Select Committee on Economic Affairs Written Evidence

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SUMMARY

Some claim that climate change will result in an increase in vector-borne disease, flooding, catastrophic weather events, loss of biodiversity, changes in agricultural production and other problems. Yet these are problems today and are either caused or are exacerbated by poverty. Tackling poverty is likely to be better way to address these problems than attempting to control the climate.

Climatic change may turn out to be benign or harmful: we do not know. But in the context of this uncertainty, policies that are narrowly focused on adaptation to possible negative effects are short-sighted and may even be counterproductive. Policies aimed at mitigation through control of atmospheric carbon are almost certainly counterproductive.

Adaptive, sustainable development can come only through the adoption of institutions that enable people to engage in economic activities that create wealth and lead to technological progress. Policies that rely on these institutions provide the best way to deal with an uncertain climate future.

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INTRODUCTORY

1. Proponents of the Kyoto Protocol and similar proposals to limit emissions of greenhouse gases (GHGs) have justified their case by asserting that climate change poses a grave threat, with a range of devastating consequences for humanity, and that restricting emissions now is the best response to that threat.

2. The problem with this argument is that nearly all the alleged negative consequences of climate change (its "impacts") are in fact problems that humanity faces today. Future changes in climate may or may not make these problems worse, but the fact remains that unless they are addressed directly, they will continue to remain problems, regardless of attempts to limit human impacts on the climate.

3. Article 3 of the United Nations Framework Convention on Climate Change, to which the Kyoto agreement is a Protocol, says that

"Policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost," and that *"The Parties should cooperate to promote a supportive and open international economic system that would lead to sustainable economic growth and development in all Parties, particularly developing country Parties, thus enabling them better to address the problems of climate change."*

4. Meanwhile, *"Measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade."*

5. These qualifications suggest that the question we should ask ourselves is not, "what should we be doing to limit human impacts on the climate"? Rather, we should ask, "what actions can we take that will most cost-effectively reduce the problems we face today that may be exacerbated by climate change"?

6. Imposing restrictions on GHG emissions is only one of many possible policy options—and it may well not be the most cost-effective option.

ALLEGED EFFECTS OF CLIMATE CHANGE

7. It is *climate*—that is to say the prevailing weather, not changes in the climate *per se*—that is a major problem for most people on the planet. Heat and cold pose problems for human survival, both directly and indirectly. Direct effects include deaths from dehydration when it is hot, and deaths from hypothermia during cold spells. Indirect effects include impacts on agricultural productivity; both frosts and long periods of heat can cause crop damage. Likewise, droughts, floods and storms also have both direct and indirect impacts on humanity.

8. While the climate of a region—especially associated floods, droughts, storms, heatwaves and cold spells- affects everyone, it disproportionately affects the poor. This is because poor people are less able to adapt than are wealthy people. The wealthy are able to limit direct effects by constructing robust buildings, with efficient heating and cooling systems. They also have wider access to the better warning systems afforded by mass media and communications technologies, which enables them to escape adverse events.

9. Still, some campaigners and scientists suggest that climate change will have a variety of incontrovertible environmental effects, including the loss of biodiversity and desertification. Both biodiversity loss and land degradation are realities today but have little to do with climate change.

10. *Biodiversity loss*: the main reason for the loss of biological diversity globally is the conversion of habitat for human uses, especially agriculture. While climate change may affect biodiversity (positively or negatively), improving the incentives of people to manage habitat sustainably is a far more urgent issue.

11. *Desertification*: the concept of desertification is highly contentious. Nevertheless, land degradation is a real problem and, like biodiversity loss, is strongly related to the incentives people face when making decisions about resource uses.

12. *Flooding:* Some allege that climate change will lead to rapidly rising sea levels, causing flooding in low-lying areas and displacing large numbers of people. Whether or not this is the case remains unclear, but for the purposes of argument, I will assume that it is true.

13. Bangladesh is often cited as a country particularly at risk because a large proportion of its 130 million inhabitants live in a low-lying river delta which periodically experiences massive flooding and other severe weather events.

14. But is climate change the real threat to Bangladesh? Compare with Holland, a country of around 11 million inhabitants, most of which lies below sea-level, which has not experienced a flood since 1953. Purely on the basis of the threat of inundation from the sea, Holland should be more "at risk" than Bangladesh. So why is Bangladesh so much more at risk of losing human life and experiencing economic losses from flooding than Holland?

15. The simple reason is that Holland has been a liberal democracy for over three centuries and has benefited from more-or-less continuous economic growth during that period. By contrast, prior to independence in 1971, Bangladesh was ruled by a series of more-or-less oppressive absentee landlords (the Moguls, the British, Pakistan). Since independence, it has been ruled by a series of more-or-less oppressive and/or incompetent elected officials. As a result, and in spite of (perhaps even in part because of) billions of dollars in aid, the majority of its inhabitants remain poor and disenfranchised, unable to control their immediate environment.

16. *Effects on human health*: Another alleged consequence of climate change is the spread of vector-borne and bacterial diseases. As with climate in general, these diseases are a problem today and they affect the poor far more than the wealthy. Vector-borne diseases, such as malaria and dengue, are essentially diseases of poverty.

17. Many countries that are today wealthy once experienced levels of vector-borne diseases similar to those now experienced by poor countries. In the fourteenth century, one-third of Europe's population died from the Black Death, which was spread by fleas that thrived on rats living in the sewers of medieval towns.

18. Today, every year between one and three million people, mostly children, die from malaria. A similar number die from dehydration as a result of diarrhoea. Approximately two million people, mostly children, die every year from respiratory infections which are largely brought on by indoor air pollution. Most of these six million total deaths are of children, all of them are poor, and most of them preventable.

19. Wealthy countries have largely eliminated such diseases through a combination of environmental interventions (such as the use of pesticides), improved water supplies (piping to the home and using chemical decontaminants) and sanitation systems, improved energy delivery systems (including grid electricity), improved agriculture (which has dramatically reduced malnutrition), and the development of vaccines and medicines.

ECONOMIC EFFECTS OF CLIMATE CHANGE?

20. Activists, policymakers and others have also argued that changes in the climate will have negative economic consequences, caused by a combination of changes in agricultural production, droughts and water scarcity, movement of pests, and other ecological factors. Such claims are, however, highly contentious for a variety of reasons. Predictions of widespread negative economic effects are predicated on the assumption that the earth's climate will warm dramatically during the coming century. The IPCC upper estimate for warming by 2100 is 5.6ºC. To arrive at this upper estimate, the IPCC had to assume that emissions of GHGs will rise dramatically. In fact, the scenario that leads to the 5.6ºC prediction assumes that economic growth will occur extremely rapidly and that coal will supply an increasing proportion of the energy that fuels this growth.

21. An increase in the proportion of energy derived from coal seems plausible in the short to medium term, as poor populations shift from burning biomass (wood and dung) to more reliable and less polluting forms of energy, such as distributed electricity produced by burning coal. In the longer term (eg post-2050), a switch to other energy sources seems very likely. The implausibility of the assumption that coal use will increase during the second half of the 21st century pales into insignificance compared to the absurdity of the economic claim underlying the scenario. It is barely consistent to argue, on the one hand, that climate change will result from rapid economic growth and, on the other, that climate change will have massively negative economic impacts.

22. The only way these two assertions could be reconciled is if the growth occurs in some places, while the adverse effects occur elsewhere. But that is not the basis of the IPCC scenarios. Instead, in these bizarre fictions, the world's economies are assumed gradually to converge over the course of the 21st century. Now, economic convergence in itself is not so improbable, even though it implies that by 2100 both Bangladesh and the USA would have similar levels of economic output. The problem is that in order for that to happen, Bangladesh would either have found a highly cost-effective way of coping with any adverse effects of climate change, or it would not have suffered these adverse effects. Either way, there appears to be a contradiction between the economic scenarios that underpin the IPCC's climate forecasts and the scary stories that the IPCC tells on the back of these forecasts.

23. The IPCC's median forecast for global-mean warming by 2100 is 2ºC. Some argue that even this dramatically overestimates the likely warming. But the good news is that warming of 2ºC is likely to be largely benign. Any GHG-induced warming is expected to be greater at high latitudes than at the tropics. A small amount of warming at high latitudes would improve farming conditions by lengthening the growing season and increasing the amount of precipitation. In addition, higher levels of carbon dioxide would enhance rates of growth, further benefiting agriculture.

PROSPERITY, HEALTH AND A CLEAN ENVIRONMENT

24. Empirical evidence from the past two centuries suggests that economic growth, human wellbeing and a clean environment go hand-in-hand. Increased wealth is associated with improvements in nearly every aspect of human well-being and environmental quality. Wealthier people live longer, are better nourished, have lower mortality rates, have better access to clean water, sanitation, and education, and benefit from a cleaner environment.

25. Environmental quality has improved dramatically over the course of the past century in rich countries, with significant declines in air and water pollution. The air in London is now cleaner than at any time since the sixteenth century. At the turn of the 20th century, British towns were plagued by smog caused in large part by the burning of coal in relatively simple household fires. Over the course of the following four decades, households gradually—and almost entirely voluntarily—switched to burning "town gas" in increasingly sophisticated heating systems. The result was a dramatic reduction in pollution and associated ill-health. By the time of the Clean Air Act of 1956, which mandated the replacement of coal fires with gas, electricity or coal, the transition was already well under way.

26. Even indoor air pollution—among the most significant causes of early death amongst poor people today—is improving as people in poor countries switch from poorly flued wood and dung fires to more efficient and cleaner fuels such as gas and electricity, or simply better, more efficient stoves. But these changes are possible only with increases in income, which enable the purchase of superior technologies and encourage people to spend money on more efficient goods because their time is no longer efficiently spent gathering wood and dung for fuel.

27. Access to technology allows people to use their resources more efficiently, to be healthier and to live a more benign existence. Such technologies are not an end in themselves: they allow people to work fewer hours and with less effort, to earn a living rather than subsist, to control their environment and to invest in the future of their children, their community and their country, as well as their environment.

28. Economic development and associated increases in wealth, enhanced technologies and improved infrastructure have been the primary drivers of the improvement in the lives of people globally. Increased wealth means that can children go to school rather than working on the farm. Improved technologies enable the eradication of water-borne diseases. Improved infrastructure means children can obtain the variety of foods and medicines that will enable them to grow up and live healthy, happy, long lives.

29. Given the strong relationship between prosperity, health and a clean environment, the best policy for reducing the vulnerability of people to potentially negative aspects of climate change is one that enables people to become rich and thereby avail themselves of all the adaptive measures that the wealthy can afford.

INSTITUTIONS TO ENABLE ADAPTATION

30. What is meant by these "institutions"? Institutions are the framework within which people act and interact—they are the rules, customs, norms, and laws that bind humans to each other and act as boundaries to human behaviour. Institutions reduce the number of decisions that we need to take; they remove the responsibility to calculate the effect of each of our actions on the rest of humanity and replace it with a responsibility to abide by simple rules.

31. In a system in which rules emerge spontaneously and rules are selected by evolutionary processes, good rules will tend to crowd out bad rules. That is to say, over time, rules that result in better outcomes will be preferred to rules that result in worse outcomes.

32. If the focus were on the institutions of the free society rather than specific outcomes, political decision-makers would be less able unfairly to favour special interests.

33. These institutions enable adaptation by fostering resilience in the face of uncertainty.

34. The absence of such institutions creates poverty and vulnerability to change in general.

35. The key institutions are property rights, contracts, the rule of law, open trade and good governance.

36. *Property rights* typically arise as a means of resolving competing claims over resources.

37. To function effectively as an incentive to both use and conserve resources, property rights must be well-defined, enforceable and transferable. In this way, property rights are capital; they give people incentives to invest in their land and they give people an asset against which to borrow, so that they might become entrepreneurs. The innovation of new technologies occurs when people are allowed to benefit from the investments they make through ownership of property.

38. However, poor countries generally lack well defined, readily enforceable property rights. Many people in poor countries are oppressed by tenure rules which make it difficult for them to rent, buy or sell property formally. Land transactions typically involve paying large bribes to local officials, who have a vested interest in maintaining the *status quo*.

39. *Contracts*: Another fundamental institution for adaptive, sustainable development is freedom of contract. This includes both the freedom *to* contract—the freedom to make whatever agreements one desires, subject to fair and simple procedural rules—and the freedom *from* contract—the freedom not to be bound by the decisions of others. Freedom of contract is a fundamental part of the freedom to associate with others. It includes the freedom to transact—to buy and sell property—and as such it is an essential adjunct to the right to clearly defined and readily enforceable property rights.

40. Contracts and property rights underpin the functioning of markets. The freedom from contract prevents others from attempting to interfere with one's right to engage in exchange. The freedom to contract also enables people to bind themselves to agreements and thereby creates greater legal certainty. This in turn encourages people to engage in trade and investment. Armed with enforceable property rights and contracts, the peasant becomes a merchant.

41. *Rule of law*: The rule of law, brokered by an independent and fair judicial system, is necessary to ensure that property rights, contracts and the freedoms associated with a democratic and free society are upheld, respected and enforced for all members of that society.

42. When the rule of law is absent—that is, when the power of discretion is vested in politicians, bureaucrats and civil servants—this is a certain formula for bribery and corruption. In this situation, economic and entrepreneurial activity becomes dependent exclusively on political manoeuvring rather than based on its benefits to consumers and society.

43. *Open trade*: Open markets and free investment encourage competition. By removing barriers to trade, all people can engage in mutually beneficial exchanges. This enhances competition, creates incentives for innovation and leads to more rapid advances in human welfare and environmental protection. Removing market-distorting taxes and subsidies, especially to agriculture and other products where people in poorer countries have a comparative advantage, encourages economic development and benefits consumers.

44. *Good governance*: While there is no magic formula for good governance, it is enabled by transparency and accountability amongst elected officials, bureaucrats and civil servants, and the elimination of practices which are a source of corruption. Good governance would be achieved with more universal application of the rule of law, and an understanding amongst people that the rule of law is higher than the discretionary power often employed by governments.

45. The adoption of the institutions of the free society by poor countries would lead to:

— Improvements in water and wastewater management, thereby enhancing access to safe drinking water, reducing deaths from diarrhoea and related diseases, as well as decreasing the incidence of diseases transmitted by insects like mosquitoes that breed in stagnant water.

— Improvements in education and access to information, enhancing sanitation and reducing diseases associated with improper sanitation, as well as other diseases.

— Improvements in access to affordable, reliable and cleaner forms of energy and other life-improving technologies, such as refrigeration, air conditioning, more efficient building structures.

— More political, social and economic freedoms for all members of a given society.

— Enhanced environmental protection and better use of natural resources.

— Adoption of institutions would likewise encourage:

— Research and development of new energy, construction, transportation, food production, heating and cooling technologies.

— Investment in infrastructure projects which are genuinely—rather than politically—useful.

— Faster transitions when changes, catastrophes and crises occur.

— Economic diversification and higher incomes—as people's labour becomes more valuable, fewer people are engaged in lower-value economic activities such as agriculture.

HOW CAN WE ACHIEVE ADAPTIVE, SUSTAINABLE DEVELOPMENT?

46. Sustainable development is a phrase often employed carelessly to imply that poverty, environmental degradation, disease, and other problems afflicting the world are predominantly caused by, and therefore are the responsibility of, wealthy countries.

47. An alternative view—and one that is more consonant with the thinking represented here—holds that the world is generally improving and that the rich world in particular has adopted, for the most part, institutions and policies that are sustainable. Broadly speaking, that means the institutions outlined above—property rights, contracts, the rule of law and effective legal systems, open trade and good governance.

48. According to this view, most of the problems of the poor world result not from the actions of those in wealthy countries but from the adoption of unsustainable policies by governments in poor countries. Sadly, as the plight of most poor countries suggests, few countries have come close to instituting such systems of good governance and decentralised decision-making. In particular, attempts to plan economies have proved disastrous in the Soviet Union and elsewhere. A lack of adequately defined and readily enforceable property rights—often the result of well-meaning but utterly misguided government intervention—holds back economic development in many countries, while red tape stifles entrepreneurial activity and perpetuates poverty.

49. As a general rule, institutions that are compatible with human nature are more likely to result in appropriate levels of environmental protection and conservation of natural resources. One institution in particular—private property—has been shown to have such characteristics. When combined with the rule of law, which enables people to

enforce and transfer what they own, private property encourages individuals to care for their property, for natural resources and for the environment.

50. While such institutions do not guarantee human happiness, they can be considered a critical step towards humanity's well-being. Uncertainty about the future has defined human existence. That is one of the reasons the institutions of the free society have evolved: they help humanity more effectively to cope with and adapt to change.

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84 NB this evidence is submitted in a personal capacity and not on behalf of the University of Buckingham. The views expressed are those of the author and not of the University or any of its officers or employees. Back

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