

Stern Review on the Economics of Climate Change

Submission from the Green Party of England and Wales

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*Executive Summary*

It is the considered view of the Green Party of England and Wales that climate change cannot be addressed without a substantial alteration in the functioning of our national and the global economy. Globalised capitalism is inefficient and ecologically damaging.

The objective of our economy should be to maximize the well-being of people and the other species we share our planet with. Economic decisions should be guided by the principle of bioregionalism.

The globalised capitalist economy is inherently unsustainable because it is based on turning energy into money without regard for ecology. Climate change is just the first and most urgent piece of evidence that this is the case.

The key concept underlying the development of sustainable economies is that of the bioregion. Bioregions are natural social units determined by ecology rather than economics, entities that can be largely self-sufficient in terms of basic resources such as water, food, products and services.

The UK government's target of 60 per cent reductions by 2050 is nowhere near being reached; yet many climate scientists believe that reductions of 80 or even 90 per cent are more realistic (Hillman, 2004).

The costs to business relating to the production of carbon dioxide will increase over coming years. So moving the UK economy towards a carbon-neutral position, or better still investing in low-carbon sectors, would be both economically and ecologically desirable.

A sustainable economy will need to operate in a steady state, without significant economic growth except that which can be achieved without increasing the level of environmental impact.

However, the transition to a green economy would create many jobs in sectors such as waste management, local biofuel production, and organic farming—jobs which would be rooted in the locality and not subject to out-sourcing.

Carbon dioxide emitted in transporting goods which can be produced locally is wasteful, hence the carbon-limited economy will be based on local production and consumption, radically reducing the volume of global trade.

This should be achieved by a mix of policies including: systems of tariffs, subsidies and import and export quotas, to encourage local production; a policy of 'site here to sell here', in other words producers would be required to make goods within defined economic areas; the grounding of capital through exchange controls; limits on consumer credit; and the imposition of taxes on speculative financial transactions.

## *Introduction*

SR1.1 The globalised capitalist economy is inherently unsustainable because it is based on turning energy into money without regard for ecology. Climate change is just the first and most urgent piece of evidence that this is the case.

SR1.2 Green economists have concluded that sustainability requires that our economy is based in our ecology; allowing our decisions about economic development to be shaped by the planet and its natural cycles. This is what a fully rounded definition of sustainability requires (Barry, 1999).

SR1.3 Commentators have suggested that without a challenge to the given economic and political power structure an ecological economics may not be possible (Özkaynak, Devine, and Rigby, 2004). We would concur with that view. To tackle the problem of climate change requires a reallocation of power away from corporations and towards citizens.

SR1.4 This submission uses the insights developed by green economists over the past thirty years or so to trace a path of economic development for the UK that would truly reflect a commitment to ‘strong sustainability’ and one which challenges existing assumptions about what an economy is for.

## *Bioregionalism to replace Capitalism*

SR 2.1. The key concept underlying the development of sustainable economies is that of the bioregion. Bioregions are natural social units determined by ecology rather than economics, entities that can be largely self-sufficient in terms of basic resources such as water, food, products and services.

SR2.2. Ecology demands that we recognize our part in a complex web of natural systems and this should reflect the places we choose to live and how and where we choose to access our resources.

SR 2.3 Unlike political boundaries, bioregional boundaries are flexible, but should be guided by the principle of subsidiarity in the case of any individual resource or service. Thus, within the bioregional approach beginning with the local is a principle that trumps principles such as price or choice (Desai and Riddlestone, 2002).

SR 2.4 Curtis describes such a system of interrelated but independent local economies as ‘eco-localism’ and argues that it includes: ‘local currency systems, food co-ops, micro-enterprise, farmers’ markets, permaculture, community supported agriculture (CSA) farms, car sharing schemes, barter systems, co-housing and eco-villages, mutual aid, home-based production, community corporations and banks, and localist business alliances’ (2003: 83).

SR2.5 Rebuilding strong local economies within our bioregions will present political as well as practical challenges:

‘A world economy that was sustainable would therefore be almost the exact opposite of the present unsustainable one. It would be localised rather than globalised. It would not have net capital flows. Its external trade would be confined to unimportant luxuries rather than essentials. Each self-reliant region would develop to a certain point and then stop, rather than growing continuously. Investment decisions would be made close to home. And assets would be owned by the people of the area in which they were located.’ (Douthwaite, 2005).

SR2.6 This is certainly a radical vision which has far-reaching political as well as economic implications. However, as the following discussion asserts, the ecological realities we are facing require us to revise our economic paradigm in the ways suggested by this sort of vision.

#### *The Economic Impact of Climate Change*

SR3.1 The UK government's target of 60 per cent reductions by 2050 (based on an assumption of a planetary carrying capacity of CO<sub>2</sub> of 550 parts per million) is nowhere near being reached; yet many climate scientists believe that reductions of 80 or even 90 per cent are more realistic (using a carrying-capacity assumption of 450 ppmv, (Hillman, 2004) or even 400ppmv (Meinshausen, 2005)).

SR3.2 The carbon cycle, the natural process of fixing of carbon from the atmosphere and its release after a certain length of time, is a fundamental ecological system of the planet. Climate change is the result of the burning of fossil fuels that have stored carbon for millions of years, thus disrupting this natural cycle.

SR3.3 From an economic perspective there are three main systems producing greenhouse gases that are part of our broad economic activities—the growth and decay cycle of living organisms, our interaction with the land via agriculture, and our use of fossil fuels. Of these it is the third that is mainly causing the breakdown in the natural system.

SR3.4 The current commitment to business-as-usual and the failure at the policy level to make the connections between climate change and economic development are resulting in business in the UK failing to establish a place in the new markets that a low-carbon economy will create.

SR3.5 The costs to business relating to the production of carbon dioxide will increase over coming years. So moving the UK economy towards a carbon-neutral position, or better still investing in low-carbon sectors, is both economically and ecologically desirable.

#### *Climate Change and the World Trade System*

SR4.1 Climate change is going to have a major impact on the future path of globalization, and especially on the world trade system. Reports such as *Collision Course* (Simms, 2000) have painted a disturbing picture of the environmental cost of the expansion in global trade. Climate change means an end to this economic paradigm, one that achieves growth at the expense of CO<sub>2</sub> emissions. In the new paradigm, which takes carbon limits seriously, every gram of CO<sub>2</sub> will have to have achieved its maximum in terms of increasing well-being, which is not true of the exhaust gases of trucks moving manufactured goods from the factories of China across the developed world.

SR4.2 The green response is to re-localise our economies, building a system of strong, local economies where as many of our needs for goods and services as possible are met from as close to home as possible.

SR4.3 Within the new paradigm trade is organised according to the principle of 'trade subsidiarity', a straightforward extension of the concept of 'subsidiarity' into the realm of production and consumption, so that we naturally tend to look to purchase goods produced as close to where we live as possible (see Cato, 2003; Woodin and Lucas, 2004).

SR4.4 Colin Hines, a leading proponent of the re-localisation of our economics, makes a strong argument for government action to strengthen and protect local economies: He notes that: ‘The essence of these policies is to allow nations, local government and communities to regain control over their local economies; to make them as diverse as possible; and to rebuild stability into community life’.

SR4.5 The most important policies are systems of tariffs, subsidies and import and export quotas, to encourage local production. In this respect Hines also suggests a policy of ‘site here to sell here’, in other words producers would be required to make goods within defined economic areas, balancing the needs of consumers in those areas with those of employees. On the capital side he proposes the grounding of capital through exchange controls, limits on consumer credit, and the imposition of taxes on speculative financial transactions.

#### *Challenging Carbon Dioxide ‘Burden-Shifting’*

SR5.1 Away from such issues, a more sophisticated debate is currently taking place around the concept of ‘burden-shifting’. The movement of much of our heavy industry and production to poorer countries, especially China, has meant that many goods consumed in the UK are no longer produced in the UK, meaning that CO<sub>2</sub> emissions associated with this production are now counted in other countries’ emissions totals.

SR5.2 This out-sourcing of production creates the false impression that a high-consuming country is managing to reduce its emissions—when in fact all that has happened is that its consumption has continued unchanged, and thus its emissions have continued, but the responsibility for counting those emissions has been shifted to another country. This distorts how we perceive responsibility for emissions and our performance in cutting them.

SR5.3 It is important that the CO<sub>2</sub> embodied in goods consumed in the UK but manufactured elsewhere should be included in UK emissions totals. Figures from Best Foot Forward suggest that alongside our net per capita emissions of CO<sub>2</sub> of 9,029 kg we should add CO<sub>2</sub> embodied in net imports of 2,132 kg—a 23.6% increase.

#### *Economic Growth or Economic Contraction?*

SR6.1 The most basic assumption of economic policy, one that is challenged by those adopting a strong view of sustainability, is the beneficial nature of economic growth. Orthodox economists are beginning to question the ability of a booming economy to generate happiness (Easterlin, 2004; Layard, 2005; Graham, 2005), the so-called well-being agenda, while for green economists the ending of economic growth is a necessary condition for ensuring the balance with our ecosystem that sustainability requires (Worldwatch Institute, 2004).

SR6.2 In the classic green critique of the concept of growth (*The Growth Illusion*) Richard Douthwaite (1992) makes the point that there are different kinds of growth and lists conditions that economic activity should meet for it to be considered ‘good growth’. The latter includes economic activity that does not rely on increased use of energy or raw materials and transport, and has a neutral impact on waste production and pollution (Douthwaite, 1999).

SR6.3 Ekins (2000) contextualises such concerns and distinguishes between four types of economic growth, as summarised in Figure 1. Historically, the economy has relied heavily on Type-1 growth, demanding more from the planet to generate higher levels of consumption and return on investment.

Figure 1 Ekins's typology of economic growth and consequent environmental problems

Type of growth	Environmental problem	Green economists' verdict
Growth of the economy's biophysical throughput (Type 1)	Increases entropy manifest as growth in waste and pollution	Detrimental
Growth of production (Type 2)	Tends to rely on type 1 growth or technological advance	Suspicion
Growth of economic welfare (Type 3)	Can be limited by negative environmental externalities and unequal distribution	Approval in theory; scepticism in practice
Environmental growth through increase in ecological capital (regeneration) (Type 4)	None, because nature manages to circumvent the second law of thermodynamics and decrease biospheric entropy	Approval, subject to genuine respect for natural cycles and biodiversity

SR6.4 In the debate over climate change the emphasis has shifted to Type 2 growth, relying on ingenuity to overcome the negative consequences of increased production and consumption. Ekins is keen to point out the sceptical response from many to this suggestion that technology can guarantee business as usual.

SR6.5 Type 3 growth, in human welfare, is often more apparent than real, since it may generate immediate well-being but only at the cost of later environmental destruction. Moreover, it is frequently achieved at the cost of other generations, other species or the planet itself.

SR6.6 Type 4 growth is the type that green economists have no argument with since it represents the natural ability of the planet to regenerate itself. Again, remembering the importance of living in balance with nature, such growth can be beneficial, for example the use of locally and sustainably produced biomass to generate fuels, when the carbon dioxide produced in burning can be reabsorbed by the next round of tree growth.

*Green Industrial Revolution Creates Jobs and Improves Food and Energy Security*

SR7.1 Much of the early opposition to the linking of sustainability and economic policy focused on the potential of green policies to reduce employment. This argument now appears to have been concluded by the understanding that greening the economy will be a labour-intensive process. (See, for example, the Green Jobs Strategy for Scotland that was first raised by Green MSP Robin Harper in 2002 and has since been taken up by Scottish Executive).

SR7.2 In the UK as a whole, a report called *Best of Both Worlds* (Fitzgibbon, 2004) identified how a million extra jobs could be created as a consequence of a green industrial revolution. The principal focus of this key publication was to explain how moving towards a truly sustainable economy would lead to job creation on a large scale, producing whole new areas of employment in sectors such as the mending of goods and the repair of machinery and equipment.

SR7.3 For the contemporary policy-maker environmental problems can seem a long way off but a more immediate incentive to reinforce local production and distribution systems results from a concern with food and energy security. Existing distribution systems look increasingly unreliable in the era of 'peak oil', when many commentators believe we have already passed the point of maximum oil production (Feasta 2003a, ASPO).

SR7.4 In such a context increasing reliance on imported food is not only a wasted business opportunity but also short-sighted and dangerous. Figures from the Office of National Statistics show that food imports into the UK rose by 24.6% between 1992 and 2002. The annual balance of payments deficit in food moved from £4.7bn. to £9.8bn during the same period. In response, the UK government is seemingly unconcerned: a statement from DEFRA of July 2003 noted that 'National Food security is neither necessary nor is it desirable'.

SR7.5 This attitude seems irresponsible in view of the increasing competition for the oil on which food transport relies, as well as the reduction in transportation that will be required to tackle climate change. It also undermines rural economies, which have always been based in agriculture, and devalues the contribution farming makes to the national economy.

#### *Economic and Policy Measures in the UK*

SR8.1 In the short term, the most effective way for the government to proceed with this agenda is to introduce a system of Domestic Tradable Quotas (Hillman 2004, Tyndall 2005). Combined with a hearts-and-minds campaign to explain the basis behind the measures, this provides the best way of getting most individuals and organisations refocussing their lifestyles and plans in a way that is consonant with averting climate catastrophe.

SR8.2 Such a measure would also greatly strengthen the UK's international negotiating position, both by illustrating and acting on the 'leadership' that the Prime Minister has talked about so much, and by meshing naturally with the international adoption of a framework of contraction and convergence, which a broad range of commentators agree (e.g. RCEP, 2000) is the most promising basis for the degree of international agreement that is essential and which the UK could then indeed lead in the UNFCCC's negotiations. The advantages of DTQs are well set out in (Feasta 2003b).

#### *Conclusion*

SR9.1 It is the considered view of the Green Party of England and Wales that climate change cannot be addressed without a substantial alteration in the functioning of our national and the global economy. Globalised capitalism is inefficient and ecologically damaging.

SR9.2 The objective of our economy should be to maximize the well-being of people and the other species we share our planet with. Economic decisions should be guided by the principle of bioregionalism.

SR9.3 The most effective way for government to proceed with a climate change mitigation strategy is to introduce a system of Domestic Tradable Quotas.

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