November 2009

The climate debt crisis

Why paying our dues is essential for tackling climate change

JUBILEE DEBT CAMPAIGN

World Development Movement

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About the World Development Movement

The World Development Movement (WDM) campaigns for a world without poverty and injustice. We work in solidarity with activists around the world to tackle the causes of poverty. We research and promote positive alternatives which put the rights of poor communities before the interest of big business. WDM is a democratic membership organisation of individuals and local groups.

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About Jubilee Debt Campaign

Jubilee Debt Campaign is part of a global movement working for full cancellation of unjust and unpayable poor county debts, without harmful conditions attached. We are working for a fairer international system of borrowing and lending, where debt is not an instrument of control for the rich, and further unjust debts cannot build up in the future. We are a UK coalition of national organisations and local and regional groups, as well as thousands of individuals.

You can contact Jubilee Debt Campaign on +44 (0)20 7324 4722 or sign up online at: www.jubileedebtcampaign.org.uk

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Cover image: Activists demonstrate outside the United Nations Building in Bangkok, September 30, 2009. REUTERS/Sukree Sukplang

Contents

climate debt crisis

Executive summary

In the Tagalog language, the word *utang* simultaneously connotes both 'debt' and 'credit'. In its cultural context, the word also carries with it a meaning of reciprocity; of an obligation to honour your dues and to give back what you take.

The concept isn't unique to the Philippines. In many cultures, reciprocal duties, balance and harmony are seen as essential elements for building a good society.

But while this concept is familiar to most individuals around the world, it is not reflected in historical dealings between countries, or in the global economy. Development by the world's richest economies has been based largely on a one-way practice of taking natural resources from poor countries, without proportional compensation. This includes a disproportionate use of both national resources such as fossil fuels, timber and minerals; and also includes taking a massive share of the world's common resources, notably the finite capacity for the earth's atmosphere to absorb manmade CO_2 emissions.

In fact, it is the poor who continue to pay financially for this injustice. Poor countries have been forced into taking on financial debts that not only worsen poverty, but also railroad them along a high carbon development path that benefits rich countries and companies but is fundamentally at odds with a global imperative to tackle climate change.

As we reach the end of the first decade of the new millennium, the signs become ever clearer that a world plagued by persistent social, economic and environmental injustices is one that will not sustain the human race much longer.

The Climate Debt Crisis marks a major step in efforts to draw the links between the overuse of the world's resources, particularly greenhouse gas emissions, and the unjust and economically harmful financial debt foisted upon the world's poorest countries.

The report explains the concept of 'climate debt', and explores how redressing the balance between international 'debtors' and 'creditors' is an essential prerequisite for effective global action to combat both climate change and poverty. It demonstrates why current attempts to deal with global inequalities in emissions through carbon trading and offsetting are fatally flawed, and sets out concrete proposals to finance climate debt repayments.

The Climate Debt Crisis reveals that:

- When factoring in the costs to poor countries of adapting to the impacts of climate change caused by our emissions, as well as the costs for developing countries to reduce (or 'mitigate') their own emissions, the rich world owes compensation to poor countries by a factor that far outweighs the current illegitimate debts 'owed' by developing nations.
- As an illustration of this, the UK alone owes more than $1 trillion in 'climate debt'. This debt can be paid over time, but the UK would need to commit to payments of more than $30 billion a year to repay these debts – around 1 per cent of national income.
- Despite this, current debt and the economic policy conditions forced on poor countries by institutions such as the International Monetary Fund and World Bank have locked in many southern countries to dirty investments that have been bad for people and the climate.
- The proposals being pushed by various rich countries to tackle climate change often perpetuate the unjust patterns of the past. For example, virtually all of the UK's grants for tackling climate change in poor countries are going into so-called 'Climate Investments Funds' set up within the World Bank. Money dispersed from these funds often takes the shape of large-scale project loans, access to which is usually tied to harmful economic policy conditions which preserve the control of rich countries.
- Despite the scale of the climate debt crisis, untapped mechanisms exist to enable the UK and other governments to raise the necessary resources. These include proposals for an international tax on shipping, levying charges on international financial transactions, auctions on emissions permits, stopping tax evasion and cancelling developing country debt repayments. It is estimated that a tax on aviation and shipping alone could raise up to $40 billion a year, while efforts to end tax dodging could net up to $250 billion a year.

For those who care about poverty and economic injustice, this situation creates enough of an imperative to assist the people most adversely affected by, and least responsible for, the impacts of debt and climate change to develop in more equitable and sustainable ways than the rich world has done.

But for the rich world, repaying our climate debt is not simply a matter of moral obligation or altruism. It is an essential and inescapable part of averting a climate catastrophe that imperils us all. The reason for this is simple. Developing countries won't sacrifice their right to development so that the rich world can continue living in an unsustainable way. Simply asserting our common interests in an environmental solution won't wash while the richest continue to take from the rest of the world. A global climate solution requires a just global economy.

The concept of climate debt was developed by governments and social movements in the global south. While the devastation to human lives caused by climate change can never be truly compensated for, the recent spectacular failure of the free market model presents an historic opportunity to push for an approach centred on climate debt, and establish a fair and reciprocal relationship with the majority of the world. That way we can address both poverty and climate change, and ensure a fairer, safer and more equitable world for future generations.

1. Introduction

"The existence of some communities is imperilled, while others face growing barriers to their development. Unless curbed, an impending climate catastrophe risks increasingly violent weather, collapsing food systems, mass migration and unprecedented human conflict." [1]

Statement from 242 organisations on climate debt

2009 has once again shown that climate change is already causing suffering for communities across the world.

East Africa is suffering from drought for the fifth year in a row; Kenya, Ethiopia, Somalia and Uganda are particularly affected. The rising price of food in the wake of drought has led to tens of millions of people requiring food aid, or going hungry. Hundreds of thousands of cattle have died, decimating the long-term livelihoods of pastoralists across the region.[2] The Intergovernmental Panel on Climate Change (IPCC) has predicted that hundreds of millions more people will suffer from drought across Africa as temperatures increase.[3]

But the IPCC also predicts that floods will increase across Africa; the climate will be more variable. Floods in West Africa in 2009, particularly Burkina Faso and Ghana, have forced hundreds of thousands of people out of their homes. Ouagadougou, the capital of Burkina Faso, saw its heaviest rain in 90 years.[4]

South-East Asia has suffered from typhoons and the flooding they bring. Manila, capital of the Philippines, received its highest amount of rainfall on record when typhoon Ondoy passed through in September. More than 300 people died and millions lost their homes to the floods.

The IPCC has predicted that climate change leads to typhoons becoming more intense, with stronger winds and heavier rain.[5] The IPCC further states that the Philippines is already suffering from more frequent and more intense typhoons.[6] One Filipino commented on the World Development Movement website:

> Climate change is being felt here in the Philippines and all over the world. And the most affected are the less fortunate people. Some people do not really care what they are doing, as long as they will benefit from it and earn a lot of money from it. Typhoon Ondoy left so much pain to all Filipinos; physically, mentally, emotionally, socially and financially. They lost their properties and the worst part of it, was they lost their loved ones.

Ondoy went on to cause further devastation in Vietnam. Earlier in 2009 Bangladesh and India were hit by cyclones Alia and Bijli. Alia destroyed the homes of between 100,000 and 400,000 people, along with infrastructure such as roads and irrigation systems.[7]

India had its weakest summer monsoon for forty years, with farmers in the north-west particularly badly affected by the lack of rainfall.[8] The weak monsoon was followed in September by India's worst floods in a century, particularly severe in southern states. Around 250 people were reported to have died as a result of the flooding, with 2.5 million people forced out of their homes and into emergency camps. The floods destroyed many of the crops already hit by drought.[9] The IPCC predicts that the Indian monsoon will get more variable and erratic as temperatures increase.[10]

The global north[i] has not been immune, with Australia in particular continuing to suffer from its long running drought.[11] Extreme forest fires early in 2009 near Melbourne fulfilled many of the IPCC predictions for increased fires.[12] Forest fires affect the global south too. Nepal suffered from drought as well as unusually vicious and long-lasting forest fires early in the year,[13] whilst increased wild fires in Zimbabwe have damaged food production.[14]

For over twenty years the World Development Movement and Jubilee Debt Campaign have been campaigning for economic justice. Central to our campaigns has been the call for the cancellation of unjust *financial debts*. These are debts which have impoverished countries both through taking away hard earned resources, and through giving powerful wealthy countries the leverage to force particular ways to 'develop' on the south.

i. Throughout this report we refer to global north and global south. Countries in the global north are those with the most power and wealth in the world. They have been overexploiting fossil fuels for many decades. The United Nations Framework Convention on Climate Change in 1992 divided countries into annex-I and annex-II. Annex-I countries can loosely be equated with countries from the global north, covering the US, Canada, Europe, Russia, Japan, Australia and New Zealand. Annex-II countries, roughly the global south, are all other countries; those from Latin America, Africa, the Middle East, Asia and Small Island States.

At the same time, the global north has been building up a huge *climate debt* to the global south, the effects of which are now being seen across already impoverished countries.

By using the vast majority of fossil fuels, northern countries have caused the damage now occurring in Kenya, Burkina Faso, the Philippines and India. In this report we label this 'adaptation debt': northern countries owe compensation so that those affected by climate change can adapt in order to protect their lives and livelihoods.

But the north owes another debt. If we are to prevent the worst impacts of climate change – impacts which it will not be possible to adapt to – southern countries will be unable to use fossil fuels in the same way as countries in the north have for over a hundred years. The north has used far more than its fair share of the Earth's fossil fuel reserves; we have eaten all the cake and there are only a few crumbs left. The atmosphere has no capacity to absorb further increases in greenhouse gases without triggering calamitous changes to the planet's climate, but across the world millions of people still do not have the energy needed to increase incomes, provide jobs and cut poverty.

Southern countries are fully entitled to use fossil fuels in the same way as the north has. But if this happens, there will be catastrophic increases in global temperatures. The north therefore has to provide the resources and technology for southern countries to increase energy and cut poverty, whilst moving away from using fossil fuels and towards clean energy. This is the north's 'emissions debt'.

Campaigners across the global south argue that just and effective solutions to climate change require northern countries to repay their climate debt. In June 2009 a statement written by southern campaigning organisations on climate debt was signed by 242 organisations, which together represent millions of people who stand on the front line of climate change. Quotes from this statement on climate debt introduce each section of this report.

In section two we estimate that the UK alone owes more than $1 trillion in climate debt. This debt can be paid over time, but the UK needs to commit to payments of more than $30 billion a year; around 1 per cent of national income.

The climate debt owed by the north far outweighs the unjust financial debt 'owed' by the south. But the financial debt owed by the south has been used by the north to push particular forms of 'development' on southern countries. In section three we show how debt and the economic conditions forced on countries by the International Monetary Fund (IMF) and World Bank have locked many southern countries into dirty investments; investments which have been bad for people and the climate. Section four highlights how this 'development' has been of benefit to multinational companies and northern governments.

Section five analyses the proposals to tackle climate change currently being promoted by northern countries, and shows how these continue to perpetuate the injustice of climate debt and financial debt. In section six we explore thoughts on what more just and effective solutions to climate change could be, to ensure the climate debt is repaid, and to maintain a habitable planet for all.

As temperatures increase everyone, not just the most impoverished, will be affected by rising sea-levels, changes in rainfall, heat waves, stronger storms, more disease and increased flooding. We all need effective solutions to climate change.

The only effective solutions to climate change will be just solutions. Solutions which reduce global inequalities by ensuring that everyone has the energy and livelihoods they need. Solutions which cut poverty rather than increase it. Solutions which make sure the climate remains habitable for all. As the Bolivian government has said:

> There is no viable solution to climate change that is effective without being equitable. Deep emission reductions by developed countries are a necessary condition for stabilising the Earth's climate. So too are profoundly larger transfers of technologies and financial resources than so far considered, if emissions are to be curbed in developing countries and they are also to realise their right to development and achieve their overriding priorities of poverty eradication and economic and social development. Any solution that does not ensure an equitable distribution of the Earth's limited capacity to absorb greenhouse gases, as well as the costs of mitigating and adapting to climate change, is destined to fail.

Just and effective solutions to climate change require the UK and other countries in the global north to recognise and repay our climate debt. This report sets out why this is the case, and how it could be done.

2. Climate debt

"Poor countries, communities and people have contributed least to the causes of climate change, yet are its first and worst victims. At greatest risk are women, indigenous peoples, poor people, small farmers, fisher-folk and forest communities, people relying on scarce water resources, youth and other groups susceptible to harm and health impacts.

"A wealthy minority of the world's countries, corporations and people, by contrast, are the principal cause of climate change. The developed countries representing less than one fifth of the world's population have emitted almost three quarters of all historical emissions. Their excessive historical and current emissions occupy the atmosphere and are the main cause of current and committed future warming.

"Developed countries have consumed more than their fair share of the Earth's atmospheric space.[i] On a per person basis, they are responsible for more than ten times the historical emissions of developing countries. Their per person emissions today are more than four times those of developing countries." [16]

Statement from 242 organisations on climate debt

2.1 Responsibility for climate change

Rich countries are overwhelmingly responsible for climate change. Around 70 per cent of carbon dioxide emissions from burning fossil fuels have been made by rich countries, despite the fact that they hold just 20 per cent of the world's population. The UK accounts for six per cent of emissions from fossil fuels between 1850 and 2005, yet has just one per cent of the world's population. This is a huge level of overconsumption.

Despite agreeing to tackle climate change in 1992, through the United Nations Framework Convention on Climate Change (UNFCCC), the global north has continued its addiction to fossil fuels. Rich countries, with one-fifth of the world's population, continue to account for 55 per cent of carbon dioxide emissions from burning fossil fuels, compared to 45 per cent in the global south, where four-fifths of the world live. Average per person emissions in the global north are more than four times higher than in the global south.

Northern countries therefore have the primary responsibility for tackling climate change. This responsibility was in theory accepted with the signing of the UNFCCC by all northern countries in 1992, but they have done extremely little to implement this agreement.

Any amount of human-caused climate change is dangerous. So far global temperatures have increased by an average of 0.8°C since the industrial revolution. As outlined in the introduction, these increases are already causing suffering across the world. The Global

i. To keep the global increase in temperature below levels that will bring catastrophic changes for people across the world there is a limited amount of carbon dioxide and other greenhouse gases which can be emitted into the atmosphere. This is the concept of atmospheric space.

Table 1. Contribution to global CO_2 emissions from fossil fuels[17]			
	Northern countries	**Southern countries**	***UK***
Current emissions (per cent)	55	45	*2*
Historical emissions (per cent)	70	30	*6*
Share of world population (per cent)	20	80	*1*
Current emissions per person (tonnes)	12	2.5	*10*

Humanitarian Forum estimates that 300,000 people are now dying every year from climate change due to increased disasters and disease.[18]

The impacts of climate change are becoming progressively worse as temperatures increase. The EU and UK have said that the world should aim to keep increases in global temperatures to 2°C, although the Least Developed Countries and Association of Small Island States have both said that their survival requires the increase in temperature to be limited to 1.5°C.[19]

Beyond certain temperatures tipping points occur where global warming triggers off changes that cause further warming. For instance, melting of permafrost in Russia could release millions of tonnes of methane, a powerful greenhouse gas. Estimates for the temperature increase at which many of the tipping points will be reached are around 2°C.

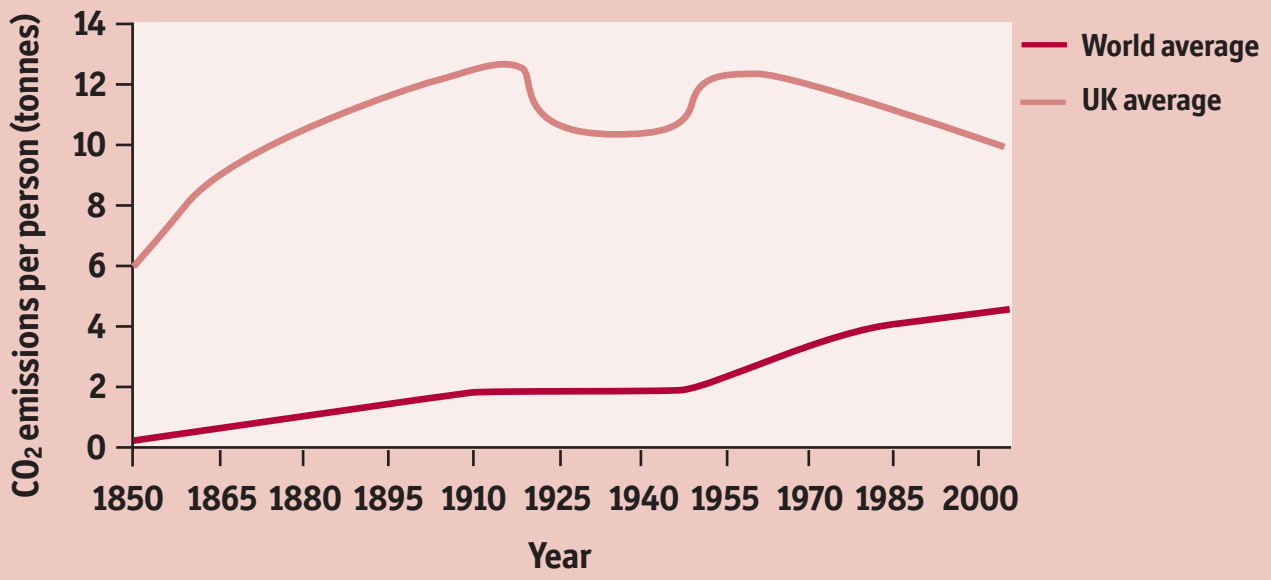
If every country in the world had consumed fossil fuels at the same rate as the UK, cumulative global carbon dioxide emissions between 1850 and 2005 would be almost four times higher than actual levels (see Graph 1 opposite).[i 20] Whilst emissions so far have not necessarily condemned the world to temperature increases of 2°C or more, if all countries had consumed at the rate of the UK, then the 2 degrees tipping point would be well passed. The UK has already used far more than its fair share of fossil fuels, and owes a huge debt to those who have consumed less. Even if the UK stopped all emissions now, its historical debt would remain. In terms of emissions, the UK is bust.

In contrast, if all countries had emitted at the same rate as developing countries, we would not now be facing the disastrous impacts of climate change.

Estimates put the UK's responsibility for climate change somewhere between four and eight per cent, depending on how far back historical emissions are calculated, and what level of carbon emissions per person are seen as not causing dangerous impacts of climate change.[22] In the sections below we base our estimates of the UK's climate debt on it currently being responsible for six per cent of climate change.

i. 4.3 trillion tonnes rather than 1.1 trillion tonnes

Graph 1. UK and world carbon dioxide emissions per person, 1850-2005[21]



"For their disproportionate contribution to the effects of climate change – requiring developing countries to adapt to rising climate impacts and damage – they have run up an 'adaptation debt' to developing countries." [23]

Statement from 242 organisations on climate debt

2.2 Adaptation debt

One way of viewing the adaptation debt owed by the UK is the amount of money needed to help countries and communities adapt to climate change so that their lives and livelihoods are not negatively impacted by climate change. In the UNFCCC, the UK along with other rich countries agreed that they would *"assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects."*[24] The UNFCCC has estimated that between $27–66 billion[i] will be needed annually by 2030 for adaptation in developing countries.[25]

However, a recent report by IPCC authors has argued that these are significant underestimates, perhaps by a factor of two to three. This is due to, for example, certain sectors or climate change impacts not being considered. One issue not considered in the original UNFCCC report was the costs of transferring water within a country from places of surplus to deficit.[26] For example, the disappearance of glaciers in the Andes means Peru is likely to need to divert water from east to west of the Andes, engineering which will cost billions of dollars by itself.[27]

i. Throughout this report we use $ to signify US$.

It is difficult to give any precise figures for adaptation debt. If we assume that $150 billion a year is needed for adaptation in the global south,[i] and that the UK is responsible for six per cent of climate change, then the UK owes around $9 billion a year to service its adaptation debt. This is a total of $360 billion between now and 2050.

Estimated UK adaptation debt: More than $9 billion a year, more than $350 billion in total

Whilst the aim of adaptation is to overcome the negative impacts of climate change, the reality is that we are already at the point where impacts cannot be fully prevented. Ultimately there is a limit to how much adaptation can take place. Bangladesh cannot adapt if it is underwater.[28] The recent report by IPCC authors on adaptation states that: *"it will probably be very inexpensive to avoid some impacts but prohibitively expensive to avoid others; and some impacts we cannot avoid even if funds were unlimited, because the technologies are not available."*[29]

Already where adaptation is being attempted, it cannot fully replace livelihoods. Albay province in the Philippines is already suffering from more intense tropical storms linked to climate change.[30] The local government is actively seeking ways of adapting, such as planting mangroves and creating new settlements further from the sea. There is even talk of moving the whole city of Legaspi – 150,000 people – several miles inland.

However, new settlements have meant longer journeys for people to find work, and do not provide the same amount of land as people's former homes. Building a whole new city would be a vast undertaking requiring huge resources for infrastructure and services. According to Professor Virgilio Perdigon from the local Aquinas University, the principle of moving out of a dangerous area is sound, but it is difficult to get right. Professor Perdigon says: *"We have measures to adapt. But we cannot just adapt. We need mitigation. We will get tired of constantly adapting more and more."*[31]

The north's responsibility for adaptation is not just about money. For instance, it is estimated that between 10 million and 200 million people will lose their homes and be forced to move by 2050 because of climate change, depending on how much the world cuts emissions and how successful measures to adapt are. Whilst many of these refugees will remain within the global south, the global north needs to welcome, allow and enable those climate refugees who need to migrate internationally because of the impacts of climate change.[32]

The IPCC has concluded:

> Although many early impacts of climate change can be effectively addressed through adaptation, the options for successful adaptation diminish and the associated costs increase with increasing climate change. ... Adaptation alone is not expected to cope with all the projected effects of climate change, and especially not over the long term as most impacts increase in magnitude ... Unmitigated climate change would, in the long term, be likely to exceed the capacity of natural, managed and human systems to adapt.[33]

Adaptation is a necessity, but it is only a sticking plaster on the suffering caused by climate change. The root causes of climate change, the use of fossil fuels and emissions of greenhouse gases, have to be tackled.

i. Based on the UNFCCC estimate being an underestimate of around a factor of three.

"For their excessive historical and current per person emissions – denying developing countries their fair share of atmospheric space – **[the global north has]** ***run up an 'emissions debt' to developing countries."*** [34]

Statement from 242 organisations on climate debt

2.3 Emissions debt

Given the potential catastrophic impacts of climate change from temperature increases of 2°C or more, and the increasing difficulty or impossibility of successfully adapting to those impacts, urgent and radical action is needed to limit the increase in global temperatures. But this must be done in a just way.

For the past 150-200 years, countries that are now rich have built their wealth and power in the global economy on the basis of using fossil fuels as the main source of energy. If the world is to prevent increases in temperature of 2°C or more, southern countries will be unable to use fossil fuels in the same way. The north's vast overconsumption of fossil fuels continues to dump enormous volumes of greenhouse gases into the air, effectively using up most of the atmosphere's capacity to absorb these gases. Now there is almost no atmospheric space left for the south, which means that their option to use fossil fuel energy for much needed development is massively restricted.

Northern countries therefore owe an emissions debt. As well as now drastically reducing emissions, they have a responsibility to provide the finance and technology to help the south meet its energy needs, without using fossil fuels. This principle was agreed in 1992 in the United Nations Framework Convention on Climate Change, when rich countries agreed to pay the *"full incremental costs"* of any measures to reduce emissions in the global south. [35]

The UN estimates that $270 billion will be needed in developing countries to meet global targets for cutting emissions.[36] However, this is based on reducing global greenhouse gas emissions by just 50 per cent on 1990 levels by 2050; far away from the real level of action needed to keep to 2°C or less. Cuts in global emissions of 80 per cent on 1990 levels by 2050 are a more science based estimate of the level of action required.[37]

Furthermore, the UN estimate assumes a business-as-usual approach: how much extra investment is needed to limit southern emissions based on what would otherwise have happened. A more ambitious approach would be to ensure that all people have adequate access to energy across the world. This may require more resources, given that current emission scenarios assume hundreds of millions of people will remain in energy poverty.

It is difficult to give any precise figure for the emissions debt. Assuming $300 billion a year is needed for cutting emissions in the global south,[i] if the UK is responsible for six per cent of climate change, this means the UK owes around $18 billion a year to service its emissions debt. This is a total of more than $700 billion between now and 2050.

Estimated UK emissions debt: More than $18 billion a year, more than $700 billion in total

"Together the sum of these debts – emissions debt and adaptation debt – constitutes their climate debt, which is part of a larger ecological, social and economic debt owed by the rich industrialised world to the poor majority." [38]

Statement from 242 organisations on climate debt

2.4 Conclusion

Climate debt cannot be fully quantified, because climate change destroys a lot more than just money. It is meaningless to talk of financial compensation either for those dying or for the friends and families of those dying because of climate change. No money can replace the destruction of villages, towns and countries and the loss of identity and relationships the destruction will bring.

However, estimates of the UK's emissions and adaptation debts above put the UK's total climate debt to the south at over $1 trillion, with annual payments needed to service this debt of more than $30 billion a year. The total debt amounts to 40 per cent of UK national income, with annual debt service payments of 1 per cent. A small amount to pay to ensure, in a just way, the survival of a habitable world for hundreds of millions of people.

i. Based on rounding up the UN figure for costs of mitigation in the south, which is almost certainly an underestimate.

3. Links between financial debt and higher emissions

"It's a tragic irony that the north has continued to power its economies based on destructive resource exploitation and depletion in the south, then used the proceeds of that wealth to shackle the south in a never ending cycle of financial debt and brazenly refuses to admit or recognise the ecological debt. Ecological debt is the next frontier of social economic justice and economic governance campaigning that will drive the impetus for reparations and repudiation across the global political economy and international relations architecture." [39]

Wahu Kaara, Kenya Debt Relief Network

3.1 The financial debt crisis

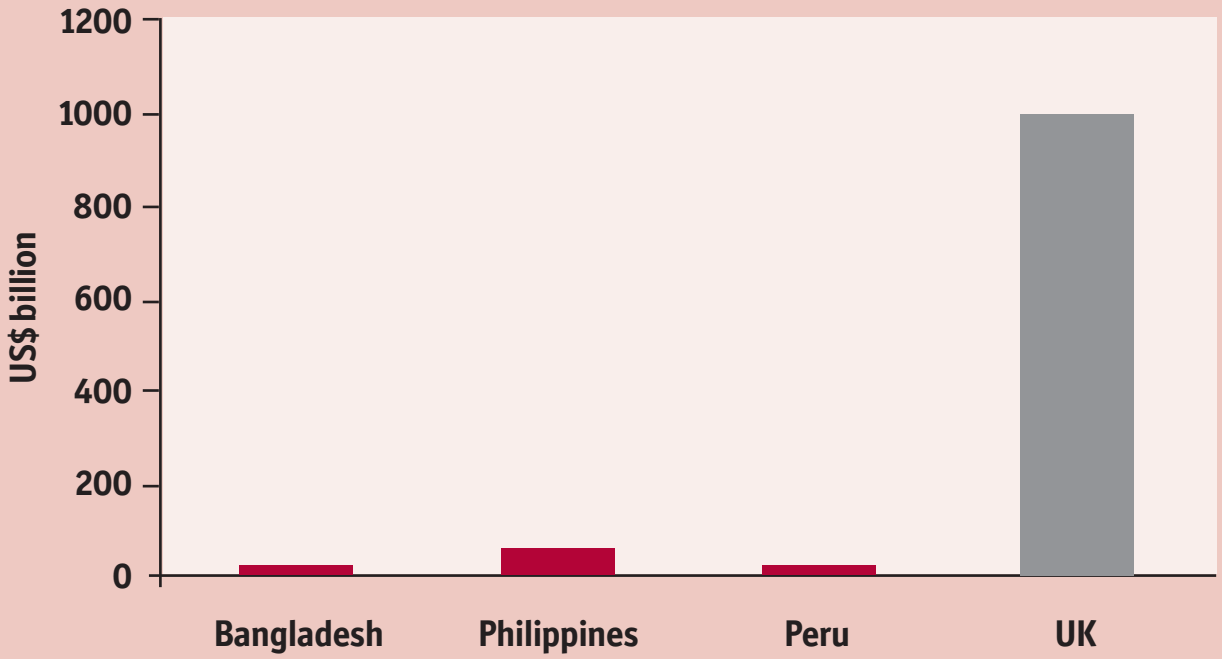
At the same time as the rich world has accumulated an enormous climate debt to poorer countries, those same poor countries still pay out five times more in debt repayments than they receive in aid. In this section we outline how the use of financial debt to restructure poor country economies in line with IMF and World Bank conditions has locked countries in to a high carbon model of development.

After the Second World War, banks and official lenders sought to lend money to the governments of newly independent countries, seeing them as a safe investment. As the Cold War deepened, governments from both Eastern and Western blocs lent increasingly recklessly as a means of gaining political influence. Lending increased in the 1970s due to oil price hikes and exchange rate changes. Money was cheap and lent on to impoverished countries without regard for what it was being spent on and whether it could be repaid.

In the late 1970s and early 1980s, with rising interest rates, deflation and falling commodity prices, poor countries suddenly experienced rapidly rising debt service levels but were earning less money to be able to pay those debts. In 1982, Mexico effectively threatened to default on its debts. The world woke up to the scale of the global debt crisis.

Efforts since the 1980s to tackle the problems faced by indebted poor countries have focused on programmes by the IMF and World Bank to 'restructure' developing economies. For the past 20-30 years, the priority has remained the imposition of a series of economic policy conditions such as liberalising markets and shrinking the public sector. There has been a particular focus on increasing exports to earn dollars with which to service debts.

Graph 2. **Financial debts of Bangladesh, Philippines and Peru contrasted with estimated climate debt of the UK[40]**



Sometimes these conditions have proved harmful in themselves. But they always undermine local democracy by making countries accountable to international financial institutions, rather than to their own citizens. The schemes have also failed to consider the lenders' responsibility for debts, thus ignoring debts which should be cancelled because they were incurred through irresponsible lending, or given to unelected and unaccountable governments.

The debts of developing countries have risen steeply through the past decade, and now stand at well above $3 trillion.[41] The amount of debt in itself largely reflects the growth of many middle income countries' economies, meaning they can absorb more debts. However this is not the whole story: the poorest 43 countries owed around $223 billion in 2007, repaying some $12.5 billion in that year alone. In the absence of adequate compensation from rich countries, climate change will further increase financial debts. For example the Philippines is borrowing more money to help deal with and recover from the impacts of Typhoon Ondoy (see section one).[42]

Many poor countries' debts remain deeply unsustainable. There are now grave fears that the global economic downturn will lead many more poor countries into a renewed debt crisis, as their export markets collapse and sources of public and private finance dry up.

The financial crisis and recession have led to the IMF and World Bank being given a renewed role by northern countries. With this increased power, the two international financial institutions continue to push the same free market economic conditions. A recent report from the European Network on Debt and Development shows that IMF and World Bank programmes in low-income countries during the financial crisis and global recession have continued to force cuts in government spending, and liberalisation, whilst ensuring that financial debts continue to be paid.[43]

The weakening of governments and increased power of multinational companies promoted by the IMF and World Bank present a fundamental problem for southern countries in tackling climate change. Below we consider how the

need to earn foreign exchange to service financial debts, and the free market conditions imposed by the IMF and World Bank, have led to greater dependence on extractive industries; intensification of damaging farming practices; increased deforestation; and less efficient, but more damaging, power sectors.

None of this is to suggest that southern countries should not be 'allowed' to use fossil fuels. Rather, debt and economic conditions have actually led to forms of 'dirty development' which have been bad for local people, as well as for the climate.

Both financial debt and climate debt are hurting the poor. Given the dual responsibility of the rich world for these crises, we need to radically reshape our perception of who is really in debt to whom.

3.2 More resource extraction

Investment in the extractives industry (mining for minerals, coal, oil and gas) has often been promoted as a major strategy for tackling poverty. Economic policies focused on the export of extractable resources have been widely encouraged in poor countries by lenders who believe it is the best way of promoting growth. International financial institutions have often required adherence to these policies as part of their wider packages of loan and debt relief conditions, in order to increase the levels of hard currency with which countries can repay their debts. The strategy of promoting extractives is often portrayed as a 'win-win' situation by lenders, as it also helps northern countries to satisfy demand at home, particularly at a time when the governments of these countries are anxious about resource scarcity.

However the links between fossil fuel extraction and climate change are indisputable. Fossil fuels are the most important source of the greenhouse gases which cause climate change. Yet northern countries continue to subsidise fossil fuel extraction through, for example, their export credit agencies and loans and guarantees from international financial institutions.

At the same time, these resources often lead to poverty, debt, corruption and misery for the countries concerned. The reckless lending such extractive resources can attract from abroad overwhelmingly serves the interests of companies and wealthy elites and often leads to huge levels of unpayable and unjust debt, the loss of economic sovereignty, and corrupt and unaccountable governance.

However, extractive industries do benefit northern governments and corporations. A study in 2004 found that 82 per cent of the World Bank's oil extraction projects are for export rather than relieving energy poverty within the country concerned. Furthermore, almost all World Bank projects to finance extraction of gas, oil and coal have benefited northern fossil fuel companies.[44] Securing access to resources clearly remains a key priority of northern governments, heavily influencing their support for extractives projects in the global south.

Developing countries rich in natural resources have in many cases been lured into taking on huge debts. Governments of poor countries expect large levels of future income from their extractive industries, so they often start to accumulate debts on the basis that they will have plenty of revenues in the future with which to repay them. Based on this 'collateral', lenders are often more than happy to lend large sums, secure in the knowledge they will be repaid handsomely in time. By using their natural resources to leverage more lending, countries have access to more expensive private sources of finance, which ultimately translates into larger, more costly debts.

Once a country has high levels of debt, it needs to continue to earn enough hard currency to service that debt. In resource-rich countries, this usually means depending more and more on resource extraction. As well as setting conditions to their lending, the World Bank and IMF give 'policy advice'. For example the World Bank seeks *"to facilitate the extractive industries' contribution to poverty alleviation and economic growth,"*[45] and has been involved in 'reforming' the governance of extractives sectors in more than

100 developing countries.[46] Governments may well feel obliged to follow the advice of the Bank and Fund given their central role in providing and leveraging development finance. But in the long run this policy path increases countries' dependence on external debt, through national and institutional lenders and international banks.

For example, the Republic of Congo's economy is heavily dependent on oil, which accounts for three-quarters of all government revenue.[47] Since the 1980s, banks and oil companies have been financing oil extraction. With the sharp decline in oil prices in the early 1980s, the Republic of Congo could no longer service its debts. President Sassou Nguesso approached the oil companies in order to obtain an advance in the mid-1980s. Agreements were badly negotiated, meaning that companies could guarantee massive profits, and at the end of 1987, the Republic of Congo was the most indebted country in the world as a percentage of GDP. By 1990, oil revenues had already been mortgaged up until 1994.

As the Republic of Congo's debts ballooned, it has sought further oil-backed loans. External debt now stands at $5.2 billion, mostly owed to Western governments and multilateral institutions such as the World Bank. There has also been widespread corruption, with a wealthy local elite making huge amounts of money while ordinary Congolese remain in poverty: life expectancy is 54 years[48] and the poorest 20 per cent of the population share just 5 per cent of national income.[49]

Ecuador and oil

The IMF and World Bank have pushed Ecuador into using its oil resources to service its debts. The economy of the South American country has therefore become increasingly reliant on oil revenues.

In the early 2000s, Ecuador constructed a national oil pipeline touted as an economic panacea for the country. The privately financed, heavy crude pipeline was constructed to relieve the country's transport bottleneck. It was intended to double Ecuador's oil production capacity from 400,000 to 850,000 barrels per day. As a condition of IMF lending, 70 per cent of the revenues were earmarked for debt servicing, while only 10 per cent would be used for social spending.[50]

The allocation of 10 per cent for social spending became a key sticking point in Ecuador's negotiations over a new loan with the IMF in 2003. The IMF pushed for an even greater percentage of revenues to be spent on servicing debts.[51]

In 2005, then finance minister Rafael Correa moved to restructure the oil stabilisation fund in order to channel a greater proportion of oil revenues into social sector programmes. This time both the IMF and World Bank objected, and the Bank first delayed and then ultimately cancelled an already approved loan to Ecuador.[52]

There is more oil available to be extracted in Ecuador. The region of Yasuní is a tropical rainforest home to indigenous peoples, but sits above around 500 million barrels of oil. In 2007, now President Correa offered to keep this oil in the ground, in return for the northern countries paying compensation for the loss of revenue. Accepting the Ecuadorian offer would be a concrete example of rich countries helping to pay their climate debt.

Studies have shown a positive correlation between a large extractives sector and the size of a country's debt, in particular in relation to oil. Research by Oil Change International[53] has demonstrated that, as oil wealth increases, so does a country's debt burden. It found that doubling a country's annual production of crude oil was predicted to increase the size of its external debt by 43.2 per cent of GDP.[54] While large debts may be serviceable during the good times, if the prices of natural resources begin to fall, a government has less money with which to pay back its relatively more expensive debt.

Many oil-rich countries saw a rapid expansion of their debt burdens during the 1970s oil boom. Then, when oil prices fell back in the 1980s, bankers stopped lending to them and many of them fell into arrears, triggering penalty interest charges that made their debts grow even more. This has led to a vicious cycle where, in order to earn hard currency to service ever increasing debts, countries have to depend more on their extractives industries even where these contributed to their debt crisis in the first place. This vicious circle helps to explain why some of the countries richest in natural resources are actually the poorest.

For example, highly oil-dependent Nigeria was one of those countries that saw its debt burdens hugely increase during the 1970s oil boom. The subsequent fall in prices in the 1980s left Nigeria unable to service its debts, triggering penalty interest charges of staggering proportions.

Nigeria borrowed $13.5 billion from Paris Club creditors (a group of nineteen of the world's wealthy countries) between 1965 and 2003. However, it paid back some $45 billion because of penalties and interest accrued.[55] With half of its debt made up of interest on arrears and penalties, in 2005 Nigeria still had $30 billion to repay. A debt relief deal was agreed with the Paris Club, where $18 billion was cancelled, but Nigeria has to repay the remaining $12 billion. The Paris Club and other creditors failed to acknowledge their role in creating unsustainable and unjust debts. There is little to prevent such a build-up reoccurring.

3.3 More forests cut down

Cutting and burning forests and peat land releases carbon from vegetation and soils, increasing the concentration of carbon dioxide in the atmosphere. The IPCC estimates that emissions from land use change are between 5 and 25 per cent of carbon dioxide emissions every year, although there is large uncertainty over these figures.[56]

The main pressures for deforestation and peat land destruction are to log timber for export, and to expand plantations of products like palm oil for export. Both of these have been pushed by the IMF and World Bank. Jubilee Australia has shown how this has particularly been the case for Indonesia.[57]

Indonesia has the world's third largest area of tropical forest and around 70 per cent of carbon dioxide emissions from within its borders are estimated to come from deforestation. The boom in deforestation began under the regime of corrupt, western-backed President Suharto (1967-1998), encouraged by large scale foreign lending that required big increases in exports to buy dollars to service the debts. Suharto liberalised investment regulations, allowing foreign companies to become key players in the destruction of forests and export of timber and profits.[58]

In 1997 Indonesia was devastated by the Asian Financial Crisis. Currency speculators had ploughed large amounts of money into countries such as Korea, Thailand and Indonesia fuelling a boom. In 1997, market sentiment changed and currency speculators rapidly sold their currency holdings in East Asia, causing currencies to collapse.[59] Economies followed with them; Indonesia's economy shrank by 13 per cent in 1998.[60]

The IMF told the Indonesian government it had to implement a number of economic policies as a condition of receiving money in a 'rescue package'. One condition was cuts in government spending, which stands in stark contrast to the increases in government spending by northern countries in response to the financial crisis and recession of 2008/09. A consequence of these cuts was a reduction in environmental protection measures, leaving forest resources vulnerable to private operators.[61]

A further condition imposed by the IMF was a reduction in export taxes on "logs, sawn timber, rattan and minerals ... to a maximum of 10 per cent" with "all types of export restrictions" to end within three years. The IMF also set a condition that "restrictions on foreign investment in palm oil plantations" be removed.[62]

The ending of restrictions on log exports led to a rapid decline in domestic supply of timber, exacerbating illegal logging. Meanwhile, the removal of restrictions on investment in palm oil resulted in a rapid spread of palm oil plantations, causing rampant deforestation and destruction of peat land.[63] Following the Asian Financial Crisis, palm oil exports rapidly increased, rising from around 0.3 per cent of GDP early in the 1990s, to one per cent in 2000 and two per cent by 2008.[64]

Expansion of palm oil plantations continued through the 2000s partly funded by the International Finance Corporation, the private-sector arm of the World Bank. The Forest People's Programme has shown how IFC loans to one company supported illegal use of fire to clear forests and the seizure of lands belonging to indigenous peoples.[65] An internal audit has found that the World Bank ignored its own environmental and social protection standards, saying:

> For more than twenty years, IFC had information at its disposal on significant governance as well as environmental and social risks inherent in the Indonesian oil palm sector. Despite awareness of the significant issues facing it, IFC did not develop a strategy for engaging in the oil palm sector. In the absence of a tailored strategy, deal making prevailed.[66]

Indonesia is not the only country where IMF and World Bank conditions have increased deforestation. In Papua New Guinea it is estimated that forest cover fell by 4 per cent in the 1990s.[67] The IMF and World Bank again encouraged logging through conditions in 1998 reducing the tax on log exports from 33 per cent to 0.5 per cent, with further tax cuts on other products. Companies took advantage of the incentives and increased rates of logging.[68]

3.4 More industrial and export-orientated agriculture

Over the last 30 years, World Bank and IMF policies have put pressure on developing country governments to support the production of cash crops for export, often produced using industrial farming methods, at the expense of small scale production for domestic consumption.[69]

The strategy of growing cash crops for export has had an unconvincing track record in reducing rural poverty. For example, an estimated 43 per cent of the rural population of Thailand now live below the poverty line despite 65 per cent growth in agricultural exports between 1985 and 1995. In Bolivia, after a period of spectacular agricultural export growth, 95 per cent of the rural population still earn less than a dollar a day.[70] Even the World Bank admitted in 2005 that a *"development strategy based on agricultural commodity exports is likely to be impoverishing in the current policy environment"*.[71]

However, an analysis of the World Bank and IMF's response to recent food and fuel crises found that *"the problematic agricultural model promoted by the Bank and others has not been reconsidered"* and that the same privatisation and liberalisation policies continue to be prescribed.[72] The authoritative International Assessment of Agricultural Knowledge, Science and Technology for Development (IAASTD), endorsed by 57 countries, including the UK, describes the World Bank's approach as *"short term"*.[73]

As well as the failure of these policies to further development, there is also evidence that they have made considerable contributions to climate change.

Industrial agriculture is a major contributor to climate change through the energy intensive production of chemical fertilisers and the use of fossil fuels in farm machinery. In Europe, artificial fertiliser production accounts for 40 per cent of the energy used in farming. In the US, fertiliser production and operation of farm machinery account for 50 per cent of the energy used in agriculture.[74]

Industrial farming methods also disrupt natural soil processes which allow carbon to be stored in the soil. Land use changes to accommodate all stages of the industrial food system, from monoculture production areas and processing plants to food hypermarkets, reduce the amount of carbon stored in land.[75]

The initial adoption of industrial agricultural methods locks farmers into this type of production. With depleted soil, and reduction of biodiversity through the use of pesticides, it becomes difficult for farmers to revert back to more climate-friendly farming.

Rising agricultural exports are also contributing to climate change through increased greenhouse gas emissions from long distance transport. As the IAASTD states: *"increased international trade in agricultural commodities has often led to over-exploitation of natural resources, and increased energy use and greenhouse gas emissions"*.[76]

The IAASTD found that *"emphasis on cash crop production for export has encouraged transportation networks linking rural areas direct to ports but neglected internal connections such as local market feeder roads that would benefit small scale farmers producing for local and regional markets"*.[77] Farmers have been locked in to a higher-carbon food system because of a bias towards export-oriented agriculture and underinvestment in production for local and regional markets.

In 1986 Tanzania signed a structural adjustment agreement with the IMF which required the government to support large-scale export-oriented agriculture. Between 1980 and 1993, a quarter of the nation's forests were lost, at a rate of 400,000 hectares per year, with almost half of this loss due to the conversion of land for the production of export crops. In the district of Simanjiro over 50,000 hectares of land were cleared to plant beans, which are produced on 80 large commercial farms mainly for export to the Netherlands.[78]

World Bank policies have also encouraged the expansion of industrial livestock production. The livestock sector is a large contributor to climate change,[79] generating an estimated 18 per cent of global greenhouse emissions whilst producing an inefficient source of protein consumed primarily in developed countries. Conversion of forest and grassland to grazing or feed production land is estimated to release 2.4 billion tonnes of carbon dioxide a year, equivalent to around 6 per cent of global greenhouse gas emissions,[80] while feed production results in the greenhouse gas emissions common to all industrial arable production. Processing of feed crops is also energy intensive.[81] Meanwhile, methane emissions from livestock contribute around 6 per cent of global greenhouse gas emissions.[82]

According to World Bank former environmental director Robert Goodland, the International Financial Corporation (part of the World Bank) has contributed over $700 million to damaging livestock projects in South America, Asia and Eastern Europe.[83] In Brazil, Bertin Ltd, one of the country's leading beef and leather producers, was lent $90million to fund the expansion of the Bertin Amazon Cattle Ranching project, which is recognised as posing a risk of deforestation in the Amazon. The IFC funding enabled the project to secure $250 million in further loans from the Inter-American Development Bank.[84] In Bolivia, plantations of soy, which is used for feed, have expanded partly due to World Bank funding, resulting in deforestation.[85]

3.5 More dirty energy

It is estimated that 1.6 billion people have no access to electricity, and 2.4 million people rely on traditional biomass for cooking and heating. Four out of five of those without electricity live in rural areas of South Asia and sub-Saharan Africa.[86] The UNDP says that: *"Energy is central to sustainable development and poverty reduction efforts. It affects all aspects of development – social, economic, and environmental – including livelihoods, access to water, agricultural productivity, health, population levels, education, and gender-related issues."*[87]

People using traditional energy sources such as kerosene and diesel can pay more than those using renewable electricity[88] and traditional biomass sources of fuel can have negative health impacts from smoke inhalation.[89]

Privatisation of energy services has been a consistent demand of the IMF and World Bank across the global south. A 2005 review of Poverty Reduction Strategy Papers (PRSPs) (shown to be heavily influenced by the IMF and World Bank) found that out of 42 countries, 14[i] specifically focussed on electricity privatisation.[90] Given that many of the 42 countries would have already privatised electricity in the 1990s under World Bank programmes, and that many countries mentioned general privatisation programmes in their PRSPs without mentioning specific sectors, this is a high proportion.

Lack of access to electricity

Privatisation of electricity services has continually failed to improve access to, and affordability of, electricity for the poor. Even the World Bank admits that increased private sector involvement has not delivered significant investment in new infrastructure.[91] At the same time, electricity privatisation has brought with it problems of corruption, inefficiency and overpricing both in generation and distribution.[92] Privatisation has not tended to increase competition, with the creation of privately owned monopolies the favoured model of the Bank.

In contrast, the development of electricity systems across the north, and much of the south, has been done using public sector electricity companies.[93] In the UK, the national grid was developed by the government from the 1930s to broaden access to electricity beyond small private systems owned and run for those with financial resources.

Choosing carbon

Whilst privatisation has often had limited success in increasing access to energy, this may have helped prevent higher emissions. However, there are ways in which privatisation and liberalisation have prevented, or will hold back the future emergence of low carbon energy systems.

Private companies are likely to favour technologies which promote short-term profits, rather than investing in technologies which will be immune from potential increases in fossil fuel prices in the future. Given the past history of countries in the south suffering from rapid increases in the price of fossil fuels, it is in their own long-term interests, regardless of climate change, to ensure energy security through a lower reliance on fossil fuels. The rise in oil prices in the 1970s helped to trigger the debt crisis. In recent years, countries across the global south have suffered from large increases in the price of gas, oil and coal.

In the late 1990s Nicaragua had to privatise its electricity sector as a condition of receiving debt relief from the IMF and World Bank.[94] As part of the privatisation, Spanish multinational Union Fenosa took over electricity distribution, creating a private monopoly. The privatisation has widely been seen as a failure, with increased power cuts, no extension of electricity coverage, and increases in the average bill of between 100 and 400 per cent.[95] Gonzalo Salgado, from the Nicaraguan National Consumer Defence Network, says:

> We were told that with privatisation energy would become more efficient, viable, cheaper and accessible for all. But in Nicaragua, none of this has resulted.[96]

Furthermore, privatisation has focussed investment on oil power plants, rather than viable alternatives to fossil fuels such as hydro-power and geothermal. Since the mid-1990s, the proportion of Nicaragua's electricity coming from oil has increased from around 55 per cent to over 70 per cent. Electricity from renewables, primarily hydro, geothermal and wind, has fallen from over 40 per cent to less than 30 per cent.[97] Subsequently, rising oil prices in recent years have increased the costs of generating electricity in the country.

In contrast, Nicaragua's neighbour Costa Rica has maintained a public, not-for-profit electricity system, which according to Christian Aid has allowed it to *"remain autonomous from short-term profit motives and keep a long-term, sustainable strategy intact"*.[98] Costa Rica now gets 94 per cent of its electricity from renewable sources, with hydro contributing 76 per cent, geothermal 14

i. Albania, Bosnia and Herzegovina, Burkina Faso, Cameroon, Djibouti, Gambia, Kyrgyzstan, Malawi, Mali, Nicaragua, Pakistan, Serbia and Montenegro, Uganda, Zambia

per cent and wind 3 per cent.[99] There has been far less intervention by the IMF and World Bank in Costa Rica, which managed to avoid being on an IMF programme between 1995 and 2009.

Private companies may also lock countries in to high carbon infrastructure. A key form of privatisation pushed by the World Bank has been take-or-pay contracts which set a contract that the government will guarantee a price to buy electricity from the producer. Even if the market or state electricity distributor do not meet this price, the government has to pay the company. Similarly, if the electricity is not wanted, the public still has to pay for it, whether through a state owned company or the government.[100]

Joseph Stiglitz has argued:

> The IMF and World Bank encouraged many countries to sign contracts for the construction of power plants that transferred all the risk of demand volatility to themselves; in these take-or-pay contracts, the government would guarantee to buy whatever electricity was produced, whether or not there was a demand for it.[101]

As well as removing the supposed benefits of privatisation, such as competition and passing risk on to companies, take-or-pay contracts lock countries in to producing high carbon electricity for long periods of time. Once a take-or-pay contract has been signed, there is no point in developing alternatives to fossil fuels, as the government is responsible for paying the bill whether or not anyone actually wants the electricity the fossil fuels generate.

In Kenya, there have been three take-or-pay contracts for oil power stations with foreign generating companies.[i] An audit report in 2004 revealed that the price received by the foreign companies was far higher under the take-or-pay contracts than that paid to the Kenyan national power generating company, leading to the three companies earning $235 million in profit. In 2004 the Kenyan government decided to phase out contracts with foreign power generators because of the high prices.[102]

No subsidies, no alternatives

The World Bank's push for privatisation often goes in hand with achieving 'full cost recovery', eliminating subsidies for consumers. Given the level of income poverty in many southern countries, the removal of subsidies hinders the expansion of electricity coverage, and can cause energy to become unaffordable for some. As well as being needed to help make energy affordable, subsidies are also needed to develop renewable sources of electricity. Full cost recovery, and bans on subsidies, prevent countries from providing the government support needed to diversify electricity supply with investment in renewables.

The focus on the free market and against subsidies appears to have hindered the development of solar photovoltaic electricity (PV) in Africa. The Global Environmental Facility[ii] has provided over $100 million in concessional loans to develop PV in Africa. However these loans have been for 'capacity building', whilst direct subsidies have been banned on the grounds that they would interfere with the market. One energy consultant based in Kenya blames this ban on subsidies as being the key reason for the lack of development of PV in Africa:

> The **most important single reason** for PV's lack of progress in Africa is the lack of incentives for companies and consumers. The phenomenal growth of PV in Japan, Germany and elsewhere is almost **entirely** due to incentive support and policy drivers that come from governments.[103]
>
> [Emphasis in original]

Alternative access

Increased use of renewables could help increase access to electricity for poor communities. The vast majority of those lacking access to a national grid are from rural areas of India and sub-Saharan Africa. National grids based on large fossil fuel power plants are unlikely to be able to reach the rural poor. Many rural areas are not connected to a grid and are unlikely to be in the foreseeable future due to cost, practicality, environment and

i. One was a consortium of a UK and a US company with the International Finance Corporation, one a Spanish company, and one Malaysian.

ii. Moved out of the World Bank in 1994 but still administered by the Bank.

low power demand.[104] Furthermore, a UN report argues that given the lack of existing energy infrastructure in developing countries, it *"may be cheaper and easier to switch to a renewable pathway than to retool existing infrastructure"*.[105]

A more cost-effective and cleaner way to provide rural electricity is through small renewable projects, such as solar, wind and hydro. However, privatised electricity systems focused on corporate profits and providing electricity to companies and rich urban consumers are unlikely to make investments in such rural networks.[106] Christian Aid comments that:

> There appears a very real danger that focus on large-scale power generation and on fully commercial, cost-recovery models for operating the sector [means] the kinds of technologies that might bring power to poor, rural communities rapidly are being crowded out. In both poverty and climate change terms, this appears to be a lose-lose scenario.[107]

There is evidence that in the north, countries which have heavily liberalised electricity services have tended to see less investment in lower-carbon alternatives to gas and coal.[108] In a liberalised energy market, governments cannot demand that energy generators invest in certain technologies, as they could for example under a more regulated or nationalised system. The UK's Committee on Climate Change has said that the UK's current liberalised electricity system could prevent the required cuts in emissions from UK electricity generation. Consequently, greater government intervention in the electricity market is needed.[109]

Furthermore, companies have an incentive to sell as much electricity as possible in order to increase profits, rather than actively seek to reduce demand for electricity. One researcher concludes:

> All the evidence suggests if companies are left to choose, they will buy fossil fuel plant and they are highly unlikely to choose low carbon sources such as renewables and nuclear power. With a field of competing retailers, companies will make more money the more power they sell, and implementing energy efficiency measures with a consumer who could opt to switch retailer at short notice would make no commercial sense. So, meeting environmental objectives can only be at the expense of compromising competition.[110]

3.6 More guaranteed loans for high-carbon projects

Export credits are guarantees given by governments to the exports of private companies, effectively transferring risk from private companies to taxpayers. In the UK, the Export Credit Guarantee Department (ECGD) insures British companies exporting goods to another country. If the company is not paid, the British company claims payment from the UK government. The UK then adds this amount to the financial debt owed by the country the goods were exported too. Typically export credits are responsible for 30-40 per cent of the debt owed by southern governments to northern governments.[111] In the UK 95 per cent of outstanding developing country debt is owed to the ECGD.[112]

Many of the credits are given to companies with close strategic links to the state. The UK ECGD has long been known primarily for its support of arms exports, many of which are treated as 'commercially confidential' and so do not appear in official reports of credits given. Sectors closely linked to fossil fuels also receive large backing from the ECGD. In recent years, for the projects for which information is publicly available, around three-quarters of ECGD credits to companies exporting to southern countries have been for exports in fossil fuel sectors (See table 2 below).

Table 2.
UK ECGD publicly declared projects to southern countries supporting fossil fuel projects, 2002-2007[113]

Year	ECGD credits (per cent)
2006/07	73
2005/06	76
2004/05	83
2003/04	89
2002/03	73

The aim of export credit agencies is to support the exports of domestic companies. Despite the fact they are backed by public funds, export credits have a poor record of taking into account environmental and social impacts of the projects they support.[114] Many export credit backed projects have also been linked to corruption; bribes have earned companies generous contracts and enabled white elephant projects to go ahead, whilst causing taxpayers and the poor to lose out.

For example, in the mid-1990s, a consortium of US energy companies entered a joint venture with a local Indonesian company (closely linked to President Suharto) to build a set of coal power plants, named Paiton. The plants were backed with export credits from both the US and Germany. The Indonesian government signed take-or-pay contracts with electricity to be sold at a rate one-third higher than comparable tariffs at the time.

There have been widespread allegations of corruption and the Wall Street Journal labelled the first part of the Paiton plant as *"one of the most expensive power deals of the decade, anywhere"*.[115] At the same time as the contracts for the large coal power plants were being signed, Indonesian power consultants recommended smaller alternatives such as geothermal and small gas power plants, claiming they would be both more economic and less environmentally destructive.[116]

The take-or-pay contracts stated that Paiton would be paid in dollars, rather than rupiahs. With the Asian Financial Crisis, the value of the rupiah against the dollar collapsed, and demand for power fell, leaving the Indonesian government saddled with an exorbitant bill to pay for electricity, some of which was not needed.[117]

In 1999 the State Electricity Company took Paiton to court to nullify the contract. In response, officials from US and German export credit agencies went to Jakarta to warn the government that failure to honour the contracts would *"harm new foreign investment and delay Indonesia's economic recovery"*.[118] Faced with international pressure from donors, the case against Paiton was dropped and the President of the State Electricity Company resigned.[119]

In 1997 a consortium including British company National Power built the Hubco oil power station in Pakistan, backed by export credits from France, Italy and Japan. In 1998 Pakistan's Accountability Bureau claimed that the cost of the power station was $400 million higher than it should have been. Corruption charges, always denied by Hubco, were dropped in 1999 after Pakistan came under pressure from export credit agencies and donors such as the World Bank and UK government.[120]

These examples indicate that export credit agencies have a troubling record of supporting exports of fossil fuel intensive infrastructure. In the cases outlined above, northern multinational companies benefited from export credit backed fossil fuel projects, whilst taxpayers, the general public and the climate lost out. Export credits helped contracts to be awarded at exorbitant cost, which resulted in increases in the financial debt of southern countries, whilst also increasing their dependence on fossil fuels.

4. Injustice of responses from the global north

"Developed countries, however, intend to write-off rather than honour their debt. In their submissions to the climate negotiations they seek to pass on substantial adaptation costs to developing countries; evading rather than honouring their adaptation debt. And they seek to continue their high per person emissions; deepening rather than repaying their emissions debt, consuming additional atmospheric space, and crowding the world's poor majority into a small and shrinking remainder." [121]

Statement from 242 organisations on climate debt

Both within and outside the international negotiations on climate change, northern countries are pushing various 'solutions' to climate change. However, these perpetuate the unjust patterns of the past: continued overconsumption in the north, rules to benefit multinational companies rather than people, northern control over resources to maintain their wealth and power, and continuing to push southern countries further into financial debt.

4.1 Scale of emission reductions proposed

No major northern country has significantly cut its emissions since 1990, despite signing the UNFCCC in 1992 and Kyoto protocol in 1997. And in their current policies and proposals, northern countries intend to continue their high emissions for many years to come (see Table 3 below).

Table 3. Current northern targets for emission reductions, and policies that will help determine emissions in the future

Country/Region	Current target for emissions in 2020, on 1990 levels	Notable policies determining future emissions
US	+/- 0	Proposals for over 100 new coal power stations.
EU	- 10[i]	Proposals for up to 70 new coal power stations across the EU. EU subsidy to support new coal plants.
Japan	- 15?[ii]	Fourteen coal power plants have been built or expanded since 2000.
Canada	+ 2	Increased exploitation of tar sands.

i. The EU has formally adopted a target to cut emissions by 20 per cent on 1990 levels by 2020. However, half of this or more can be done through buying carbon offsets rather than actually cutting emissions in Europe.

ii. Newly elected Prime Minister Yukio Hatoyama announced a target to reduce Japanese emissions by 25 per cent on 1990 levels by 2020 in September 2009. However, this allows for the target to be met partly through offsets, and is dependent on other 'major countries' agreeing to 'ambitious targets'.

The failure of the north to offer any meaningful moves towards ending their addiction to fossil fuels blocks any chance of a just and effective solution to climate change. Furthermore, even if northern countries did have more ambitious emission reduction targets, they would be contradicted by policies being implemented now which will determine emissions over the next decade. For instance, the UK government supports new runways, such as at Heathrow airport, and is considering allowing new coal power stations to be built.

4.2 Carbon trading

Carbon trading is being promoted by northern governments as *the* solution to climate change. It is claimed that carbon trading can both cut emissions in the north, and provide resources to help southern countries to reduce emissions. The current existing carbon trading schemes are based around the Clean Development Mechanism (CDM) and EU Emissions Trading Scheme (ETS). Australia and the US also now have bills in their respective legislatures to introduce carbon trading schemes.

The EU ETS sets a cap for emissions from power stations and factories. In theory, permits to pollute are created which can be traded between companies. Emissions cannot be higher than the number of permits, and if the cap is tight enough, this forces emissions to be cut somewhere. In reality, the EU ETS has so far set very weak caps leading to little if any reduction in emissions.

Furthermore, rather than reducing emissions in Europe, caps can be met by buying CDM credits from companies in the global south. This system works on the same principle as personal carbon offsetting, but on a much bigger scale. Rather than reducing their own emissions, companies in Europe pay for companies in the global south to supposedly reduce their emissions. This use of offsetting to meet EU and UK targets for reducing emissions is currently planned to continue on a large scale. In December 2008, the EU agreed that more than half of the reductions in ETS emissions from 2013 to 2020 could be met through buying CDM credits, rather than reducing use of fossil fuels in Europe.[122]

Carbon trading is beset by a number of problems. Firstly, it double counts emission reductions in the north and south. As explained in section one, northern countries have to cut their own emissions to stop increasing their debt, and also provide resources to assist southern countries to develop in a low carbon way. But rich countries are counting offsetting as both contributing to their own targets for reducing emissions, and for meeting their obligation to provide money to southern countries for low carbon development. This is unjust. Unless northern countries make radical cuts in their own emissions, there is no chance catastrophic increases in global temperature will be prevented.

Secondly, a large majority of CDM credits have clearly not resulted in any reduction in emissions in the south. A report by International Rivers Network found that three out of four CDM projects were already up and running by the time they were approved to generate CDM credits, strongly suggesting that the projects would all have happened anyway.[123]

David Victor from the Californian University concludes from his research that: *"It looks like between one and two thirds of all the total CDM offsets do not represent actual emission cuts."* [124] One European Commission official has publicly admitted that at least 40 per cent of CDM projects are not additional to what would otherwise have happened.[125]

Thirdly, the trading of carbon credits happens between multinational companies with no accountability to local communities. Across the south communities have suffered due to projects funded by the CDM.

For example, one of the main generators of carbon credits has been projects to cut emissions of HFC-23, a powerful greenhouse gas, from factories through the addition of some simple technology. With the technology installed, factories have been able to sell carbon credits generating large profits; the money received for carbon credits has been far higher than the cost of installing the technology.

The state of Gujarat in India has seen a particularly high number of factories earning high profits from selling HFC-23 based carbon credits. The Gujarati NGO Paryavaran Mitra says that some of the industries funded by CDM produce toxic or hazardous local pollution. The reinvested profit from CDM allows these industries to expand their operations, producing more local pollution, without any regulation of the impacts. Mahesh Pandya from Paryavaran Mitra says: *"It is unjust that the rich are allowed to emit whilst paying for more pollution for the poor."* [126]

Furthermore, carbon is already traded by speculators. It is likely that this speculation will lead to the carbon price fluctuating wildly. There have and will be large and sudden changes in the carbon price as has been seen in recent years for commodities such as fossil fuels and food.[127] A volatile carbon price will be difficult to base investment decisions on.

The 2009 UN World Economic and Social Survey argues that carbon trading schemes are not the solution to cutting emissions in developing countries. Instead it recommends a combination of large-scale investments and active government policy interventions, with funding provided by rich countries.[128]

The UK government is pushing for carbon trading to be the main source of funds from the north for cutting emissions in the south. In June 2009 Prime Minister Gordon Brown launched the 'Road to Copenhagen' which stated that the UK *"expect*[s] *the private sector to be the main source of finance, with a reformed carbon market providing a significant portion of incremental finance by 2020"*. Furthermore, the UK government estimates just $100 billion a year is needed for adaptation and cutting emissions in the global south, and it *"expect*[s] *developing countries to fund some of the activities themselves"*.[129]

4.3 World Bank funding

Where money for climate change is being given directly by northern countries to the south, donors are insisting it be managed by institutions the global north controls, particularly the World Bank.

Gordon Brown, in his last budget as UK Chancellor in 2007, announced a flagship £800 million Environmental Transformation Fund of aid money for adaptation and cutting emissions. The Fund is dispersing money between 2009 and 2011, and is the main way in which the UK is funding adaptation and low carbon development in the global south. In addition, the UK has also pledged £60 million for adaptation in Bangladesh.

Virtually all of the UK's money for tackling climate change in the south is going into new funds set up within the World Bank, such as the Clean Technology Fund and Pilot Programme for Climate Resilience. Together these are collectively known as the Climate Investments Funds. The UK, along with the US and Japan, have pushed for these funds to be created and established within the World Bank. Yet the World Bank's involvement in climate change finance has been strongly opposed by both southern governments and civil society.

By choosing to use the World Bank, northern countries have ignored the UNFCCC, a more legitimate international institution for tackling climate change. With rich countries still holding around two-thirds of votes in the World Bank, using the Bank allows the north to control the money. Climate change funds can potentially be used in the same way as development funds and debt cancellation in the past; to exercise control over southern governments.

Table 4. UK aid money for cutting emissions (mitigation) and adaption[130]

Fund	Run by	Amount pledged	Amount given so far	Loans or grants	Mitigation or adaption
Clean Technology Fund	World Bank	£385 million	£60 million	Primarily loans	Mitigation
Pilot programme for climate resilience	World Bank	£225 million	£18 million	Primarily loans	Adaption
Forest investment programme	World Bank	£100 million	£12 million	Not yet decided	Mitigation
Congo basin fund	DfID / African Development Bank	£50 million	£3 million	Unknown	Mitigation
Scaling up renewable energy for low income countries	World Bank	£25 million	£5 million	Loans and grants	Mitigation
Forest carbon partnership	World Bank	£15 million	£3 million	Grants	Mitigation
Bangladesh multi-donor trust fund	World Bank	£60 million	Unknown	Unknown	Adaption

Speaking in April 2008 after the announcement of the World Bank Strategic Climate Funds, Bernaditas Muller, coordinator of the G77 and China (the group of developing countries in international negotiations) said: *"The governance of these funds is donor-driven. There is clearly money for climate actions, which is the good news, but the bad news is it is in the hands of institutions that do not necessarily serve the objectives of the Convention."*[131]

The use of the World Bank was further criticised by individual developing countries. India commented that:

> The current moves by some donor countries to finance parallel initiatives through the World Bank, outside the UNFCCC framework, are seen as potentially detrimental to existing developmental financing flows. Further, they are seen as promoting potential conditionalities that would creep into other developmental and commercial financing.
>
> These parallel funding channels could further marginalise developing countries from having a stake in the fight against climate change and create solutions that undermine instead of supporting their efforts to develop adaptive capacities.[132]

If the north continues to control financial resources for tackling climate change, such money will be less an attempt to repay climate debt, and more a way for the north to continue to use its power and wealth for its own benefit and that of its multinational companies. The Third World Network has shown that access to Clean Technology Funds will be based on traditional World Bank economic policy conditions, such as tight fiscal policy and deregulation of businesses, concluding that this *"is in effect, conditionality through the back door"*.[133] Furthermore, northern countries can further their geopolitical aims by channelling funds meant for tackling climate change towards countries they like, and away from countries they don't like.

Campaigners across the global south agreed a statement in September 2009 saying:

> IFIs, [International Financial Institutions] such as the World Bank, regional, and national development banks [are] responsible for the current economic, financial, and climate crises [and] are using these crises to increase their lending and influence to maintain the status-quo and continue to fuel the climate crisis by supporting extractive industries and other harmful industrial sectors. These institutions are selling market-based false solutions and pushing new loans on countries of the global south to deal with a catastrophe they did not cause.[134]

The World Bank has a long history of pushing through fossil fuel projects against local opinion. Following criticism of World Bank support for mining projects, in 2001 the Bank commissioned the Extractive Industries Review, led by Professor Emil Salim, former Indonesian Population and Environment Minister.

The Extractive Industries Review reported in 2003, recommending that the Bank phase out funding for oil and coal extraction, increase funding for renewable energy projects and ensure projects get the prior-informed consent of indigenous and project-affected peoples.[135] However, the World Bank refused to adopt the findings of the Extractive Industries Review, and has continued to heavily subsidise oil and coal. Bank Information Centre has shown that World Bank lending for fossil fuels was higher in 2008 than any previous year in the preceding decade (see Graph 3 below).[136]

The World Bank recently announced that in 2008 it spent 40 per cent of its energy budget on renewable and energy efficiency projects. However 'energy efficiency' includes subsidies for fossil fuel power stations; it is still unclear how much World Bank energy lending is for renewable power projects focused on enhancing energy for the poor.

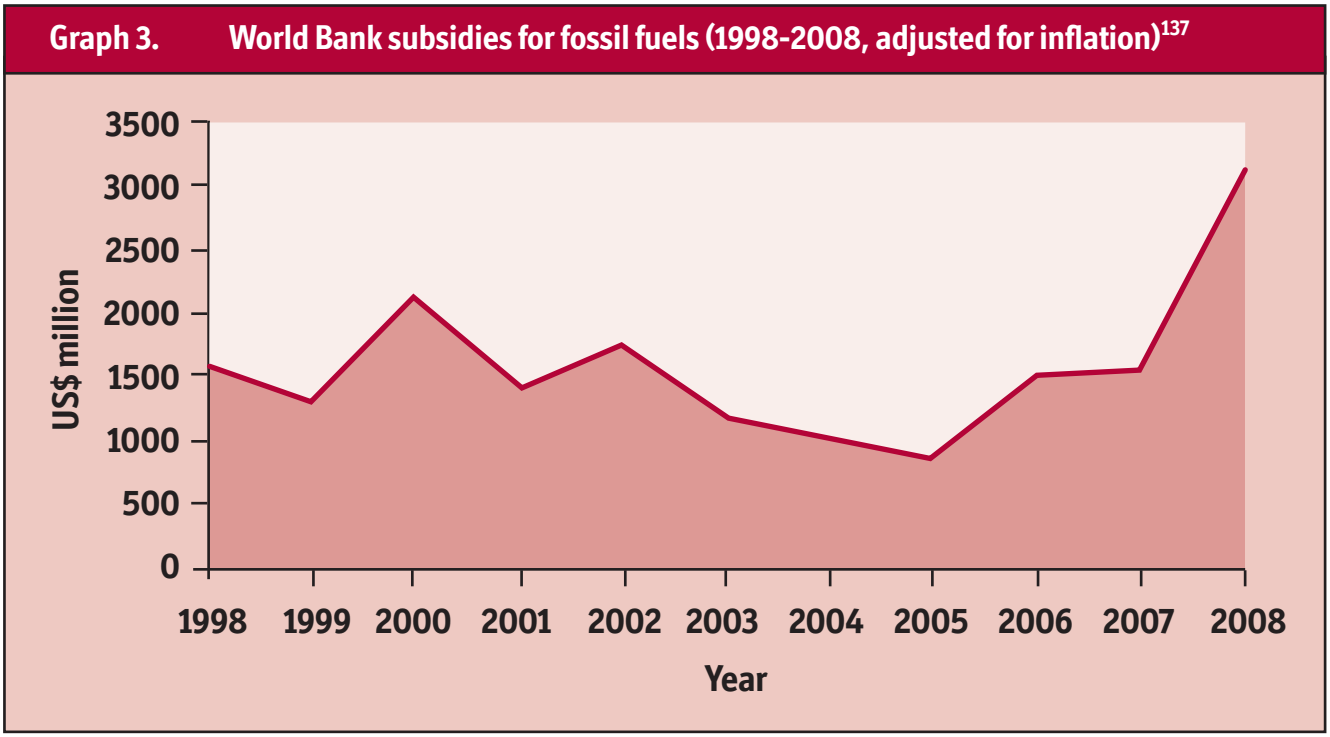
In the design of the Clean Technology Fund, the World Bank has continued to show its devotion to fossil fuels by deciding that one of the 'clean technologies' which should receive funding is coal power. The Bank views newer more efficient coal power plants as a clean technology because they produce less carbon dioxide for the energy produced than older forms of coal power.[i] However, these newer coal plants are still dirtier than oil and gas, never mind renewable forms of generating electricity.

Ricardo Navarro from the campaign group CESTA in El Salvador says:

> The World Bank has a history of funding projects that cause climate change. The UK should not give this World Bank fund a pound. I would rather that the UK government bought flowers for every household in the UK than spend this money on a World Bank coal fund. The UK should abandon this plan and make sure that the money goes to fund renewable energy, not new coal. [138]

i. The Clean Technology Fund will give subsidies to support 'supercritical' coal power plants, as opposed to 'subcritical' coal. Supercritical is a technology which emits less CO_2 for electricity generated than older subcritical power plants; it is more efficient. This should not be confused with the yet to be demonstrated carbon capture and storage technology, which the Clean Technology Fund will not yet support.

Graph 3. World Bank subsidies for fossil fuels (1998-2008, adjusted for inflation)[137]



4.4 Loans rather than grants

So far the finance northern countries are making available is largely in the form of loans rather than grants (see Table 4 above), merely adding to impoverished countries' financial debts while failing to acknowledge the responsibility of the rich world. Funding for climate change is being seen by the World Bank and northern countries in the same way as aid, which is mostly given as loans, rather than compensation and reparations for climate debt.

In particular, the general Bank model works on the basis of the poorest countries receiving concessional loans (providing part grants, part loans, with repayment terms that are longer and have lower interest rates than the market) in return for adhering to strict programmes of conditions.

This is hugely problematic in itself, but is clearly inappropriate for climate finance. It ignores the strong argument from civil society and southern countries that finance to help cut carbon and develop alternatives. It should be compensatory, not in the form of loans and not with economic policy conditions attached.

Concerns in particular have been raised that adaptation efforts are not generally revenue generating and therefore repayment of these loans will be difficult. More importantly it is unjust for poor countries to have to repay this money to those countries that are historically responsible for the activities that have caused climate change.[139]

Rich countries should not be seeking to meet their obligations under the UNFCCC by forcing the south into even more financial debt. Rather, climate debt has to be repaid through grants rather than loans. Compensation means just that; money paid out in recognition of harm done. Not more loans with strings attached.

5. Just solutions

"As the basis of a fair and effective climate outcome we therefore call on developed countries to acknowledge and repay the full measure of their climate debt to developing countries commencing in Copenhagen. We demand that they:

- ***Repay their adaptation debt to developing countries by committing to full financing and compensation for the adverse effects of climate change on all affected countries, groups and people;***
- ***Repay their emissions debt to developing countries through the deepest possible domestic reductions, and by committing to assigned amounts of emissions that reflect the full measure of their historical and continued excessive contributions to climate change; and***
- ***Make available to developing countries the financing and technology required to cover the additional costs of mitigating and adapting to climate change, in accordance with the Climate Convention."*** [140]

Statement from 242 organisations on climate debt

5.1 Emission reductions

The UK and other northern countries have already used more than their fair share of fossil fuels and atmospheric space. Any continued use of fossil fuels continues to increase their debt. Any emission reduction less than 100 per cent allows the north to continue to emit. However, as well as not being realistic, a sudden stop to fossil fuels would not be fair for many in northern societies, especially the poor. A just transition is needed in the north which allows for energy needs to be met, and jobs to be created to replace any jobs lost in fossil fuel industries. Fossil fuels need to be phased out in the north as much as possible, as soon as possible.

For the world to have any reasonable chance of keeping temperature increases to 2°C, northern countries need to reduce their emissions by 40 per cent on 1990 levels by 2020.[141] Thirty-seven developing countries have proposed that northern countries should commit to targets of reducing emissions by *at least* 40 per cent on 1990 levels by 2020.[i 142]

Many view this as not being enough. The Association of Small Island States (AOSIS) and groups of Least Developed Countries (LDCs) have both argued that their survival depends on temperature increases being limited to 1.5°C. Consequently, they argue, northern countries should reduce emissions by 45 per cent by 2020.[143]

Emission reductions in the north are not just about targets. Northern countries have to be setting the policies now to ensure they meet those targets. For example, one simple measure would be to ban the building of new coal power stations. Large and quick declines in emissions are clearly prevented

i. Algeria, Benin, Brazil, Burkina Faso, Cameroon, Cape Verde, China, Congo, Democratic Republic of the Congo, El Salvador, Gambia, Ghana, India, Indonesia, Kenya, Liberia, Malawi, Malaysia, Mali, Mauritius, Mongolia, Morocco, Mozambique, Nigeria, Pakistan, Rwanda, Senegal, Seychelles, Sierra Leone, South Africa, Sri Lanka, Swaziland, Tanzania, Togo, Uganda, Zambia and Zimbabwe

by building coal power stations, the dirtiest form of electricity generation, with lifetimes of thirty to fifty years.

5.2 Repay the debt

Climate debt has to be repaid. This means transferring resources on the scale set out in section two for both adaptation and cutting emissions in the south. This money has to be additional; both to cuts in northern emissions (ie, without offsetting) and to current aid commitments (ie, above and separate from commitments to provide 0.7 per cent of national income as aid).

Many suggestions have been put forward as to where the resources for the north to repay its debt can come from. Ideal sources would ensure that money comes from the north and the rich within the north, and is a regular, predictable flow rather than being at the whim of northern government treasuries.

International taxes on transport

International aviation and shipping currently pay no taxes on their fuel. Introducing international taxes would raise revenue as well as help lower demand for highly polluting international transport. Aviation and shipping companies would be given a greater incentive to be more efficient.

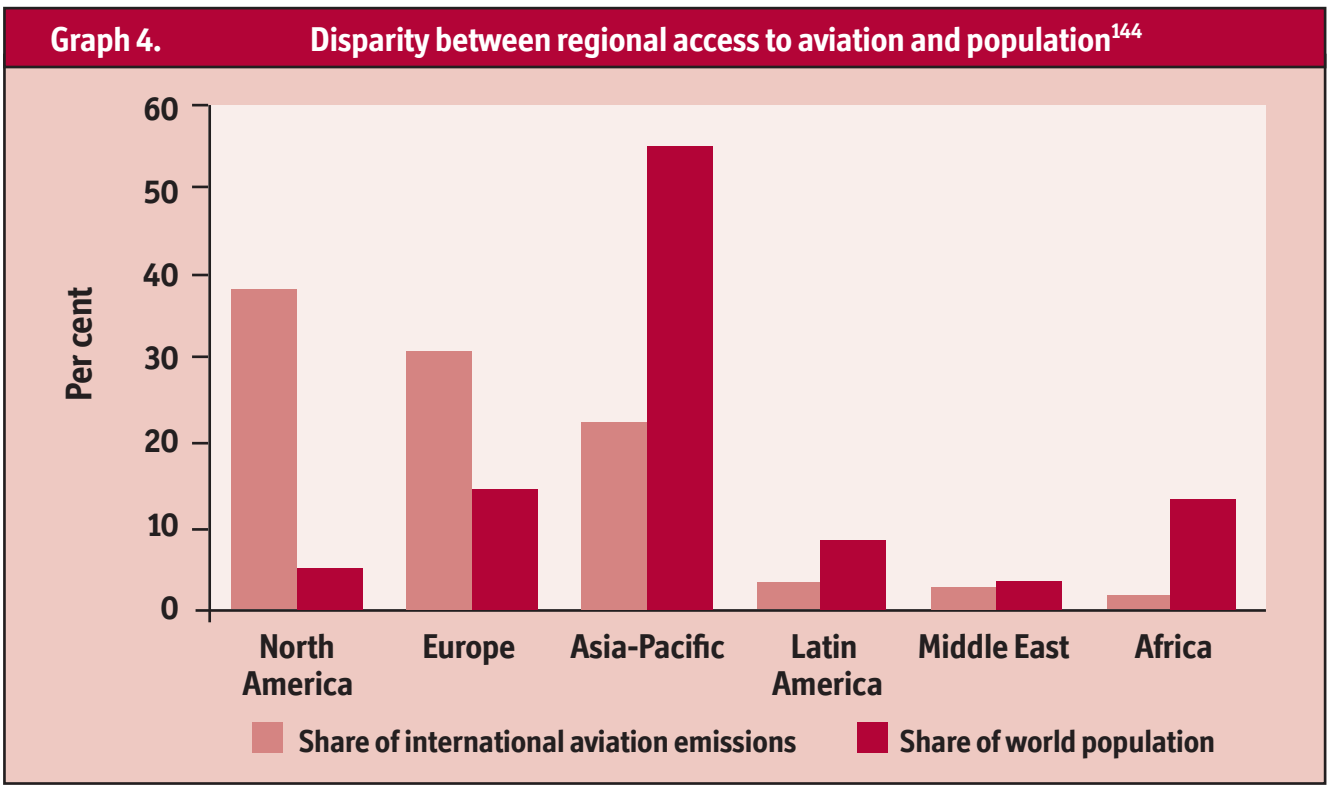
Some countries have identified taxes on international aviation and shipping as sources of revenue. The Maldives on behalf of the Least Developed Countries has proposed an international levy on flights to help fund adaptation.[i] These taxes would be regular and predictable sources of finance (at least in the medium term) and by being independent of national governments, could pay money straight into climate change funds rather than via the treasuries of northern governments.

However, some southern countries oppose international transport taxes because they would apply to both north and south in the same way. This would fail to respect the 'common but differentiated' responsibilities of north and south agreed in the UNFCCC.

Over 70 per cent of aviation emissions are the responsibility of northern countries (see graph 4 below). A similar, though less extreme proportion,

i. Set at a rate of $6 for an international economy flight and $62 for a business class flight.

Graph 4. Disparity between regional access to aviation and population[144]



is likely to be true for international shipping. Furthermore, it would primarily be elites, both in northern and southern countries, who would ultimately pay international transport taxes, especially aviation. In the UK, the richest 20 per cent of the population are responsible for well over half of the flights by UK citizens.

However, whilst producing far more revenue from the north than the south, an international tax would impact southern countries, and ultimately some local communities, as well. Some countries particularly dependent on tourism, such as the Maldives, could face sudden negative economic shocks through the imposition of an international tax on aviation.[145] More generally, efforts to cut emissions from international trade need to be gradual and be implemented alongside other measures to strengthen regional and local economies.

The revenue raised from northern countries by international taxes on aviation and shipping fuel could go towards repaying the north's debt to the south, if revenue raised from southern countries were channelled back to the south as well. And specific proportions would be required to compensate any countries particularly dependent on aviation.

The potential income from international taxes is dependent on the rate at which they are set. The Maldives proposal only addresses aviation, and would be a flat rate of around $5-$10 a flight. Whilst doing little to reduce emissions from aviation, this would raise $5 billion to $10 billion a year. A suggestion by NGOs is a tax of $30 a tonne of CO_2,[146] still relatively low, but which could raise more than $40 billion from aviation and shipping.

International taxes are most often considered for international aviation and shipping. But there may be a case for similar taxes on other high polluting industries which are difficult to tackle in one particular country. It is difficult to impose higher costs on a few particular high energy using industries such as cement because they can easily shift production across borders.[i] A global tax on the emissions of such industries may be an alternative approach, although there would be even greater equity implications in how this would impact southern countries.

International taxes on currency transactions

International taxes on financial transactions have long been advocated by civil society across the world. Such taxes could both reduce the level of damaging currency and commodity speculation which led to the Asian Financial Crisis, as well as large increases in the price of basic foods and the global recession in recent years.

A currency transaction levy was recently supported by Adair Turner, chair of both the UK Financial Services Authority and UK Committee on Climate Change.[147] And in September 2009 the G20 Pittsburgh Summit commissioned the IMF to produce a report on the contribution that the financial sector could make towards paying for the repair of the banking system – a recommendation that has been widely interpreted as referring to a financial transaction tax of some sort. The tax would fall primarily on wealthy elites in the north. A tax on just currency transactions of 0.005 per cent would generate $40 billion a year.[148]

Auctioning of emissions permits

EU member states have said they are willing to use at least 50 per cent of proceeds from auctioning carbon trading permits *"to enable and finance actions to mitigate and adapt to climate change in developing countries"*.[149] This is separate from the finance supposedly generated through offsetting within carbon trading schemes. At the current price of carbon, if the EU were to auction all emission permits, total revenues would be $30 billion.

In section 4.2 above we outlined problems with carbon trading, and why the north's focus on carbon trading as the solution to climate change should be abandoned. However, in as much as the EU and other northern countries continue to use carbon trading, revenue generated from

i. One of the reasons given for the EU ETS having a weak cap is that a stronger cap, and so higher carbon price, would cause certain industries such as cement to move outside the EU's borders, and continue emitting elsewhere. The carbon leakage argument may be true for a few specific industries, but it means all large emitting installations are let off the hook, even if, like coal power stations, there is no risk of them moving.

auctioning permits is clearly a source of finance to go into UN funds for low carbon development and adaptation. To ensure the 'common but differentiated' responsibilities of north and south are respected, carbon trading schemes and auctioning of permits would need to be exclusively in the north.

End financial debt repayments

Many countries which are and will suffer large impacts from climate change have not been included in current multilateral debt relief schemes. Others have, but still suffer from large, and growing, external debts.

Bangladesh and the Philippines are both set to face disasters from increased intensity of typhoons and tropical storms.[150] In Peru, glaciers provide 80 per cent of freshwater resources,[151] yet all of Peru's glaciers are likely to disappear by the 2020s or 2030s.[152] None of these countries currently have access to multilateral debt relief, but all have high financial debts (see Table 5 below).

Given the failure of northern countries to repay their much larger climate debts, it is morally unacceptable for them to continue to demand repayment of financial debts from the south. They should cancel all unpayable and unjust debts immediately. Southern countries may well consider withholding debt payments – something with which debt campaigners in the north would stand in solidarity. Campaigners in the global south have long argued that debt repayments should be withheld or cancelled because the debts are unjust. As such, any debt cancellation by the north should not count towards meeting obligations to repay climate debt.

However, in the absence of the north repaying its climate debt, it is madness for countries in the south to be forced to repay debts rather than being able to use those resources to help cope with the impacts of climate change. Southern countries in total pay over $500 billion a year in debt repayments.

If countries consider defaulting or declaring themselves unwilling to repay debts they are generally threatened with a range of penalties, for example in terms of their credit rating, the loss of creditor confidence, and collapse in future investment.

But in fact the cost of repudiation varies depending on context and is often exaggerated. Deliberately punishing countries for defaulting or repudiating is a political act, whereas markets themselves tend not to be interested in political statements. If the economic circumstances are agreeable, there will always be investors. Argentina's 2001 debt default, for example, was widely expected to lead to long term decline, but in fact precipitated spectacular economic growth.

Moreover, for very poor countries, the threat of a cut in the flow of private foreign investment is not much of a threat for countries that hardly receive any such investment anyway. Equally, very indebted countries often take out new loans to service their outstanding debt. If that debt is repudiated, a shortfall in lending may not be devastating.[154]

Table 5. External debt of countries severely affected by climate change[153]

	Bangladesh	Philippines	Peru
Total debt (US$ billion)	22	65.8	32.2
Total debt as percentage of national income	30	42	33
Debt repayments each year (US$ billion)	0.8	10.5	8.8

Stop tax evasion

Big companies and wealthy individuals, those most responsible for climate change, are allowed to avoid large amounts of tax by the deregulated international financial system. The Tax Justice Network estimates that individuals hold $11.5 trillion in offshore bank accounts, therefore avoiding tax on those assets of around $250 billion a year.[155] International regulations to prevent tax avoidance could provide extra funds for northern and southern governments, and/or collect tax at an international level which could then go straight into climate change funds.

Money direct from governments

In their response to the financial crisis, governments have shown they are able to find large amounts of money in a short space of time. In the same way as international aid, northern governments could pay the climate debt they owe directly from their own treasuries.

This does not need to imply extra taxes or less spending on public services. As outlined above, large amounts of money are lost to governments each year because of tax avoidance. Northern governments could also redirect money away from climate damaging activities such as subsidising fossil fuels. And if northern countries cut their dependence on fossil fuels, they may no longer see the same need for military spending to fight for access to resources across the world.

However, whilst this is a moral obligation of northern governments, they have a very poor record of meeting the aid commitments they have made. Furthermore, the more northern governments control the source of climate change funds, the more influence they will have on how the money is used.

5.3 Fair and effective governance

Key to just and effective solutions to climate change is the governance of money. These resources should be properly seen as reparations for past damage, rather than aid. As such, there is no reason why the north should exercise any particular control over the finance. As set out in section 5.3, northern countries are currently trying to ensure money for tackling climate change stays under their control, and so becomes part of their global political power, by channelling it through the World Bank.

Southern countries have insisted in the international negotiations that finance should be controlled through the UNFCCC. This would allow both northern and southern countries some say in how finance is controlled, as all are members of the UNFCCC. Third World Network argues that:

> Efforts must therefore be focused on developing a genuinely multilateral fund for climate change financing under the auspices of the UNFCCC which is governed by the UNFCCC membership on the basis of regional representation. This would give developing countries due representation and voice within the governance structure and ensure that resources set aside for climate change are used in accordance with internationally agreed principles and meet the objectives of the multilateral climate change regime.[156]

One example to learn from is the Multilateral Fund set up under the Montreal Protocol to deal with the phasing out of ozone-depleting substances. The Fund was created in order to give southern countries the resources to allow them to stop using CFC's. A paper published by Third World Network states that there is balanced representation of developed and developing countries in governing the fund *"ensuring that neither set of countries dominate the decision making"*.[157]

Bottom-up governance also needs to be promoted in the use of funds for tackling climate change. Both northern and southern governments need to recognise that local communities need to give their consent, and be actively involved, in low carbon and adaptation projects and strategies.

In many circumstances it is local communities who are leading on tackling climate change. La Via Campesina, the global network of peasants' organisations, argues that:

> Large agribusiness extensions and vast monocultures make an intensive use of oil-based chemical fertilisers, pesticides and machinery, they convert carbon-rich forest and prairie into green deserts and they are based on a long and unnecessary chain of secondary processing and transport links. On the other hand, small scale sustainable family farming is a key solution to climate change. It contributes to cooling down the earth and plays a vital part in the relocalisation of economies which will allow us to live in a sustainable society.[158]

5.4 Debt cancellation and an end to economic conditions

The World Development Movement and Jubilee Debt Campaign have argued for many years that key causes of continued and increased global poverty have been unjust debts and the power of the IMF and World Bank to force a fundamentalist free market model of development on countries and communities in the global south.[159] In this report we have shown that debt and conditions have also locked-in high carbon development.

The IMF and World Bank must stop imposing economic policies on southern countries. Cancellation of financial debts would give southern countries greater autonomy to develop in a way more supportive of local industries, and potentially less damaging to the climate.

6. Conclusion

"Copenhagen must be a key turning point for climate justice – a major milestone on the journey towards safeguarding the earth's climate system and ensuring a future in which the rights and aspirations of all people can be realised." [160]

Statement from 242 organisations on climate debt

Tackling climate change requires not just scientific and technological solutions, but a change in economic power and wealth relations in the world.

This report has only been able to touch on the many issues involved. We have suggested that solutions to climate change will need to involve:

- Northern countries reducing their use of fossil fuels as much as possible, as soon as possible. At the least, rich countries need to reduce their own emissions by 40 per cent on 1990 levels by 2020.
- Northern countries repaying their climate debt, both through helping communities and countries adapt to impacts from climate change, and by providing the money and technology needed for energy needs to be met in low carbon ways. This report estimates that the UK alone owes more than $30 billion a year, around one per cent of national income, to repay its emissions and adaptation debts to poor countries.
- For this money to be given as compensation, in the form of grants, rather than loans used to maintain the current imbalance of power and wealth.
- For this money to be fairly and effectively governed, and for local communities to have a full say in low carbon adaptation policies and strategies.
- For unjust debts to be cancelled, removing the straightjacket of overexploitation, and allowing new possibilities for the development of local and regional economies.
- For local communities and governments to be empowered, rather than forced into implementing policies determined by the IMF and World Bank, and their paymasters in rich countries.

So far, the governments of rich countries are still a long way from acknowledging their climate debt, recognising the need to stop increasing it, and finding ways to effectively and fairly repay the debt. Kenyan President Mwai Kibaki has said: *"Tackling climate change is not a matter of choice. It is an imperative if we are to continue life on this planet."*[161] Climate change will be tackled because it must be tackled. And climate change must be tackled in a fair way because there is no other way in which action will be effective.

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