff, P. and Eckersley, R. (2011), 'Comparing State Responses', in J. S. Dryzek, R. B. Norgaard, and D. Schlosberg (eds.), The Oxford Handbook of Climate Change and Society (Oxford: Oxford University Press).

Christoff, Peter and Eckersley, Robyn (forthcoming), Globalization and the Environment.

Clapp, Jennifer and Dauvergne, Peter (2011), Paths to a Green World: The Political Economy of the Global Environment (Cambridge MA: MIT Press).

Commission, Brundtland (1987), 'Our Common Future', (Oxford: OUP).

Cook, Sarah, Smith, Kiah, and Utting, Peter (2012), 'Green economy or green society?', Occasional Paper (10; Geneva: UNRISD).

Coote, Anna (2012), 'The Wisdom of Prevention', (London: New Economics Foundation).

Daly, Herman (2008), A Steady State Economy (London: Sustainable Development Commission).

Deacon, B. (2007), Global Social Policy and Governance (London: SAGE Publications Limited).

Deacon, Bob (2013), Making Global Social Policy; Towards the Social Protection Floor (Bristol: Policy Press).

Dercon, Stefan (2012), 'Is green growth good for the poor?', (Policy Research working papers 6231; Washington DC: World Bank).

Dresner, Simon et al (2012), 'Designing carbon taxation to protect low-income households', (London: Joseph Rowntree Foundation).

Dryzek, J. and et al. (2003), Green States and Social Movements: Environmentalism in the United States, United Kingdom and Norway (Oxford: Oxford University Press).

Eckersley, R. (2004), The Green State: Rethinking Democracy and Sovereignity (MIT Press).

Falkner, R. (2008), Business Power and Conflict in International Environmental Politics (Basingstoke: Palgrave Macmillan).

Falkner, R., Hannes, S., and Vogler, J. (2010), 'International Climate Policy after Copenhagen: Towards a "Building Blocks" Approach', Global Policy, 1, 252-62.

Farnsworth, K. (2004), Corporate Power and Social Policy in a Global Economy (The Policy Press).

Foryn, C. B. (2007), 'International Environmental Cooperation: The Role of Political Feasibility', in G. Atkinson, S. Dietz, and E. Neumayer (eds.), Handbook of Sustainable Development (Cheltenham: Edward Elgar), 395-412.

Garnaut, R (2008), 'The Garnaut Climate Change Review: Final Report', (Cambridge).

Gough, I. (2008), 'JESP Symposium: Climate Change and Social Policy', Journal of European Social Policy, 18 (4), 325-44.

Gough, I. and Meadowcroft, J. (2011), 'Decarbonizing the Welfare State', in J. S. Dryzek, R. B. Norgaard, and D. Schlosberg (eds.), Oxford Handbook of Climate Change and Society (Oxford: Oxford University Press), 490-503.

Gough, I. et al. (2011), 'The Distribution of Total Embodied Greenhouse Gas Emissions by Households in the UK, and Some Implications for Social Policy, CASE/152', in Centre for the Analysis of Social Exclusion (ed.), CASEpapers (London: London School of Economics and Political Science).

Gough, Ian (2013a), 'Carbon mitigation policies, distributional dilemmas and social policies', Journal of Social Policy, 42 (2), 191-213.

--- (2013b), 'Climate change and public policy futures', in Peter Taylor-Gooby (ed.), New paradigms in public policy (Oxford: OUP).

Head, Brian (2008), 'Wicked problems in public policy', Public Policy, 3 (2), 110-18.

Hepburn, C. (2009), 'Carbon Taxes, emissions trading and hybrid schemes', in D. Helm and C. Hepburn (eds.), The Economics and Politics of Climate Change (Oxford: Oxford University Press), 365-84.

Hills, J. (2012), 'Getting the measure of fuel poverty: final report of the fuel poverty review', in Centre for the Analysis of Social Exclusion (ed.), CASE Report 72 (London School of Economics and Political Science).

Ikeme, J. (2003), 'Equity, Environmental Justice and Sustainability: Incomplete Approaches in Climate Change Politics', Global Environmental Change, 13 (3), 195-206.

IMF (2013), 'Energy Subsidy Reform: lessons and implications', (Washington DC: IMF).

IPCC (Intergovernmental Panel on Climate Change) (2007), 'Fourth Assessment Report: Climate Change'.

Jackson, Tim (2009), Prosperity without Growth: Economics for a Finite Planet (London: Earthscan).

Jacobs, M. (2012), 'Green Social Democracy', Fabian Review, Winter.

Jessop, Bob (2012), 'Economic and ecological crises: Green new deals and no-growth economies', Development, 55 (1), 17-24.

Kaul, I., et al. (2009), 'Round table discussion: Economics and climate change: Where do we stand and where do we go from here?', in P. Touffut (ed.), Changing climate, changing economy (Cheltenham: Edward Elgar).

Lenton, T. et al. (2008), 'Tipping Elements in the Earth's Climate System', Proceedings of the National Academy of Sciences, 105 (6), 1788-93.

Lipschutz, R. and McKendry, C. (2011), 'Social Movements and Global Civil Society', in J. S. Dryzek, R. B. Norgaard, and D. Sclosberg (eds.), The Oxford Handbook of Climate Change and Society (Oxford: Oxford University Press).

Meadowcroft, J. (2005), 'From Welfare State to Ecostate?', in J. Barry and R. Eckersley (eds.), The State and the Global Ecological Crisis (Cambridge: MIT Press), 3-23.

--- (2012), 'Greening the State?', in P. F. Steinberg and S. D. VanDeveer (eds.), Comparative Environmental Politics: Theory, Practice, and Prospects (Cambridge: MIT Press).

Metz, Bert (2010), Controlling Climate Change (Cambridge: CUP).

Nef (New Economics Foundation) (2008), 'A Green New Deal'.

Newell, Peter (2012), Globalization and the Environment: Capitalism, Ecology and Power. (Cambridge: Polity Press).

Newell, Peter and Paterson, Matthew (2010), Climate Capitalism: Global Warming and the Transformation of the Global Economy (Cambridge: CUP).

O'Neill, Kate (2009), The Environment and International Relations (Cambridge: CUP).

OECD (Organisation for Economic Co-operation and Development) (2011), 'Towards Green Growth'.

Organization)., UNEP–WTO (United Nations Environment Programme–World Trade (2009), 'Trade and Climate Change: A Report by the United Nations Environment Programme and the World Trade Organization', (Geneva: WTO).

Paterson, M. (2011), 'Selling Carbon: From International Climate Regime to Global Carbon Market', in J. S. Dryzek, R. B. Norgaard, and D. Schlosberg (eds.), The Oxford Handbook of Climate Change and Society (Oxford: Oxford University Press), 611-24.

Polanyi, K. (1957 (1944)), The Great Transformation (Boston MA: Beacon Press).

Smith, K., Utting, P., and Cook, S. (2012), 'Green Economy or Green Society? Contestant and Policies for a Fair Transition', in UNRISD (United Nations Institute for Research Development) (ed.), (Occasional Paper 10; Geneva).

Stern, N. (2007), The Economics of Climate Change: The Stern Review (Cambridge: Cambridge University Press).

--- (2009), A Blueprint for a Safer Planet: How to Manage Climate Change and Create a New Era of Progress and Prosperity (London: Bodley Head).

UNDP (United Nations Development Programme) (2011), 'Human Development Report 2011: Sustainability and Equity: A Better Future for All'.

UNEP (United Nations Environment Programme) (2011), 'Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication'.

UNRISD (2010), Combating Poverty and Inequality: Structural change, social policy and politics (Geneva: UNRISD).

Victor, Peter (2008), Managing without Growth: Slower by design, not disaster (Cheltenham: Edward Elgar).

Vogler, J. (2007), 'The International Politics of Sustainable Development', in G. Atkinson, S. Dietz, and E. Neumayer (eds.), Handbook of Sustainable Development (Cheltenham: Edward Elgar), 430-43.

World Bank (2010), 'World Development Report 2010: Development and Climate Change', (Washington, DC).

--- (2012), 'Turn Down the Heat: Why a 4°C World Must be Avoided', (Washington, DC).

Yeates, N. (2008), Understanding Global Social Policy (Bristol: Policy Press).