

November 2007

Blame it on China?

The international politics of climate
change



**World
Development
Movement**

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By Peter Hardstaff and Tim Jones

About the World Development Movement

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1. Introduction

Fifteen years after over 150 countries signed the United Nations Framework Convention on Climate Change (UNFCCC) and ten years after the subsequent Kyoto Protocol on reducing greenhouse gas emissions was created, the world is in need of international cooperation to address global warming more than ever. The process to agree the regime for the next phase of emissions reduction, kicking-off in earnest at the December 2007 Convention of the Parties to the UNFCCC in Bali, could not be more important.

Progress on curbing emissions has been sporadic at best and targets are being missed left, right and centre. At the same time, the science on climate change and its likely impacts becomes ever more compelling. The message being sent is loud and clear: the action required must be radical and swift. Time is running out to take the steps necessary to limit the average increase in global temperature to at most 2°C – a level that will still have severe impacts on people and the environment – and to facilitate adaptation to this level of climate change. The Intergovernmental Panel on Climate Change (IPCC) report on mitigation in May 2007 calculated that to keep the increase in global temperatures to between 2°C and 2.4°C requires global emissions to peak between now and 2015, at the latest, and then fall by between 50 and 85 per cent, on 2000 levels, by 2050.¹

Yet despite this scientific boldness, the international politics of the climate talks are still characterised by fear: fear of losing international competitiveness; fear of taking on vested interests; and fear of potentially unpopular policy choices. And with fear comes the need to apportion blame. The very real and very dangerous scenario we face is the talks breaking down in acrimony with rich countries playing the ‘blame China game’; as the US administration did in the late 1990s, pointing the finger at the growing emissions of large developing countries as a reason not to take concerted action themselves.

Taking China as the most obvious example of a large, rapidly growing developing country and the UK as an example of an established industrialised country, the first part of this report looks behind this issue of ‘who is responsible’, comparing the situation in the two countries and highlighting the implications for the international talks. The report highlights the difference between current emissions and historical emissions; the difference between emissions per country and emissions per person; the UK’s recent patchy history in reducing emissions; and the recent trend for the UK to ‘import’ emissions from countries such as China. The report suggests the need for understanding that different positions in the negotiations are based on different ways of looking at who is responsible, and that accommodating these different perspectives is a critical part of the negotiations.

In the complex world of international climate negotiations, who moves first, who demonstrates the willingness and ability to reduce greenhouse gas emissions first, is also a critical issue. Governments are involved in an

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international game of ‘chicken’. As we all race headlong towards a catastrophic collision, we are waiting to see if someone else will move out of the way first – the perception being that the one who moves ‘loses’. This perception is based on a fear that taking the necessary steps towards a low carbon economy will undermine a country’s competitiveness in a globalised world, which is why reaching international agreement is seen as being a key part of the process.

However, as recent experience with the Doha Round of trade negotiations highlights, reaching an international accord that can address fears of losing competitiveness and create a just outcome is far from simple. In many ways the climate talks display similar characteristics to the Doha Round of trade negotiations in the World Trade Organisation (WTO). The World Development Movement has been following the WTO talks for many years, and the second part of this report analyses the similarities, and also the differences between the climate talks and the trade talks in order to draw lessons and help understand what we can expect in Bali, and beyond. The report draws out some reasons to be pessimistic, but also highlights several reasons for optimism that suggest, unlike with the WTO, co-operation rather than competition can win the day.

Ultimately of course, it has to. Unless historical responsibility and the gaping inequality in emissions and consumption is accounted for, the patchy record of industrialised countries in reducing emissions is acknowledged, the current emissions situation addressed, and the fear of being ‘first to move’ is overcome, we face a much more frightening prospect; dangerous, irreversible, runaway climate change.

2. Climate change: who is responsible?

2.1 A complex picture

“I am instructing our delegation right now to show increased negotiating flexibility if a comprehensive plan can be put in place, one with realistic targets and timetables, market mechanisms, and the meaningful participation of key developing countries.” (underlining added)

Al Gore, (then) Vice President of the United States, speech to the Kyoto Climate change conference, December 1997.²

After the Kyoto Protocol was created, the United States refused to ratify it. Bill Clinton (then President) and Al Gore (then Vice President) would not put the Treaty before the US Senate for a vote. They knew it would not be passed because larger developing countries were not required by the treaty to make emissions cuts – one of the US’s ‘red lines’ in the negotiations.³ Since then, the share of global emissions from developing countries has continued to increase, and with it calls from richer countries for larger developing countries

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to make cuts have become louder. But this overall picture of rapid emissions growth in countries like India and China still hides a gaping inequality in both historical and per person emissions.

The table below shows up to date calculations by the World Development Movement on the difference between the historical contribution to climate change and the current contribution for developed countries, developing countries and then the UK and China.

Table 1: Contribution to Global Man-Made CO₂ emissions (percentage)⁴

	Industrialised ¹ countries	Developing countries	UK	China
Current Emissions contribution	54	46	2.0	18.9
Historical Emissions contribution ²	69	31	6.2	7.8
% Share of World Population	18	82	0.9	20.4

Looking at the current picture in terms of greenhouse gas emissions, responsibility is roughly equally shared between industrialised and developing countries (54 per cent and 46 per cent respectively). This overall figures does of course mask significant variation, perhaps the most important to point out being that within the developing country group there are many countries, such as Bangladesh, Kenya and Peru, whose emissions are negligible in comparison to those of industrialised and larger developing countries. The 50 Least Developed Countries (LDCs), containing 740 million people, create just 0.6 per cent of global CO₂ emissions between them.⁵ There is also an increasing gap opening up between emissions in China and industrialised countries such as the UK. The fact that the UK currently emits just 2 per cent of global man-made CO₂ emissions is something highlighted by both UK politicians and media commentators alike, although rarely mentioned is that the UK has less than 1 per cent of the world's population.^{6,7,8}

However, while the current contribution of developing countries is almost on par with the industrialised world and the current contribution of China is large, the historical picture is very different. Even after taking into account significant recent emissions growth in larger developing countries, the historical contribution to climate change of the industrialised world is still almost 70 per cent. And despite its massive scale in terms of land area and population, the historical contribution of China (7.8 per cent) is not that much more than the UK (6.2 per cent).

¹ This includes high income countries as defined by the World Bank plus Russia (an upper-middle income country), which is classified by the UNFCCC as an 'Annex 1' country (i.e. a country that is part of the binding emissions reduction framework in the Kyoto Protocol).

² Historical contribution to climate change has been calculated for the period 1850 – 2003; 2003 being the most recent year where figures are available to make this calculation.

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The politics of the international negotiations and the arguments that play out in the media are heavily influenced by which set of figures form the frame of reference. Industrialised country governments will point to current emissions and demand action - some may possibly demand equal action - from larger developing countries. Larger developing countries will point to the historical emissions of rich countries and demand that the industrialised world acts first and does the most.

The picture is further complicated by the fact that, even though overall emissions in a country like China dwarf those of the UK, emissions per person are still highly unequal.

Table 2: Average Annual Per Capita Emissions in 2005

UK	China
9.6	4.1

As Table 2 shows, annually, the average person in the UK is still responsible for more than twice the emissions of the average person in China. A more equitable approach to addressing climate change has to factor in this disparity. At an informal preparatory meeting of the UNFCCC in late October the call was once again made, this time by Pakistan, that the most equitable way to determine responsibilities on climate change would be based on per person greenhouse gas emissions.⁹

It is far from simple then to apportion responsibility for climate change based on current emissions per country. The nations of the developing world might also point towards the difficulty rich countries have had in actually reducing emissions in the decade since signing the Kyoto Protocol and also to the shift of manufacturing production (sometimes by western companies) from industrialised to developing countries.

2.2 Cutting emissions: the UK's record

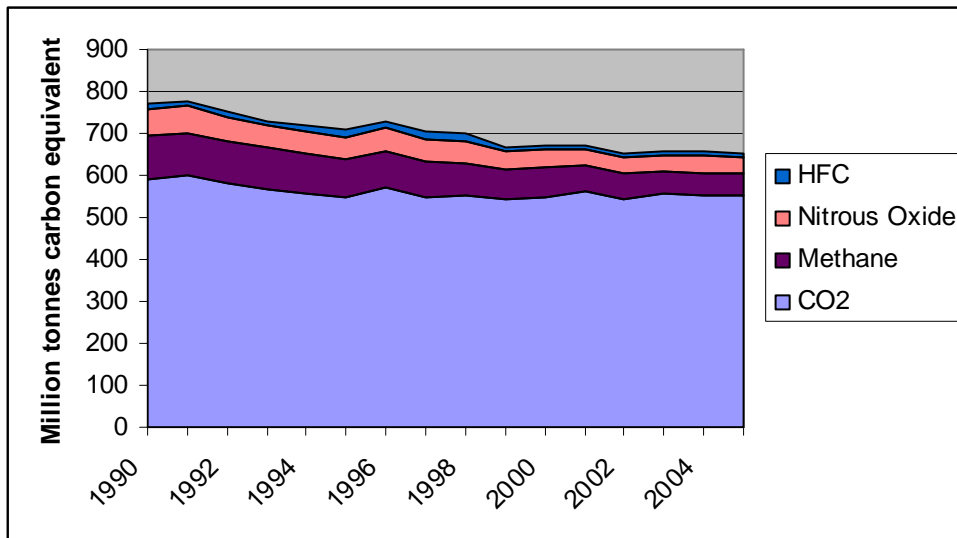
2.2.1 Understanding the data

With various different definitions and different interpretations of the data flying around it is not easy getting a straight answer to the question; has the UK managed to cut its greenhouse gas emissions? Predictably, the answer can be both yes and no, depending on which emissions are included and which date forms the baseline.

The official position, represented in Figure 1 below, is that, overall, emissions of greenhouse gases in the UK have reduced by 15.3 per cent since the base year established by the Kyoto Protocol.³ The UK's Kyoto target is a reduction of 12.5 per cent by 2012 so on the face of it the UK is doing well. However, a look behind these statistics reveals a less impressive picture.

³ The Kyoto Protocol base year is 1990 for the main greenhouse gases (carbon dioxide, methane, and nitrous oxide) and 1995 for the other greenhouse gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride).

Figure 1: UK emissions of the principal greenhouse gases⁴ 1990 – 2005¹⁰



HFC = hydrofluorocarbons

As the graph shows, the most significant reductions have been in Methane and Nitrous Oxide emissions. To the government's credit, a major reason for the reduction in methane emissions has been a cut in emissions from landfill. The other main reason for the methane emissions cut is the ongoing decline in the UK coal industry. Between 1990 and 2005, coal production fell by 77 per cent (from 89.5 million tonnes in 1990 to 20.5 million tonnes in 2005).¹¹ Not surprisingly, during the same period methane emissions resulting from coal production fell by 79 per cent (from 870,000 tonnes to 181,000 tonnes⁵).¹²

The significant cut in nitrous oxide emissions (a 38 per cent drop since 1990) is largely the result of abatement technology being installed in 1998 at a DuPont factory producing adipic acid. DuPont is the UK's only manufacturer of adipic acid (an ingredient for producing nylon) which until the late 1990s was the UK's second largest source of nitrous oxide emissions behind agriculture.^{13,14}

More difficult however has been cutting emissions of the most important greenhouse gas, carbon dioxide, which according to official figures has dropped by just over 5 per cent in 15 years. The modest reduction in CO₂ emissions was largely a result of an increase in gas, and a reduction in coal, used for energy generation which happened before the current government came to power in 1997. Since 1997, CO₂ emissions have steadily increased from 548.4 million tonnes to 560.6 million tonnes in 2006.¹⁵

Significantly, the official line does not include the UK's share of emissions from international aviation and shipping because no agreement was reached

⁴ This graph does not include perfluorocarbons and sulphur hexafluoride as UK emissions of these gases are negligible and would not show up on a graph of this scale.

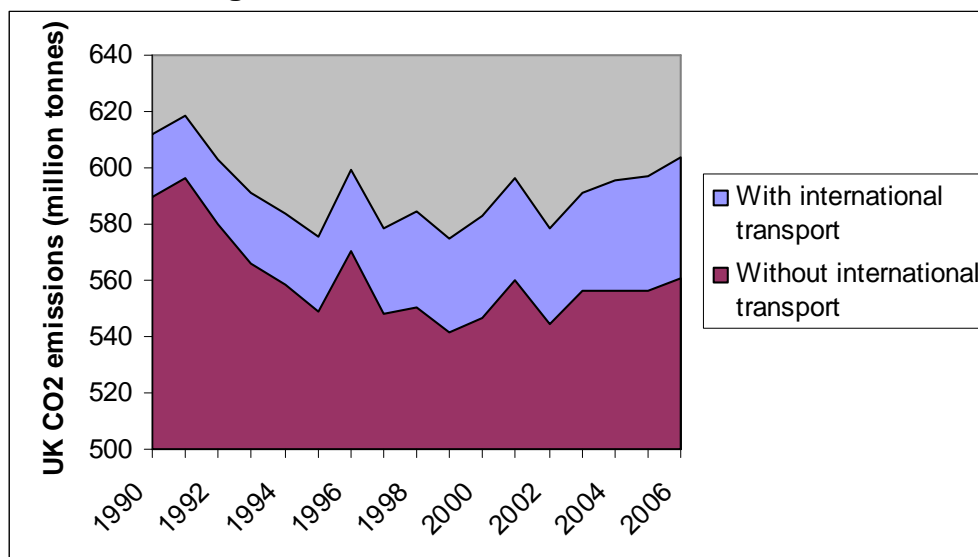
⁵ Due to the additional potency of methane as a greenhouse gas, 870,000 tonnes is roughly 18.2 million tonnes CO₂ equivalent and 181,000 tonnes is roughly 3.8 million tonnes CO₂ equivalent.

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to include these emissions in the Kyoto Protocol. But these emissions contribute to climate change like any other and if they are included the picture changes again.

Figure 2: UK CO₂ emissions 1990-2006¹⁶



The government reports that UK CO₂ emissions in 2006 were 560.6 million tonnes.¹⁷ This compares with 592.1 million tonnes in 1990; a cut of 5.3 per cent over 16 years (the darker area in Figure 2. See also Appendix 1). Even on this measure, the government is set to fail to meet its own target of a 20 per cent cut in CO₂ emissions by 2010 by a long way.

However, as mentioned these figures exclude the UK's share of international aviation and shipping emissions. When these are included, total UK CO₂ emissions in 1990 were 614.5 million tonnes, and in 2006 they were 603.3 million tonnes⁶ a negligible cut of just 1.8 per cent over 16 years (the lighter area in Figure 2. See also Appendix 1). Furthermore, UK CO₂ emissions have been rising in recent years from 577.5 million tonnes in 2002 to 603.3 in 2006 (see Appendix 1). Current government policies are therefore leading to emissions increases rather than cuts. Whilst the UK government presents itself as acting on climate change by talking of targets for future cuts in CO₂ emissions, its current policies are resulting in an increase.

Although the overall change in UK CO₂ emissions between 1990 and 2006 has been negligible, there have been substantial variations across different sectors of the economy. Most striking of all are the changes at either end of the spectrum (see Table 3).

⁶ The UK government has yet to release estimates of international transport emissions for 2006. We have conservatively estimated that CO₂ emissions from aviation increased by 5 per cent between 2005 and 2006. This is lower than the growth rate in aviation in any year since 1992, except for the period after 11 September 2001.

Table 3: Change in emissions of major carbon dioxide emitting sectors in the UK from 1990 to 2006¹⁸

Sector	Change on 1990 levels
Civil aviation	+ 132%
Road transport	+ 12%
Residential heating	-1%
Commercial and public services	-7%
Electricity generation	-12%
Manufacturing and industry	-14%

2.2.2 Aviation and road transport emissions increasing

At one end of the spectrum, CO₂ emissions from aviation have increased by more than 130 per cent between 1990 and 2006, and from road transport by 12 per cent (see Table 3). These increases have almost cancelled out the effect of cuts by commercial and public buildings, electricity generation, and manufacturing and industry.

One might reasonably have assumed that this increase in emissions would have given rise to a policy response from the UK government. However, recent indications are that the UK will plough on regardless with increasing road and airport capacity.

The government is currently supporting a massive expansion in UK aviation, with a planned doubling of air passengers between 2002 and 2020, and a doubling of air freight between 2002 and 2010. The government's aviation white paper supports new runways at Edinburgh, Birmingham International, Stansted and Heathrow airports. In addition, the government's white paper supports other airport expansion measures, such as new terminals or longer runways, at a total of 24 different airports⁷ in the UK.¹⁹

The Tyndall Centre for Climate Change has predicted that unless the government's policy changes on aviation expansion, CO₂ emissions from UK aviation will have more than doubled by 2030 and trebled by 2050.²⁰

The latest Department for Transport strategy document, while including significant investment in the UK rail system, also continues with road expansion plans with £1.3 billion being spent every year and 29 schemes either underway or due to start in the near future.²¹

2.2.3 Importing emissions?

At the other end of the spectrum, emissions from manufacturing and industry have declined by 14 per cent on 1990 levels. This reflects a decline in the importance of manufacturing to the UK economy. Between 1995 and 2006, the contribution of manufacturing towards UK Gross Domestic Product (GDP) declined from almost 22 per cent to 13 per cent.²²

⁷ Edinburgh, Glasgow International, Glasgow Prestwick, Aberdeen, Dundee, Inverness, Cardiff International, Belfast International, Manchester, Liverpool John Lennon, Blackpool, Carlisle, Newcastle, Teesside International, Leeds-Bradford International, Birmingham International, East Midlands, Bristol International, Bournemouth International, Exeter International, Stansted, Heathrow, Gatwick, Luton.

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However, while it has clearly been possible to grow the UK economy by *producing* fewer manufactured goods, we certainly haven't stopped *consuming* fewer manufactured goods. The total domestic material consumption – a calculation of the quantity of natural resources used by the UK economy – has remained fairly stable for the past 10 years.²³ The UK has essentially continued to 'outsource' or 'relocate' its manufacturing sector to larger developing countries like China. Therefore, figures for the UK's true responsibility for CO₂ emissions should take account of goods produced elsewhere but consumed in the UK (minus goods produced in the UK and consumed elsewhere).

Using a methodology developed by the Tyndall Centre for Climate Change Research (see Appendix 3), the World Development Movement has calculated the UK's 'exports' and 'imports' of CO₂ emissions for the years 1990, 1997 and 2005. Table 4 shows that since 1990, the UK's net 'imports' of CO₂ emissions have almost trebled. This jump in 'imports' of CO₂ emissions has been largely due to a significant increase in imports of manufactured products from China and raw materials (e.g. coal and gas) from Russia.

Table 4: UK net 'imports' of CO₂ emissions (million tonnes)

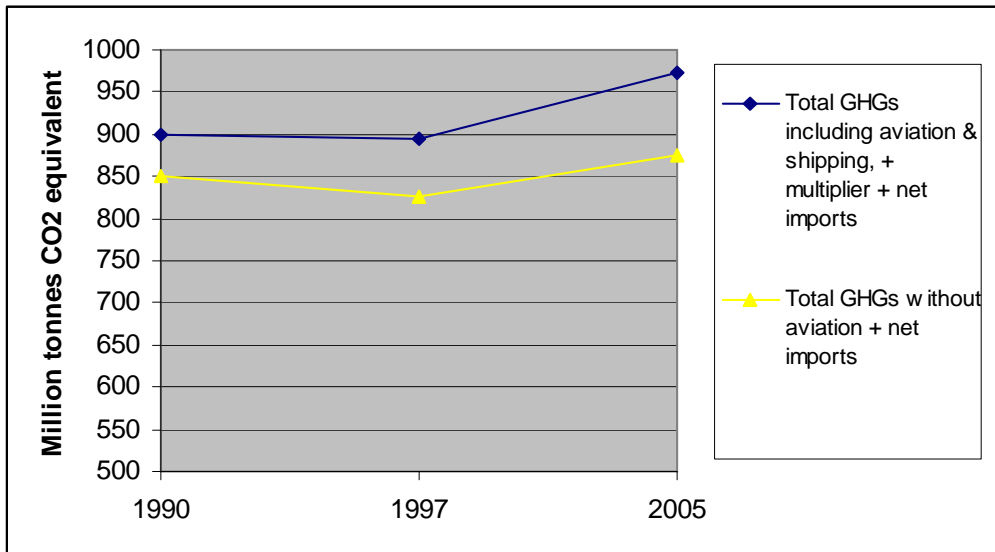
Year	Emissions 'imports' (million tonnes)
1990	78.6
1997	119.5
2005	220.7

In 2005, the UK was a net importer of 220.7 million tonnes of CO₂. These are emissions from goods produced elsewhere which were consumed in the UK. Adding these to UK CO₂ emissions raises emissions from 595.1 million tonnes of CO₂ to 815.8 – an increase of 37 per cent. If these are added to the UK's total greenhouse gas emissions, the overall picture changes significantly. The UK government's reported 15 per cent cut in total greenhouse gas emissions since 1990 turns into a 2.7 per cent increase (see lower line in Figure 3).

If these net emissions 'imports' are added to the fuller picture of UK climate impact (i.e. the UK's total greenhouse gas emissions including aviation and shipping and the extra warming effect of aviation emissions⁸) the UK has increased its climate impact by eight per cent since 1990 (see upper line in Figure 3. See also the tables in Appendix 1 and Appendix 2).

⁸ As well as CO₂, aviation produces nitric oxide and nitrogen dioxide, which at altitude form ozone, a greenhouse gas. Aviation also emits water vapour, which at altitude leads to the formation of contrails and cirrus clouds – again contributing to global warming. In 1999, the Intergovernmental Panel on Climate Change (IPCC) calculated that up until 1992, the warming caused by aviation was 2.7 times that of the warming of its CO₂ emissions alone. It went on to predict that between 1992 and 2050, the warming caused by aviation would be 2 to 4 times larger than aviation's CO₂ emissions alone. The UK Department for Transport uses a figure of 2.5 times more warming from UK aviation than CO₂ alone. WDM has used this more conservative estimate.

Figure 3: UK Greenhouse Gas (GHG) emissions 1990 – 2005, including net CO₂ emissions ‘imports’



Taking into account imports and exports also significantly alters the CO₂ emissions profile for a major manufacturer and net exporter like China. In 2005, the total net ‘exports’ of CO₂ emissions from China were 1,348 million tonnes of CO₂, which is equivalent to 25 per cent of China’s overall CO₂ emissions.

CO₂ emissions per capita are also significantly altered. With net ‘exports’ and ‘imports’ accounted for, the average UK citizen is responsible for over four times the annual CO₂ emissions as the average Chinese citizen (see Table 5).

Table 5: Average Annual Per Capita Emissions in 2005

	UK	China
Without trade	9.6	4.1
Including trade	13.2	3

The administrative and political barriers to actually using this CO₂ ‘imports’ and ‘exports’ concept in the international negotiations are significant. However, this does not prevent the issue from at least being acknowledged when it comes to considering where responsibility lies for creating the problem.

2.3 Pointing the finger won’t work

As already mentioned, the IPCC calculates that to have a reasonable chance of preventing the worst effects of climate change requires global emissions to peak by 2015 at the latest, then fall by between 50 and 85 per cent on 2000 levels. For this to happen, emissions from the UK have to be cut by 80-90 per cent by 2050 – cuts of 4-5 per cent every year – and for those cuts to start immediately.

Although the UK government presents a favourable view of its achievements on emissions reduction to the UK public and media, this is not likely to have much traction with the Chinese and other major developing country

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governments. They will look at the UK and see that, although our Kyoto commitments are being met, our emissions of CO₂ – the most important greenhouse gas - have not changed significantly over the past fifteen years and we are certainly not on track to achieve what the IPCC says is needed.

They will see that the profile of our emissions has changed (e.g. more energy is produced from gas and less from coal, our manufacturing sector has contracted and transport emissions have increased). And they will see that our 'emissions imports' have increased.

So should we be so quick to point the finger at countries like China and demand they significantly reduce emissions while we are voraciously consuming the goods they produce? Can we realistically demand major steps from countries still home to many millions of desperately poor people when we have failed to demonstrate that, even with all our wealth, knowledge and access to technology, we have both the willingness and the ability to significantly reduce emissions here in the UK?

The international politics of climate change are such that showing leadership and showing commitment, rather than playing the blame game, is more likely to yield a positive result. However, a significant barrier to be overcome is the fear of losing international competitiveness and the next section looks at the similarities and differences between the climate talks and the Doha Round of trade negotiations.

The Political Reality

It is critical to bring countries like China into an agreed regime of greenhouse gas emissions reductions.

But China and other large developing nations are well aware who has historically caused the problem, how unequal per capita emissions remain, and how we have struggled to reduce our own CO₂ emissions since signing the Kyoto Protocol.

Using the media to shift the 'blame' towards these countries will likely hinder, rather than help reach, a useful outcome.

3. Negotiations on trade and climate change: how they compare

3.1 Similar challenges

On trade

“As we reform at home, we should be activist abroad. Opening others’ markets to our goods. Insisting on reciprocity. We need reciprocal openness: not reciprocal barriers.”

“Openness can only function on the basis of a fair level of reciprocity from our major trading partners in the developed and emerging economies.”

“In too many major emerging economies, the state is so much in the business of business, interfering so much in a wide range of so-called "strategic" sectors, that our products and services are kept out or theirs are given an unfair advantage...It is a level of unfair competition which we cannot accept.”

Peter Mandelson, European Trade Commissioner, June 2007²⁴

On climate change

"There are very legitimate concerns that unilateral action by the UK could seriously damage the competitiveness of our economy, with consequences for jobs and investment.”

John Lambert, Director General, Confederation of British Industry (CBI).
November 2006²⁵

On climate change, as on trade, unilateral action is perceived as potentially undermining competitiveness, leading to demands for action at the international level. In the Guardian interview quoted above, John Lambert of the CBI went on to call for ‘international partnerships’ that could "bring about emissions reductions in a way that does not destroy our economy."²⁶

But launching international talks is no guarantee that fears of losing competitiveness can be overcome. The Doha Round of trade talks at the World Trade Organisation has been mired in disagreement for several years and although the reasons for impasse often seem highly technical and arcane, the underlying basis usually relates to a stand-off between those fearing a loss of competitiveness and those wanting to gain it.

Table 6 highlights a range of ways in which the climate talks exhibit similar characteristics to the Doha Round of trade negotiations.

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Table 6: Similarities between the negotiations on climate change and trade

Similarity	Climate Talks - UNFCCC	Trade Talks - WTO
Broad in-principle agreement...	on the need for emissions reductions to mitigate climate change	on the need for multilateral trade rules
Major disagreement on the detail	whether binding commitments are needed, and how they should be achieved	on the nature and extent of liberalisation: tariff reduction formulae, subsidy reductions, investment liberalisation etc
Complexity of the issues and multiple 'trade-offs'	quantifying emissions and allocating responsibility Technology transfer and intellectual property rights Carbon trading Clean Development Mechanism Joint implementation Aid for mitigation and adaptation	quantifying 'trade distorting' subsidies and non-tariff measures The nature and extent of differential treatment for developing countries Technology transfer and intellectual property rights Services liberalisation 'Aid for trade'
Developing countries want US and EU to act first and do the most...	on reducing greenhouse gas emissions and providing aid and technology transfer	on reforming existing agreements, cutting agricultural subsidies and providing aid and technology transfer
US and EU want reciprocity from larger developing countries...	in make commitments on emissions reduction in return for their own	in significantly opening markets in manufactured goods and in services in return for modest agricultural reform
Developing countries highly suspicious of US and EU...	after seeing carbon emissions increase in many countries since Kyoto was signed	after seeing agricultural subsidies increase since the last round of talks
The poorest countries, in particular small island states, potentially face the biggest threat...	to livelihoods if significant action to reduce emissions is not agreed. Yet they are not a powerful voice in the talks	to livelihoods if a pro-development deal is not reached. Yet they are not a powerful voice in the talks
Corporate lobbying to create business friendly 'rules'...	such as carbon markets and offsetting, so that business can reap benefits	such as on intellectual property rights and investment, so that business can reap benefits
The creation of potential loopholes that could water-down the effectiveness of a deal	Carbon markets, clean development mechanism, joint implementation	Some 'green box' agricultural subsidies, anti-dumping rules
US Congress playing a 'wildcard' role because of uncertainty over...	whether any post-Kyoto deal will get approval in Congress even if the US administration agrees	how congress will vote on any new trade deal even if the US administration agrees
Blame game. If a deal is not done...	larger developing countries will be the scapegoat - used by the US and EU - to cover their own refusal to act in a just way	larger developing countries will be the scapegoat - used by the US and EU - to cover their own refusal to act in a just way
China an increasingly important 'player' in the talks...	due to rapidly expanding emissions	due to rapidly expanding exports and imports
A justice issue: rich countries have become wealthy through...	the carbon economy. They have historically been the major cause of the problem so should take responsibility for cutting emissions and enabling developing countries to pursue low carbon development	using a wide variety of trade policies to promote domestic industrial development. They should take responsibility for ensuring developing countries are able to use the same policy instruments
The poor will suffer first and worst...	from dangerous climate change	from blanket trade liberalisation and also the status quo on agricultural subsidies and intellectual property rights
The greatest barrier to a fair outcome is...	fear of losing international competitiveness	fear of losing international competitiveness

3.2 The same difference in perspective

Table 6 highlights a range of similarities between negotiations on trade and those on climate change. What it does not properly convey is the fundamental difference in perspective that forms the starting point for both sets of negotiations. This difference was mentioned earlier and, put simply, could be described as 'historical justice' versus 'future prospects'.

3.2.1 Trade

The approach of most developing countries to the launch of the Doha Round was to focus on demanding changes to existing trade agreements; what they saw as correcting the injustices or imbalances in the rules created during the last round (Uruguay Round) of trade talks, which themselves compounded an economic system that made it extremely difficult for these countries to develop competitive industries. Their call was for developed countries to agree to 'review, repair and reform' the existing rules on agricultural subsidies, intellectual property rights, investment measures and so on without developing countries having to 'pay twice' with further liberalisation of their own in return for addressing these failures or injustices.²⁷ Evidence of the struggle for this reform of current trade rules can be seen in the negotiating mandate agreed in Doha. Top of the list are 'implementation issues'; a wide range of corrections demanded of existing rules.²⁸

Most industrialised countries on the other hand were focused on the future prospects for their companies in new or emerging markets. They saw rapidly growing countries like China both as a threat and opportunity for their industries and saw market opening as a key tool for maintaining/enhancing their competitive position. Their call for was for further liberalisation in agriculture (with a wide range of limits and caveats), further liberalisation in services and industrial products (with very few limits and caveats) and the expansion of WTO rules into more policy areas.²⁹ They did not, and will not, acknowledge that any injustice was done during the Uruguay Round and they have spent the past six years trying to oppose, ignore and sideline developing country proposals to correct the situation. The fact that the industrialised world has managed to punt most if not all of the 'implementation issues' agenda into the long grass is one of the many travesties of the Doha Round.³⁰

3.2.2 Climate change

On climate change, the approach of most developing countries is to demand action from the industrialised world in order to correct a historical injustice; rich countries have become wealthy as a result of high carbon economies, causing yet another problem that will hurt the poorest countries and poorest people most. They see little reason why they should make commitments that are perceived to potentially hurt the competitiveness of their economies when they are not, historically, the principal cause of the problem. Their focus in the climate talks is for developed countries ('Annex I countries' in Kyoto-speak) to agree emissions cuts in a second 'commitment period' already mandated in the Kyoto Protocol; the first commitment period expires in 2012.³¹

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Industrialised countries are more focused on the future prospects for emissions (and competitiveness). While, unlike the trade talks, there is a greater willingness to acknowledge past injustice³² there is still a tendency to look more at the current and likely future emissions picture and demand action on that basis. There is also an underlying fear, as expressed above by the CBI, that making emissions reduction commitments in the absence of commitments by larger developing countries will hurt competitiveness. While not yet fully expressed, the focus will probably be on creating a new deal that either augments or replaces the second commitment period of the Kyoto Protocol in order to draw-in larger developing countries to an emissions reduction framework. As the European Union representative stated at a preparatory UNFCCC meeting at the end of October 2007, in addition to industrialised countries committing to another round of emissions cuts, "It is up to emerging economies to take up further, fair and effective contributions that are quantifiable and reportable to reduce GHG emissions and the energy intensity of their economic development."³³

Of course the characterisation of developed and developing country positions outlined above masks differences between some countries or groups of countries. For example, in the climate talks, the Alliance of Small Island Developing States (AOSIS) is also calling on larger developing countries to start making emissions cuts.³⁴ It also masks a good deal of complexity in the issues that will comprise the final deal such as technology transfer, aid for mitigation and the nature of so-called 'clean development mechanism' projects between developed and developing countries.

However, the essential point remains: the extent to which the need for justice as well as the need to address future prospects for emissions can be successfully accommodated, while at the same time overcoming fears of losing competitiveness, is the key test for the climate talks.

3.3 But...(the big difference between trade and climate)

For developing countries in the WTO no deal is better than a bad deal. While few if any governments would publicly advocate such a position while the talks are still theoretically 'alive', ending up with no new rules and no new commitments may well be a more palatable outcome for many than signing up to a new deal exchanging the possibility of modest agricultural reform in rich countries (that could benefit a *few* developing countries)³⁵ for import tariff cuts on manufactured goods and opening up service markets (that could be harmful for *many* developing countries).³⁶ In contrast, on climate change, no deal and no significant change spells catastrophe for probably hundreds of millions of poor people across the world.

Also in many (not all) rich countries the push for a new trade round and the push for ever more liberalisation tends to come from corporate lobby groups with the public largely an indifferent bystander or involved in campaigns to reign-in the liberalisation agenda. On climate, in many (not all) rich countries there is more public interest in pushing for an effective international agreement while companies play more diverse roles with some calling for effective international action, some seeking to use the talks to create new

market opportunities, and some, as seems to have been the case with the Australian coal industry and the US oil industry, opposing an international deal. As a recent UN report says concerning opposition to the Kyoto Protocol, “Some industrial sectors that were unfavourable to the Protocol managed successfully to undermine the political will to ratify it.”³⁷

3.4 Reasons for pessimism

Although concerns over competitiveness are unlikely to be overtly mentioned at the Bali meeting or in subsequent climate talks, the issue is likely to cast its shadow over proceedings. In view of the precarious position of the US economy, including a massive and growing trade deficit with China,³⁸ the US administration is likely to be particularly sensitive when it comes to making any commitments that it perceives will give economic advantage to large developing countries.

Recent actions by both the US and the European Union suggest that narrow economic interests could trump effective policies to address climate change. For example, there is significant evidence that bio-fuels – or agro-fuels as they are also known – can often be socially and environmentally harmful including actually exacerbating rather than mitigating carbon emissions.³⁹ Despite this evidence, the US and EU have enthusiastically embraced current agro-fuel technology as part of the ‘solution’ to climate change and have created subsidies to stimulate domestic production.⁴⁰ It is hard not to conclude that the US and EU view agro-fuels more as a new opportunity for their farmers and agri-business rather than a means to effectively tackle climate change.

Even if the evidence is ignored and a massive leap of faith is taken in assuming that agro-fuels can really help mitigate climate change, the actions of the US and EU are perverse. Because despite their enthusiasm for agro-fuels, and of course their professed enthusiasm for free markets, both have opposed moves to facilitate increased imports from countries like Brazil.⁴¹ Even measured against their own questionable position on the contribution agro-fuels can make to curbing carbon emissions, the US and EU still seem more concerned about the competitiveness of their own producers.

A second recent example is the EU’s approach to imports of cheaper energy saving light-bulbs. In October 2007, the European Union approved a one-year extension of special import taxes (known as anti-dumping duties) of up to 66 per cent on Chinese-made, energy-saving light bulbs.⁴² Again, it looks like concerns over competitiveness have overridden policies to mitigate climate change.

A third recent example is the UK government’s decision to proceed with airport expansion. According to Transport Minister Ruth Kelly, this expansion is a necessity in order to maintain the competitiveness of the UK economy.⁴³ Recent experience shows that although aircraft fuel efficiency has more than doubled over the past few decades,⁴⁴ the impact on emissions has been overwhelmed by the increase in the number of flights. Therefore, whatever its rhetoric on the potential for more efficiency gains, by planning a further

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increase in the number of flights the UK government is placing concerns over competitiveness above the need to curb the growth in aviation emissions.

The actions of the EU and US in trade negotiations also give grounds for pessimism that they will prioritise broader public policy objectives over specific economic interests. For example, the demands of the pharmaceutical industry have been placed above providing affordable medicines to poor people, even with the additional 'flexibility' in WTO rules being granted in 2003.⁴⁵ And the demands of multinational banking corporations have been put before the needs of poor rural families, as financial sector liberalisation has been pushed despite strong evidence that it results in less access to credit for the poor.⁴⁶

In the WTO, the EU and US have been unwilling to undertake the significant reforms demanded by developing countries and have instead tried to use their political muscle to bounce developing countries into a deal. When developing countries, whether individually or in groups, defend their interests, the US and EU are quick to blame them for any impasse in the talks and the 'threat' they claim this poses to multilateralism.⁴⁷

3.5 Reasons for Optimism

Concerns over competitiveness will almost certainly play their part in shaping the climate change negotiations. However, there are several reasons for optimism that a desire for cooperation could overcome these concerns:

- Changing attitudes in the US: although the administration of George W Bush has resisted action to tackle climate change and has only recently accepted that climate change is a real and serious problem,⁴⁸ other sections of the US public and political arena have been far more active and progressive. For example, state governors have started implementing policies to reduce emissions while at the same time calling on the US Congress to act.⁴⁹ Over 400 mayors of towns and cities across the United States have signed a commitment to take action on climate change.⁵⁰ And moves to legislate a cap on emissions have been initiated by the US Senate.⁵¹
- The attitude of the Chinese government: the past couple of years have seen a shift in consciousness within the Chinese government of not only the domestic environmental impacts of China's rapid industrialisation but also the international implications. Although achieving an agreement will be extremely complex and difficult, it is not beyond the bounds of possibility that the Chinese government will agree to some form of emission reduction commitment if the right framework can be created.⁵²
- A new US administration on the horizon - by the end of 2008 a new US President will have been elected and a new administration put in place. Although some Republican Party candidates are still hesitant to accept that humans are causing climate change, the two front-runners (Rudy Giuliani and John McCain) seem to have adopted a more science-based view and support action to tackle emissions.⁵³ The two

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Democratic Party front-runners (Hillary Clinton and Barack Obama) also support action to address climate change. There is a strong likelihood therefore that the next US administration will be prepared to go further in the international talks than the current administration.

- Changing attitudes in Australia. Like the United States, the Australian government refused to ratify the Kyoto Protocol but changing public attitudes towards climate change, partly stimulated by the fact that the country is experiencing a 'once in a thousand years' drought⁵⁴ may tip the balance in favour of Australian government support for more concerted action. Polling during the 2007 federal election indicated that the voting intentions of 73 per cent of people in marginal seats would be influenced by the different parties' positioning on climate change issues.⁵⁵ A poll undertaken for the BBC World Service suggests that 70 per cent of Australians think major steps should be taken very soon to reduce the impact of climate change.⁵⁶
- Commitment from European governments. Although the EU and its member states can often pursue a muddled and/or perverse approach to tackling climate change (for example, on agro-fuels or the ineffective Emissions Trading Scheme), there is broad in-principle agreement on the need for action to prevent the average global temperature rising above 2°C on pre-industrial levels.⁵⁷ This suggests the EU will have a progressive position in the negotiations, at least in terms of setting targets that are close to what is needed.
- Campaigning in the global south. Activism on what are sometimes characterised as 'environmental issues' is nothing new in the developing world.⁵⁸ Resource exploitation and pollution are often more closely linked with people's lives and livelihoods in the global south than in the global north. There is a strong call from activists in these countries not only for climate justice from the industrialised world but also for action by developing country governments to pursue low carbon development.⁵⁹
- International civil society. There is a strong and growing movement of individuals and organisations across the world calling for action to address climate change. This movement spans traditional divisions of labour between organisations (for example it encompasses development organisations, environment organisations, trades unions, faith based organisations and so on). Public activism in support of strong political action to address climate change has never been so widespread.

4. Conclusions: competition or co-operation?

“The American way of life is not up for negotiation.”

George Bush senior, Rio Earth Summit in 1992⁶⁰

“A modest lifestyle change in some Convention Parties is a small price to pay to protect SIDS [Small Island Developing States] from the loss of finite land area, to avoid the loss to the global community of unique island cultures and ecosystems, and to avoid the loss of lives from the impacts of extreme events in SIDS and other vulnerable countries.”

The Alliance of Small Island States (AOSIS), submission to the UNFCCC, 2007⁶¹

There are significant barriers to agreeing a new phase of international greenhouse gas emissions reduction commitments, particularly one that is effective and just. As this report has shown, there is potential for disagreement due to fundamentally different perspectives over who is responsible for the problem. On the one hand, there is little if any realistic chance of tackling the problem if all the major greenhouse gas emitters, including the major developing country emitters, are not in some way committed to undertaking emissions reduction and pursuing low carbon development. On the other, there is no chance of reaching a fair outcome if the imbalance in historical responsibility for emissions and the massive inequality in per person emissions and consumption are not acknowledged and accounted for.

As in the WTO, the major barrier to creating an international agreement to tackle climate change that is fair – in other words one that treats developed and developing countries asymmetrically – is fear over ‘international competitiveness’. Although this report has highlighted several reasons for pessimism, including the increasingly sensitive trading relationship between the west (US and EU) and China, there also exist reasons to be optimistic, including changing attitudes in several countries. These changes need to be reflected in the willingness of governments to take bold steps. Going into the talks with a mindset like that of George Bush senior at the Rio Earth Summit in 1992 is a recipe for deadlock and acrimony. It is also imperative that the industrialised world pursues a different strategy to the ‘blame large developing countries’ approach used in the WTO.

Ultimately, playing a game of ‘blame China’ simply won’t work. Pointing the finger at large developing countries while at the same time citizens in rich countries voraciously consume imported manufactured goods makes little negotiating sense. The responsibility to act first and do the most must lie with the industrialised world, not only because of historical emissions and unsustainable levels of resource consumption, but also because these

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countries hold many of the other key cards in the negotiations, such as the ability to transfer technology and financial resources to those who need it. All these cards will need to be played well if the negotiations are to have any chance of reaching a successful conclusion.

And reach a successful conclusion they must, because unless the various political fears can be overcome, we face a much more frightening prospect; dangerous, irreversible, runaway climate change.

5. Appendices

Appendix 1: UK CO₂ emissions 1990 - 2006⁶²

Year	UK CO ₂ emissions, including international aviation and shipping, and net imports of CO ₂ (million tonnes)	UK CO ₂ emissions including international aviation and shipping (million tonnes)	UK government claimed CO ₂ emissions (million tonnes)
1990	693.1	614.5	592.1
1991		620.7	598.9
1992		605.1	581.9
1993		591.7	567.0
1994		584.3	559.2
1995		576.1	549.6
1996		599.6	571.3
1997	698.4	578.9	548.4
1998		583.9	550.1
1999		574.2	540.8
2000		584.4	548.8
2001		595.5	559.6
2002		577.5	543.2
2003		589.9	555.1
2004		593.7	554.6
2005	815.8	595.1	554.2
2006	n/a	603.3	560.6
% change	+17.7	-1.8	-5.3

Appendix 2: Total UK Climate Impact 1990 – 2006 (includes all major greenhouse gases)

Year	Total without aviation	Total with aviation & shipping	Total including aviation multiplier	Total including aviation multiplier and net imports of CO ₂
1990	772.9	795.3	822.1	900.7
1991	779.2	800.9	827.4	
1992	754.3	777.5	806.4	
1993	732.5	757.2	787.7	
1994	720.0	745.0	777.3	
1995	709.7	736.1	769.7	
1996	730.7	758.9	794.4	
1997	706.6	737.1	774.9	894.4
1998	701.7	735.5	777.3	
1999	670.4	703.8	749.4	
2000	672.1	707.6	757.9	
2001	674.9	710.8	759.6	
2002	654.2	688.5	737.0	
2003	659.9	694.7	743.9	
2004	656.9	696.0	751.5	
2005	653.8	694.7	753.2	973.9
%change	-15.4	-12.6	-8.4	+8.1

Appendix 3: Methodology for calculating emissions from imports and exports

The Tyndall Centre for Climate Change Research released a briefing in October 2007 which estimated China's CO₂ emissions in 2004 that were for net exports.⁶³ Using figures for CO₂ emissions per unit of GDP for China and China's trade partners, and trade flows between these countries and China, they estimated that China's emissions for net exports were 23 per cent of China's total emissions in 2004.

We have used the same methodology as the Tyndall Centre to produce a 'net emission export' estimate for China in 2005, 1997 and 1990 and a 'net emissions import' estimate for the UK in the same years.

Methodology for calculating net emissions 'imports' and 'exports'⁶⁴

The carbon intensity of the UK economy in 2005 was 0.26 million tonnes of CO₂ for every US\$ billion of GDP. The UK's exports in 2005 were US\$370 billion, which means we can estimate 96.2 million tonnes of UK CO₂ emissions in 2005 were for exports.

The carbon intensity for 21 major UK trade partners⁹ was calculated for 2005, and each multiplied separately by the imports from each of those countries. Total imports from these 21 countries were US\$317 billion, and created 195.7 million tonnes of CO₂. The UK had a further US\$136 billion of imports in 2005. The carbon intensity of the rest of the world, minus the 21 countries and the UK, is 0.89 million tonnes of CO₂ for every US\$ billion of GDP. These imports therefore add a further 121 million tonnes of CO₂ to the UK's imports.

Overall, these two figures mean that UK CO₂ emissions from net imports were 220.7 million tonnes of CO₂ in 2005. The same methodology was then followed for the UK for 1990 and 1997, using figures for those years.

The same methodology was followed for China in 2005. The carbon intensity of the Chinese economy in 2005 was 2.38 million tonnes of CO₂ for every US\$ billion of GDP. With total exports of US\$762 billion in 2005, China's emissions for goods exported in 2005 is estimated to have been 1814.3 million tonnes of CO₂. China's imports from the 21 major countries¹⁰ were US\$370 billion and created 207.9 million tonnes of CO₂. China's imports from the rest of the world were US\$290 billion and created 258.4 million tonnes of CO₂. Overall China's emissions from net exports were therefore 1348 million tonnes of CO₂.

⁹ Australia, Austria, Brazil, Canada, China, France, Germany, India, Italy, Japan, Korea, Mexico, Netherlands, Russia, Saudi Arabia, South Africa, Spain, Sweden, Switzerland, Turkey, US.

¹⁰ The same as above except replacing China with the UK.

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