THE CHALLENGE OF CLIMATE CHANGE FOR SOCIAL POLICY

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Introduction: the issue

Climate change is happening and Nigel Lawson, Jeremy Clarkson, Exxon and the Koch Foundation cannot stop it, though they can dangerously confuse and hinder our responses to it. Last month 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".

167 countries have endorsed the Copenhagen Accord agreeing that the safest maximum amount that global temperatures should be allowed to rise above the pre-industrial revolution level is 2^{o}C. Some scientists claim that this is too lenient a target, but let us accept it for the time being. Given this the current consensus is that humans can pour roughly 565 more gigatonnes (billions of tonnes) of CO2 into the atmosphere by mid-century and still have a reasonable hope of staying below two degrees. As Bill McKibben points out, '"Reasonable" in this case means four chances in five, or somewhat worse odds than playing Russian roulette with a six-shooter'. Such probabilities must be borne in mind whenever interpreting scientists' predictions, especially since it is common to talk of policies to achieve a only 50-50 chance of avoiding warming of more than 2^{o}C.

Yet global emissions are now accelerating, not declining - they have risen over 3% a year since 2000. The World Bank, no less, warns that the globe is on a path to heat up by 4 degrees by 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'. The implications of a 4-5 degrees rise in temperature hardly bear thinking about. Lord Stern says:

> 'Five degrees is absolutely enormous. It would redraw the physical geography of the world. Large parts of the world would become desert, including most of southern Europe and the southern part of France. Other areas would be inundated. You'd see massive movements of population. If we've learnt anything from the last 200 or 300 years, it is that big movements of population have a high probability of conflict. This isn't a black swan, a small probability of a big problem; this is a big probability of a huge problem'. *(I promise to use no more scare qotations in this lecture!)*.

This poses now, and will continue to pose, what Ross Garnaut calls a 'truly complex and diabolical policy problem'. In part this is because the causal chain between emissions and human welfare is long and complex. Here is a simplified version:

Economic activity →
Energy consumption →
Greenhouse gas emissions → ← Carbon sinks
GHG cumulative concentrations →
Global temperature rise →
Regional climate change →
Impact on human habitats →
Social well-being

There are three broad categories of policy responses available, each targeting one part of this chain:

- *Mitigation*: to reduce GHG emissions and increase carbon sinks (such as forests)
- *Geo-engineering*: to directly affect the earth's climate and carbon systems
- *Adaptation*: to reduce the damaging effects of climate change

In what follows I will ignore geo-engineering, which remains at present in the realm of sci-fi fantasy; As Mike Berners-Lee and Duncan Clark put it, 'we should remain under no illusion that if we have to resort to these kinds of technologies, then humankind is in a mess'. Given time constraints I will concentrate on mitigation.

Another reason it is complex and diabolical is that climate change poses dilemmas of distribution and governance over global space and intergenerational time. In many areas of environmental concern, such as the dangers of lead in petrol, river pollution or protection of nature reserves, the distance between the preventive programme and the beneficial outcome is relatively close in time and in space. This can facilitate collective counter-measures, whether by nation states or by communities to protect common-pool resources, as Elinor Östrom has shown.

This is definitely not the case in climate change (and a few other mega-issues such as loss of biodiversity), for two reasons. First, it is inherently global. Climate change is the prime exemplar of the paradox of our times according to David Held, 'that the collective issues we must grapple with are of growing cross-border extensivity and intensivity, but the means for addressing these are state-based, weak and incomplete'. Second, climate change also poses severe problems of intergenerational justice. Because carbon dioxide remains in the atmosphere for centuries, global warming for the next three decades cannot be prevented whatever we do. The major impacts will be on future generations, the unborn and the already born (remembering that today's baby will likely live to the end of this century).

Challenges to social policy: some preliminary remarks

So it behoves us to address what complex and diabolical issues this all poses for social policy. Several notable scholars have pioneered the study of social policy and the environment, including Meg Huby and Michael Cahill, and a few, notably Brenda Boardman and Tony Fitzpatrick, have gone on to study the specific implications of climate change.

I want to concentrate on its challenges for social policy in the UK, Europe and the global North. But to do this in a short compass I shall have to make certain assumptions about the global and intergenerational prospects.

First, I assume that further global progress *will* be made towards slowing down emissions and stabilising the earth's climate. If business as usual prevails, then the prospects for human welfare across much of the planet are pessimistic. The priority in social policy will be to *adapt* habitats and infrastructures to new climatic threats, whether drought, floods, frequent storms, sea-level rises or unpredictable temperature changes; to foster individual and social adapative capacities; and to *protect* the most vulnerable via aid transfers, disaster relief and managed migration. Of course, even these efforts may not happen or may not succeed – some sociologists talk of future 'fortress states' or 'regional warlordism', but I do not consider these bleaker scenarios here.

Second, in order to counter 'the double injustice', whereby those groups and nations least responsible for climate change bear most of its impacts, such progress will embrace some form of 'contraction and convergence'. I assume overall global emissions will start to be reduced but at a faster rate in the rich world. (One illustration of current global inequality and injustice from the World Bank: if all 40 million drivers of SUVs 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). Thus emissions must be cut at unheard-of rates in the rich North.

But the situation is changing rapidly. China now accounts for 29% of global CO2 emissions, almost double that of the US, and its emissions per capita have risen remarkably to within the EU range. Thus the Kyoto Protocol is no longer sufficient. The 2011 Conference of the Parties in Durban agreed (the circumlocution is revealing) 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. 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. Optimist that I am, I will assume something like this can be achieved at the Paris 'COP' in 2015. So the assumption is of faster climate mitigation in the global North including the UK, some progress towards mitigation in the 'East' notably China, and substantial aid to the global South to finance both mitigation and adaptation measures.

A third controversial limitation is that I concentrate on national state policy-making. I know that business and civil society in all its manifestations will play a critical role in adapting to and mitigating climate change, but I am also convinced that the role of states will be, if anything, enhanced in this process. For better or worse, as Robyn Eckersley and Peter Christoff put it, 'States are still the primary gatekeepers of the global order'. Nation states are still where the main action is on *both* social policy *and* climate change.

So what are the challenges of climate change and climate change policies for social policy? Of course, 'social policy' here can refer to actual public interventions and to the academic and non-academic study and debate around these interventions. It is harder to define 'social' policy, but I take it to mean policies concerned with meeting basic needs, protecting against risks, developing human capacities and promoting human wellbeing in an equitable way. An enduring theme is concern with distribution and inequality.

I will consider the challenges under three main headings:

1. To 'traditional' welfare states in the global North
2. To integrating social, economic and environmental policies
3. To the future of economic growth and sustainable welfare

1. Challenges to 'traditional' welfare states in the global North

Let me identify three challenges to contemporary welfare states: new risks; new distributional conflicts; and tension among policy objectives.

New risks

The risks associated with climate change will increase and demand new policy responses. The models show the major impacts will affect tropical and sub-tropical and Arctic regions, but this does not mean the temperate, richer world will be unaffected. Southern Europe, Australia and the southern United States will experience rising heat and water stress, and low-lying coastal regions such as the Netherlands and perhaps London will be vulnerable to rising sea levels. The modelling is even beginning to link some weather anomalies in such a tiny area as Britain to climate change.

The Joseph Rowntree Foundation is researching the direct impacts of likely climate change on social welfare and social justice in Britain, including flood risks, drought risks and heat waves. 'Climate disadvantage' comprises exposure to hazards such as flooding *and* the social vulnerability of different groups to these hazards. The two often go together since poorer people have less choice over where to live and are less likely to be protected by insurance. The impacts will affect different regions and sectors of the economy differently; some like agriculture are already vulnerable. Adaptation costs will rise, for example moving or improving housing on floodplains. These new risks will contribute to distributive and fiscal conflicts.

New distributional conflicts

The new measures to *mitigate* climate change will have profound distributional implications. Many OECD countries recognise this and some, especially the EU, has committed to cut emissions by 80% by 2050. The UK has gone furthest to enshrine this target in the 2008 Climate Change Act 2008 and to set intermediate targets to cut emissions by at least 34% by 2020 (only seven years away!). This is ambitious stuff - it is the subject of battles within the Cabinet right now – but, assuming it holds, achieving it will require every policy tool in the box – we need, in David MacKay's phrase, 'everything, now'. These include subsidising renewables, driving improvements in energy efficiency and raising the price of carbon.

The problem which immediately arises is that all carbon taxes, or their cap and trade equivalents, are regressive in their immediate impact. Though household emissions are strongly correlated with income, as a proportion of income they decline as you move up the income scale. This varies according to the type of activity on which they are levied: domestic energy use varies least across incomes, so bears most heavily on the budgets of poorer households – as a proportion of income it is six times greater in the lowest decile than the top decile. Thus the most regressive way of curbing

energy use would be to impose obligations on energy companies which they pass on in higher tariffs to domestic consumers – precisely the dominant strategy pursued in Britain today.

Putting all this together an earlier EU study concluded that households situated in the upper part of the income distribution contribute more to CO2 emissions in absolute terms than lower income households; that poor households suffer most from environmental degradation; and that common environmental policy measures tend to have regressive effects, burdening lower income households more. The double injustice becomes a triple injustice. These new distributional dilemmas push traditional social policy concerns of equity and redistribution to the fore.

Tension among policy objectives

Climate change policies for mitigation and adaptation impose new demands on governments struggling to reconcile diverse policy goals and competing funds on the public purse. The cost of new public adaptation and mitigation measures – many of them capital costs – will compete with social expenditures in an era of slower growth and rising inequalities. At present there is no contest – public environmental protection expenditure absorbs less than one per cent of GDP across the OECD – dwarfed by social expenditures. But in the current budget reviews environmental services seem to have been protected more than welfare state expenditures. More worrying is that if serious mitigation is postponed for a decade or more then the subsequent need for crash adaptation and mitigation programmes will cut drastically into future welfare state budgets.

How then will welfare states like our own need to adjust? Here are four possibilities.

Green taxes and social security

Serious mitigation must involve raising the cost of energy, yet current policies are regressive. Simon Dresner and colleagues have shown that it is theoretically possible to protect the majority of low-income households, and almost all recipients of means-tested benefits, from the negative impacts of quite drastic policies, such as raising VAT on domestic energy from 5% to 20%. In this way we could move towards carbon reduction and not worsen inequality, but it would mean a further extension of means-tested benefits and tax credits.

Better would be a broadly based carbon tax, such as that in Sweden. It would be less regressive than the present measures – especially so if levied on airfares, some personal services and consumer goods. The EU European Emissions Trading System would achieve something similar, since – if it worked, which it isn't at present – it would gradually drive up the costs of most goods and services according to their direct and indirect carbon content. It would still *be* regressive, but taxes or the sale of permits could raise substantial revenues which could then be used to reduce taxes elsewhere and/or fund higher benefits.

But there are two major problems. First, means-tested compensation aggravates the existing problems of the highly selective UK system. Second, all this compensation will divert public funds which are urgently needed for subsidising and incentivising carbon policies; this brings me to my second strategy.

Develop eco-social investment

It makes sense to develop eco-social investment programmes to simultaneously push down carbon emissions and achieve social objectives. Future governments will need to do much more to foster alternative technologies, invest in new green infrastructure, subsidise renewable energy, microgeneration and house retrofit etc etc. The small Warm Front programme was intended to subsidise the installation of insulation and new heating systems in low income households, but it has been abolished by the Coalition government to be replaced by the Green Deal. This essentially offloads these measures onto the private sector, whilst imposing new obligations on energy companies, which will raise tariffs further and increase fuel poverty. The Hills Report shows that tax-funded retrofit programmes would have much greater impact in reducing fuel poverty, over a longer period and more equitably than potential compensation policies. But this would have to go much further than the Green Deal programme, for example along the lines of the German public programmes to fund energy efficiency and micro-generation. It would require a Green *New* Deal.

Utilise synergies

There are many other opportunities for synergies between social and climate change objectives. For example, a shift in transport from driving to walking and cycling could bring about significant reductions in heart disease/stroke, cancer, dementia and depression. Again, a 30% reduction in livestock production and consumption would reduce heart disease by 15%. These improvements would, in turn, reduce demands on health services and save money, by as much as 10% of the current NHS budget according to one estimate.

Change consumer behaviour

Welfare states all aim to affect some domains of consumer behaviour, either explicitly (eg. smoking, parental care, job search) or implicitly. This turns our attention to policy tools other than economic incentives. One of these is direct government regulation. There is clear evidence that EU and domestic *regulations* on energy efficiency of, for example, refrigerators and car emissions, have had significant benefits, as will the commitment for new zero-carbon homes. But industry opposition has watered down proposals for tougher standards on existing owner-occupied housing, and the new encouragement to cover the country in conservatories will do little to actually conserve emissions.

The other policy tool is education, information and 'nudging'. Here, the current government is wary and libertarians rightly warn of dangers. But where evidence is overwhelming, as in smoking, government has utilised a wide panoply of powers to encourage behaviour change. Again, industry opposition often delays such changes and direct regulation may be necessary given the short time window available for climate mitigation.

2. Integrating social, economic and environmental policy

The conclusion thus far is that climate change requires policy *integration*, drawing together environmental, social and economic decision-making. And this in turn will entail more upstream *preventive* policies, as the new economics foundation has argued. Society, economy and the environment are now inextricably linked and must be addressed together to plan for a sustainable future. Examples have been given above of synergies between the social and the environmental, but

what is neglected here is the third domain – the *economic*. This, I would argue, is the major block at present to effective and fair policy integration.

Evidence is growing that different forms of capitalism and welfare states are more or less capable of such policy integration. Dryzek has written: 'social democratic welfare states and what Hall and Soskice call coordinated market economies … are better placed to handle the intersection of social policy and climate change than the more liberal market economies with more rudimentary welfare states'. This follows because their institutions and political culture enable an interventionist state to act to promote the public good. The discourse of 'ecological modernisation' which expresses this idea arose in the Netherlands and Germany.

What is clear to me is that neo-liberal capitalism is a block to such policy integration. Hayek's doctrines rule out the possibility that society or its representatives can understand the causal connections essential for preventive public policies. In the Hayekian universe, social explanation is impossible and state intervention in markets will be harmful and coercive. With the triumph of neo-classical economics, government intervention in numerous areas of the economy was rolled back. Robert Skidelsky and many others have demonstrated the role of this model in bringing about the global capitalist crisis of 2008.

It has also hindered efforts to reduce climate change. There is an empirical link between extreme neo-liberal beliefs and denial of climate change. In the words of Martin Wolf in the FT,

> "To admit that a free economy generates a vast global external cost is to admit that the large-scale government regulation so often proposed by hated environmentalists is justified. For many libertarians or classical liberals, the very idea is unsupportable. It is far easier to deny the relevance of the science."

It is worth remembering, too, the statement by Nigel Lawson when Secretary of State in 1982:

> 'I do *not* see the government's task as being to plan the future shape of energy production and consumption… Our task rather is to set a framework which will ensure that the market operates in the energy sector with a minimum of distortions'.

The unthinking exploitation of North Sea oil which followed can be contrasted with Norway's precautionary stewardship of its oil reserves.

Thus the evidence linking forms of capitalism and welfare regimes to climate change mitigation is perhaps not surprising. Christoff and Eckersley's study reveals sharp differences across Western nations in their past emissions performance, present rankings on emissions intensity, and policy aspirations for the future. Germany, Netherlands, the Nordic countries - and the UK - are climate change 'leaders' on all measures, and the US, Canada and Australia are the prominent laggards. The UK is – at present - a surprising anomaly here, which we could perhaps discuss later.

Will the long crisis since 2008 affect these observations? It has obviously brought about across the developed world a strenuous and harmful fiscal consolidation which threatens many institutions of the welfare state. There is also evidence from Lyle Scruggs' research that the higher unemployment has been associated with sharp reductions in concern about climate change and, in some countries,

basic beliefs about established climate science. However, he also finds that these declines have been much weaker in more generous welfare states.

Thus I conclude that some patterns of economic, social and environmental policy offer some hope for more sustainable development. The clear block to this is neo-liberal capitalism with its associated short-termism, minimal welfare states and weak environmental policies. Yet this remains the dominant and still-ascendant socio-economic system. The major problem is, in Colin Crouch's book title, 'the strange non-death of neo-liberalism'.

3. The future of economic growth and sustainable welfare

Everything I have said so far assumes the long-term persistence of economic growth. It has assumed that 'green capitalism' or 'green growth' is a viable prospect, that emissions can be absolutely decoupled from growth in output and consumption. But some argue that it is impossible to achieve such a technological switch in a world of 9,000,000,000 people and still enable Western consumers to consume more and more every year (even though this does not appear to enhance their wellbeing). In the words of Tim Jackson, 'there is as yet no credible, socially just, ecologically sustainable scenario of continually growing incomes for a world of nine billion people'. Thus a 'steady state economy' of some kind, first advanced by John Stuart Mill, must join the potential agenda for combatting climate change.

This is of great import for social policy, since all Western welfare states have been built on the growth state. Economic growth has provided the resources for growing welfare needs and constituencies while smoothing many of the distributive conflicts that arise, as Tony Crosland recognised six decades ago. If economic growth, as measured by GDP, is no longer possible in the rich world, what does this portend for social policy?

Peter Victor's model of the Canadian economy show that zero or low growth in present circumstances is a recipe for social disaster: soaring unemployment and poverty, worsening debt and only small falls in emissions. This is the worst of all worlds, though many governments seem intent to test this model to destruction right now!

So what are the integrated policies which could foster benign no-growth and what would these mean for social policy? This is a vast topic which cannot be addressed here. It would encompass localising production closer to consumption, transforming markets in food, land and other vital assets, repairing and reclyling, restraining consumption that is both harmful to welfare and unsustainable, switching resources from consumption to ecological maintenance and public investment, expanding the decommodified sphere and the scope of co-production in delivering services, and so on. I conclude with just two priorities: changing time use and 'back to redistribution'.

Changing time use

Moving towards shorter paid work hours would reduce the quantity of consumption and foster less commodified forms of consumption, thus reducing emissions. It would allow more time to undertake caring tasks and permit a better gender balance of care time. It would also free up time

to allow greater public participation in developing policy and instigating new patterns of living. It is well known that Keynes foresaw a future when we would all enjoy a working week of around 15 hours. Yet for a variety of reasons since around 1960 productivity gains have been taken out in more and more consumption rather than increased 'leisure'.

I remain convinced that progressively reducing hours of paid work is an effective - and a gradualist - way to reduce consumption and emissions. 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. EU member states like France, Netherlands and Belgium have introduced social policies to encourage shorter hours of work. But the dominant tide is the opposite – to push more people into work and into full-time work, as part of the 'social investment strategy'. Here is an example where low growth, sustainable policies require a reversal of current thinking. But there is a danger that in our current super-unequal economy, such policies could increase 'time inequality' between the high and low-paid and, without attendant policies, could leave stranded the time-poor such as lone parents.

Redistribute income and wealth

So the second priority is redistribution – of wealth, income, resources and capabilities. This seems a bit of an anti-climax. At an SPA conference this is like calling for motherhood and apple pie. Surely the challenge of climate change requires something much more radical than this? Yes it does, but the issue of sustainability brings redistribution back to centre-stage for *new* reasons. First, if, in Herman Daly's words, we have left behind the 'empty' world and are now in a 'full' world, where human activity seriously disrupts the ecosystem, then there is no space left for further material throughput to meet basic needs. This *must* come from redistribution, by reducing 'extravagant luxuries' in favour of basic need satisfiers. Second, present levels of inequality foster emulation of wants and life practices which are unsustainable and ungeneralisable to all people. Third, hyper-inequality erodes the social solidarity – an absolute pre-requisite for an active public policy to address this 'diabolical' problem. So the challenge of climate change reinstates one of the central traditional goals of welfare states and gives it a new impetus and rationale.

Conclusion

The 'welfare' functions of states in advanced capitalist societies are now being augmented by environmental functions; welfare states now sit alongside what Meadowcroft calls eco-states. Alongside collective responsibilities for human and social welfare there are now a range of environmental responsibilities and policies, including, at different tempos in different countries, those to adapt to and mitigate climate change. Climate change itself creates new risks and inequalities and the programmes to manage these in turn create new distributional dilemmas and claims on public funds. So the eco-functions of the state react back on the welfare functions. Whilst they may conflict they also require each other.

So social policy needs 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.

That is the vision, but I have also discussed two contrasting scenarios which can frame this vision. One assumes continued - but 'green' - 'growth'; the other accepts that sooner rather than later the West must forego 'growth', at least in the absurd way that it is currently measured. I conclude that green growth will require an active welfare state alongside a vigorous eco-state and that integrated policy-making will be essential. This is likely to favour, I argue, forms of social capitalism and inclusive welfare states. But if the only way of achieving just sustainability is an end to growth in the rich world, then we would need to fashion a radically different eco-welfare system.

Thank you