ECONOMISTS WARN CLIMATE CHANGE WILL COST WORLD TRILLIONS IF GOVERNMENTS FAIL TO ACT

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The cost of allowing global temperatures to increase by two degrees or more above pre-industrial levels will run into trillions of pounds and the environmental and social costs will be incalculable, a survey of over one hundred economic and scientific papers on climate change revealed today (13 October). The report, Climate Change - the Costs of Inaction, was compiled by leading economists at the Global Development and Environment Institute at Tufts University in the U.S. for The Big Ask, Friends of the Earth's climate campaign.

The survey, which brings together the very latest scientific and economic thinking on climate change, highlights the enormous costs that would result if Governments allow temperatures to rise by more than two degrees. For example it is estimated that annual economic damages could reach £11 trillion by 2100, equivalent to six - eight percent of global economic output at that time. However even this figure is likely to be an under estimate as it does not include the costs of biodiversity or of unpredictable events such as the collapse of the Gulf Stream. The true costs of climate change are, according to Tufts University economists, incalculable.

The report also reveals the comparatively small amounts of money needed to keep temperatures in check. Action to limit temperature increases to two degrees could avoid £6.4 trillion in annual damages at a cost of only £1.6 trillion per year - a quarter of the amount [1].

Global temperatures have already risen by 0.6 degrees above pre-industrial levels. If emissions continue to rise unchecked global temperatures could increase by more than four degrees centigrade by 2100. The report looks at scientific and economic predictions on the impact of climate change as temperature rise:

TWO DEGREE RISE IN TEMPERATURES

Decreased crop yields in the developing world will spell disaster for many poor farmers and poor countries whose economies are dependent on agriculture production. Widespread drought and water shortages will also hit the developing world hardest where millions of people are already living without access to clean safe drinking water. Other impacts include a near total loss of coral reefs - of vital importance to fisheries and the tourist industry; the expanded northward spread of tropical diseases such as malaria; and the potential extinction of arctic species including the polar bear.

THREE DEGREE RISE IN TEMPERATURES

Decreasing crop yields in developed countries, including the UK, will lead to decreasing world food supplies. Disease will spread - for example the incidence of diarrhea, a killer in the developing world, is predicted to increase by six per cent in Africa. The rise in temperature will also lead to widespread species extinctions; increasing desertification; the wholesale collapse of the Amazon ecosystem; and the complete
loss of all boreal and alpine ecosystems.

FOUR DEGREE RISE IN TEMPERATURES

Melting of the West Antarctic ice sheet will gradually increase sea levels by five to six metres putting vast tracks of land underwater and producing millions of environmental refugees. In the UK the number of people at risk from coastal flooding will double to 1.8 million while in Bangladesh, where half the population lives in areas less then five metres above sea level, permanent flooding and shortages of drinking water could result in 30 - 40 million people being displaced from their homes. Elsewhere entire regions will have no agricultural production whatsoever as a result of the changing climate.

MORE THAN FOUR DEGREE RISE IN TEMPERATURES

There is a 50 per cent chance that the ocean's circulation system will shut down, removing the crucial currents that warm and stabilize the climate of Northern Europe.

Director of the Research and Policy Program at the Global Development and the Environment Institute and one of the authors of the report, Dr Frank Ackerman said:

"The climate system has enormous momentum, as does the economic system that emits so much carbon dioxide. Like a supertanker, which has to turn off its engines 25 km before it comes to a stop, we have to start turning off greenhouse gas emissions now in order to avoid catastrophe in decades to come."

Friends of the Earth Head of Campaigns, Mike Childs said:

"This report demonstrates that climate change will not only be an environmental and social disaster it will also be an economic catastrophe, especially if global temperatures are allowed to increase by more than 2 degrees centigrade. Tony Blair and Gordon Brown need to stop just talking tough on climate change, they need to start acting tough. Under their tenure carbon dioxide emissions have risen. The Government must announce a climate change bill in the Queen's Speech this autumn committing the UK to year on year cuts in greenhouse gases."

Recent research by the Tyndall Centre for Climate Research found that the UK Government has four years to implement a major programme of action if it is to play its part in keeping temperatures below the two degree danger level. As a first step Friends of the Earth's climate campaign, The Big Ask, is calling for the Government to introduce a climate change law that will commit the UK to making year on year cuts in emissions of at least three percent in the Queens Speech.

The implementation of a carbon budget - one of the key tools that could be used at a national and European level to deliver crucial reductions in emissions - is explored in more detail in 'Developing a Carbon Budget,' a report released today by Ecofys UK, international consultants in sustainable energy strategies. The report suggests a carbon budget could work in a similar way to the UK’s financial budget with the Prime Minister reporting back to Parliament on UK carbon emissions every year. A similar concept could be extended to the EU.

Notes for Editors

For more information, a summary of both reports and to arrange interviews please contact the Friends of the Earth Press Office on 0207 566 1649 or on 07764 364 187 (mobile)
[1] Based on a study by the German Institute for Economic Research; estimates in US dollars, cited in the report, converted at £1.00 = $1.87 and expressed at 2002 prices.

Friends of the Earth is also a member of the Stop Climate Chaos (SCC) coalition - an unprecedented and growing coalition on climate change, bringing together environment and development organisations, unions, faith, community and women's groups. SCCs 'I Count' campaign is designed to inspire personal and political action and counter the view that climate change is too big a problem to fix. Members of the public are encouraged to sign up to the campaign at www.icount.org.uk or by texting 'I Count' to 84424.

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