

hoodwinked in the hothouse

the g8, climate change
and free-market environmentalism

by carbon trade watch

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contents

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Climate change has, of late, been receiving more media attention than ever before. This is partially a result of the coming into force of the Kyoto Protocol despite US and Australian government intransigence, as well as UK Prime Minister Tony Blair's championing of the issue while serving as chair of the 2005 meeting of the G8 in Scotland. In parallel to these political processes, the world is slowly waking up to the magnitude of the threat posed by climate change as the world's leading scientists warn of the dangers of complacency. Concerns over climate change impacts such as droughts, floods, rising sea-levels, food insecurity, loss of biodiversity and depleted fresh water supplies have created a broad social

image by rdkay



introduction

consensus that climate change is one of the single greatest threats humankind faces. According to the World Health Organisation, climate change is already responsible for some 160,000 deaths annually.¹

The science is clear. A study by the International Climate Change Taskforce found that with any increase above two degrees in global mean temperature, "the risks to human societies and ecosystems grow significantly," with an increased possibility of "abrupt, accelerated, or runaway climate change." According to the high-level group - co-chaired by British Labour MP Stephen Byers and US Republican Senator Olympia Snowe - this scenario could be avoided by keeping the concentration of carbon dioxide in the atmosphere below 400 parts per million (ppm). However they warn that current concentrations of 379 ppm "are likely to rise above 400 ppm in coming decades and could rise far higher under a business-as-usual scenario."²

This briefing examines how despite the urgent need for action, the G8 nations are locked into this 'business-as-usual' scenario through their perpetuation and reinforcement of the kind of fossil-fuelled economic expansion that has given rise to climate change in the first place. As the grouping of nations most responsible for the majority of historic greenhouse gas emissions, as well as simultaneously

being the most powerful industrialised nations, the G8 is a logical frame of reference from which to analyse the political economy of climate change.

However this focus is somewhat arbitrary. Firstly, the nature of economic globalisation demands a more complex reading of the relationship between nation-states and transnational corporations. These corporations are in no way restricted to the G8 countries, either in economic and industrial activity or in terms of influence over national and international policy. Secondly, the G8 is only one particular grouping of rich nations, and although arguably the most powerful and influential, it is not unique. Institutions such as the World Economic Forum (WEF) and the Organisation for Economic Co-operation and Development (OECD) also exist to foster political and economic consensus amongst richer nations, and thus also have an impact on climate change through their mutual reinforcement of neoliberal economic policies and frameworks. The focus on the G8 countries in this briefing is intended to serve as a useful window into the interaction of neoliberal policy and climate change rather than telling the whole story.

offsetting responsibility

In an effort to demonstrate its green credentials, the British Government has been proudly boasting

that its G8 presidency will be 'carbon neutral'. It promises to achieve this by 'offsetting' the anticipated greenhouse gas emissions resulting from the summit by investing approximately \$90,000 in supposedly climate-friendly projects in Africa.⁴ In many ways, the attempt to make the summit 'carbon neutral' is emblematic of the degree to which the climate debate has been corrupted by a corrosive discourse. As a result, this offset culture has emerged as one of the principle concepts of 'action' on climate change. But offsets are deeply problematic and not, in the final analysis, a solution to the crisis.

Firstly, the money being invested elsewhere invariably distracts from action to reduce emissions at source. Northern governments and industry are taking advantage of such offsetting arrangements to postpone making the desperately needed cuts at home. Secondly, it is difficult, if not impossible, to guarantee that offset projects lead to genuinely 'additional' reductions. There

between the emissions one source makes with those theoretically avoided or sequestered in trees somewhere else. One side of the equation, the emissions that one is responsible for, is comparatively definite and quantifiable. The other side, the emissions saving project, is marred in both uncertainty with regards to the long-term progress of the project (for instance, if the carbon from the emissions is to be sequestered in trees, how long will these trees still be standing and storing the carbon?) and also with regards to limited scientific knowledge of the carbon cycle. According to leading scientists, calculating these carbon fluxes involves, at best, variations in the estimates of 50% or more.⁶

But for the G8 nations seeking to demonstrate vague commitment to climate action, the inherent problems relating to offset culture and other distractions such as emissions trading are swept aside by a sleight of hand. The market, we are told, is lean and green. The problem of climate change requires not radical reductions at source, but the

simply is no guarantee that the supposed emission savings from a project would not have happened anyway without the offsetting investment. Thirdly, the scientific basis upon which carbon calculations of such projects are made is hotly contested. The carbon estimates vary hugely and rely upon accounting methodologies so flawed as to make the Enron-Andersen dealings seem mild in comparison. Many projects have delivered significantly lower emission reductions than predicted in their project documents.⁵

A project category particularly prone to such overestimations is tree-planting, where verification of the amount of carbon actually stored in the forest ecosystem or tree plantation is virtually impossible. In some cases companies have received payments just to avoid felling existing forests. Monoculture trees have also been planted on carbon-rich peat bogs - emitting more carbon dioxide than they 'sink'. The worst examples have involved projects replacing grassland ecosystems with ecologically and socially destructive monoculture plantations - described as 'green deserts' by local people - in places such as Ecuador and Brazil.

Cracks in the logic of these schemes emerge when attempts are made to establish a solid equivalence

'invisible hand' of the market to sweep up the mess in the most cost effective manner possible. Part economics and part philosophy, this reliance upon the market represents an increasingly prevalent paradigm in environmental legislation.

This briefing will examine the origins of this paradigm and its development in the context of climate change, as well as the way it is being enthusiastically applied as a panacea in other areas of environmental policy as well. It argues that the 'win-win' rhetoric pervading the climate discourse is both an attempt to confound and marginalise those seeking more meaningful and effective action on climate change, as well as contributing to increased corporate power and further commodification of natural resources such as the earth's carbon-cycling capacity. The neoliberal ethic embodied in power blocs such as the G8, themselves highly dependent on the fossil fuel economy, is ultimately what drives this agenda forward. Free-market environmentalism and increased trade and investment liberalisation in the area of 'environmental goods' and 'ecosystem services' is ultimately a false promise. For activists seeking to engender meaningful social and environmental change in the climate arena, these trends must be challenged outright.

"The speeches that come out of the G8 on poverty, climate change and the issue of the carbon market are hypocritical. Because what causes poverty and environmental damage is the current development model, the logic of production and the consumer logic of capitalist society."

Marilda, Brazilian forest activist



part 1 the g8 and the climate change agenda

The G8 (Group of 8) is a political forum and annual meeting attended by the leaders of eight of the most economically powerful countries: the United States, Canada, Britain, Germany, Japan, Italy, France and Russia. It has been active since 1975 when then French President Mitterand invited the world's six largest economies to meet in France to discuss the economic crisis created by the US abandonment of the gold standard¹ and the 1973 oil crisis. The initial G6 became the G7 in 1976 when Canada joined. In 1977, the head of state who was then acting as the President of the European Union was invited for the first time, and each year is invited as a permanent, although non-hosting member. Finally, the inclusion of Russia took place over a period of time starting informally in 1994 and concluding in 1997 at the Summit in Denver, although the G7 continues to meet without Russia before each G8 Summit to discuss economic issues.

Although the G8 started out with a focus on macroeconomic and trade issues, other issues, such as energy supply, arms control and nuclear non-proliferation, health, development and terrorism have found their way over the years onto the agenda. The G8 has also created a series of ministerial forums that meet at the Summit and throughout the year on specific topics, including Trade Ministers, Foreign Ministers, Finance Ministers, Environment Ministers, and Labour Ministers. The Summit is presided over by each of the Member States in turn for a full calendar year. The country holding the Presidency proposes the location and agenda and organises preparatory meetings, giving them the opportunity to place a personal stamp on the proceedings. The final summit in the Summer is the conclusion of all the previous meetings which have led up to it.

Describing itself as "an informal club for discussion and co-operation by the leading industrialised

countries,"² the G8 has no official decision-making powers. However, by virtue of its combined economic, military and diplomatic power and influence, the nations of the G8 have enormous influence over multilateral institutions of global governance, such as the UN Security Council, the World Trade Organisation (WTO), the International Monetary Fund (IMF), the World Bank and the Organisation for Economic Cooperation and Development (OECD). These multilateral institutions in turn have enormous impacts on policies affecting climate change, from the

As one of the architects and engines of neoliberal globalisation, the G8 is promoting an economic agenda as the cure-all solution to climate change rather than acknowledging it to be a major part of the problem.

the climate change agenda in 2005

extraction of fossil fuels, the liberalisation of trade and investment, to the negotiation and implementation of the plans of action to deal with the climate crisis.

The G8 meetings are fairly opaque in that there is no transcript of the discussions and preparatory documents are rarely released to the public. Instead, at the end of each summit a communiqué is issued that summarises the final outcome. Although these G8 Communiqués typically refer to that summit's particular themes, they mainly consist of, "a renewal of vows for neoliberal globalisation and the reforms which enable this: trade and financial liberalisation, privatisation, labour market flexibility and macroeconomic policies that are deflationary such as zero-deficit budgeting³ and high interest rates."⁴ The paradox is that it is exactly this implementation of neo-liberal reform that is exacerbating the other issues that the G8 claims to be addressing, such as poverty in the majority world, global security and as is shown here, climate change. As one of the architects and engines of neo-liberal globalisation, the G8 is promoting an economic agenda as the cure-all solution to climate change rather than acknowledging it to be a major part of the problem.

At the end of 2004, Tony Blair announced his two priorities during Britain's presidency of the G8 in 2005: The plight of Africa and tackling climate change. Blair's emphasis in Scotland is not the first time that climate change has been on the G8 agenda. In July 2000 at the Okinawa, Japan, Summit, the Heads of State agreed to create a multi-stakeholder Renewable Energy Task Force as a means of mitigating the impact of climate change. The task force, which was mandated to assess the barriers to renewable energy use in developing countries as well as ways of expanding its use in domestic markets, consisted of members from government, industry, NGOs and international organisations and was assisted by an Advisory Group of over 50 recognised experts. After a series of meetings, its recommendations were presented at the 2001 Summit in Genoa, Italy, consisting of calls for:

- 1 The adoption of a renewable energy target of serving at least one billion people with renewable energy by 2010.
- 2 The reform of International Financial Institutions and Export Credit Agencies to dramatically increase funding for renewable energies in developing countries.

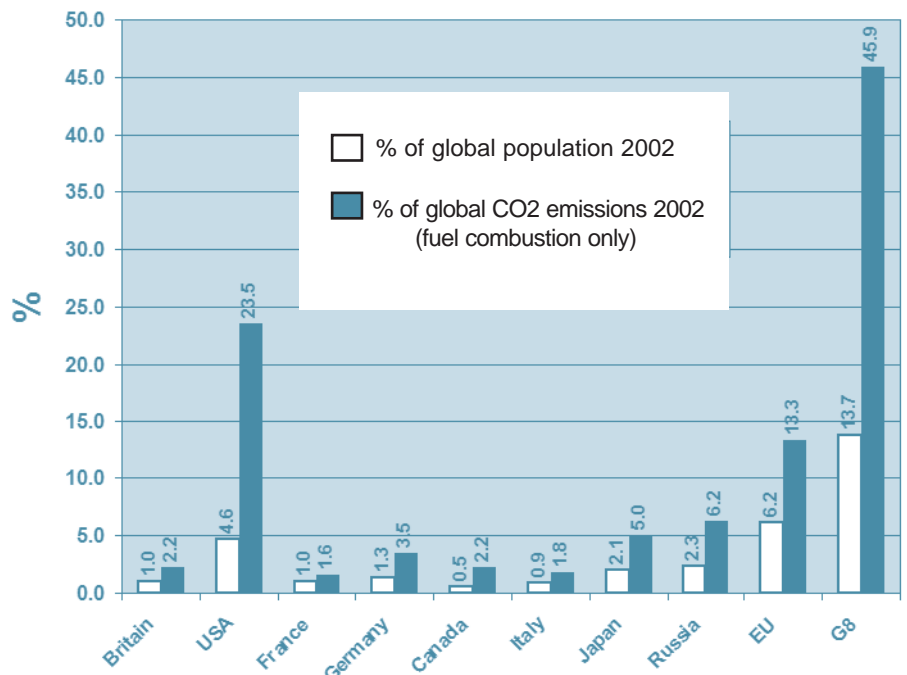


Figure 1 - Source: International Energy Agency

3 Phasing out G8 government subsidies for fossil fuels and nuclear energy, while increasing research and development for renewable energy in order to create a 'level playing field' so that energy markets can function properly.⁵

The suggestions of the task force were surprisingly positive, apart from the fact that the proposals were framed in the context of large scale, centralised renewable energy infrastructure and gave little weight to the possibility of prolific, small scale, community controlled projects. This was hardly surprising considering that the task force was co-chaired by Mark Moody Stuart, former Chief Executive Officer of petrol giant Royal Dutch/Shell. In 2004, the Shell group was one of the top five suppliers of solar photo-voltaic products and one of the top ten suppliers of wind energy in the world, and looking to expand its market share in these sectors.⁶ Unfortunately, the US and Canada led the way in rejecting the package of recommendations in Genoa, and the events of 9-11 a few months later served to re-shuffle political priorities so that the proposals of the task force which had been applauded by a wide array of organisations, were ignored or

forgotten. Climate change was to remain a footnote in the successive summits until 2005.

Since the beginning of the century, Tony Blair has regularly brought up the subject of climate change in speeches, issuing increasingly stark warnings as to the seriousness of its consequences and promising to take urgent action in dealing with it. In January 2005, during a special address he made to the World Economic Forum in Davos, Blair announced that, "this year offers a set of unique opportunities. I am committed to using the UK's G8 and EU Presidencies to try and make a breakthrough... on climate change."⁷

In the same speech Blair outlined his three point plan of action. Firstly, to secure an agreement as to the basic science of climate change and the threat it poses. Secondly, an agreement to develop a package of technologically-based, practical measures to cut emissions, through energy efficiency, renewable energy sources and cleaner fossil fuels etc. And finally, "to work in partnership with the rapidly developing economies like China, India, Brazil and South Africa to find a way for them to grow and develop as low carbon economies."⁸



1997 when Tony Blair came to power to 2003, there was a net increase of 0.03% in CO₂ levels in Britain,¹² which has prompted a report from the Royal Society in May 2005 to cast doubt on Britain achieving even its Kyoto commitment.¹³ An audit of the UK Climate Change Programme in 2003 by the Sustainable Development Commission revealed that, "the Government's projections do not yet show the radical shift needed to a low carbon path, nor are there policies in place to achieve more sustainable patterns of energy generation and consumption."¹⁴

This lack of significant domestic reductions is not inconsistent with other matters of policy and legislation related to climate change and energy

Blair's domestic record on climate change

Blair has admitted himself that, "we cannot aspire to such [global] leadership unless we are seen to be following our own advice,"⁹ but even a cursory examination of the climate change reality behind Blair's rhetoric during his first two terms as Prime Minister greatly undermines his credibility in assuming this role of global leadership. The Labour Party promised in both its 1997 and 2002 elections that it would reduce CO₂ levels by 20% (from 1990 levels) by 2010, while the 2003 Energy White Paper subsequently announced that the government would put Britain on a pathway to achieve CO₂ emissions reductions of 60% by 2050. However figures released in April 2005 from the Department of Trade and Industry showed that CO₂ emissions had actually risen by increments of 2.2% in 2003, and 1.5% in 2004¹⁰ and even Blair had to admit that his government was unlikely to fulfill its 2010 promise.¹¹

While many predict that it is still possible for Britain to come through on its Kyoto commitment of reducing CO₂ emissions by 12.5% by 2012, it is important to note that the majority of these reductions occurred in the period of 1990-1997 during the large scale switch of British industry from coal to gas, accompanied by large scale social upheaval through then Prime Minister, Margaret Thatcher's closure of numerous coal mines. From

that have been witnessed in the UK under Blair:

aviation

Despite the fact that aviation could account for 36% of Britain's total emissions by 2030,¹⁵ and contrary to the advice of the Royal Commission, there has been a huge expansion in the sector with new runways underway in Stansted, Heathrow and Birmingham airports, as well as safeguarding of land for a new runway at Edinburgh and the extension of many others. Aviation fuel remains the only fossil fuel exempt from taxation.

energy efficiency

In November 2004, MPs were instructed by Blair to vote against amendments to the Housing Bill that would increase energy efficiency of the housing stock and would have increased the efficiency standards of social housing. Although the amendment on overall energy efficiency was eventually accepted under pressure from within the party, the leadership remained adamant in rejecting concrete action on energy efficiency in social housing. In 2002, domestic energy consumption accounted for 27% of Britain's CO₂ emissions, and half of this figure was for space heating¹⁶. A typical newly built home in Britain uses three times as much energy as one in Denmark or Germany.¹⁷

With the introduction in 2001 of the New Electricity Trading Arrangements (NETA) favouring 'cheapest' forms of energy, the market has been liberalised so as to starve Combined Heat and Power (CHP) plants which dramatically increase efficiency and reduce emissions, of much needed support, resulting in a decline of the sector. Policy measures like NETA have prompted the

electricity to come from renewable sources by 2010, with an aspiration to double this by 2020. Although there has been some investment from the Government, and it is the first in the EU to give proper support to wave and tidal technologies, it has failed to remove unnecessary obstacles to the development of the sector. Around 7-8% of the 2010 target is earmarked to come from onshore

The House of Commons Environmental Audit Committee described the Government's G8 climate change objectives as "dismally unambitious"

Department of Trade and Industry to enthuse that, "the UK is seen as being at the forefront of a world-wide movement towards liberalisation, and many features of the UK system have been imitated elsewhere."¹⁸

emissions trading

At the end of 2004, Blair succumbed to pressure from the Confederation of Business and Industry to increase the amount of CO₂ by 3% that British industry is allowed to emit under the recently introduced European Union Emissions Trading Scheme (EU-ETS).¹⁹ Blair is currently taking the European Commission to a subsidiary of the European Court of Justice over its refusal to accept this increase to Britain's emissions allowance.²⁰ The associate director of the Carbon Trust, the Government-funded private company charged with helping business adapt to constraints on emissions, said that Blair's attempts to increase the British allocation had "undermined the UK's considerable authority on climate change and could significantly damage the EU-ETS," and that it could result in a "competitive race to the bottom between Member States."²¹

renewable energy

The Government has set a target of 10% of

and offshore wind farms.²² However OFGEM, the gas and electricity regulator, is creating obstacles to the development of a second round of offshore wind farms by demanding unreasonably high fees for connection to the grid, thus jeopardizing the achievement of the 2010 target. Such barriers to renewable energy development have been highlighted by Blair for removal, but he has been unwilling to use his powers of intervention in this case.²³ During 2003-04, the amount of electricity generated from renewable energy was 2.4%, just over half the target of 4.3%.²⁴

The House of Commons Environmental Audit Committee described the Government's G8 climate change objectives as "dismally unambitious", and suggested that its focus on climate science and technology "is creating the appearance of activity... whilst evading the harder national and international political decisions which must be made if there is to be any solution."²⁵ Blair is not alone in evading these difficult decisions. He is complicit with the other G8 governments in presenting a façade of concerned concerted action while continuing to follow 'business-as-usual'.

EU - Total GHG emissions 1990-2002

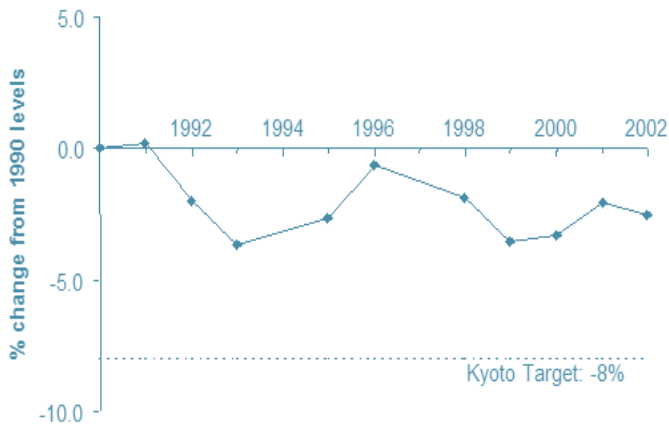


figure 2 - source: International Energy Agency

the european union

likelihood of meeting kyoto targets

The EU committed itself to reducing its greenhouse gas (GHG) emissions by 8% during the Kyoto Protocol's first commitment period of 2008-2012. This target is shared between the Member States under a legally binding burden-sharing agreement, which sets individual emissions targets for each Member State, with some making reductions, some stabilizing and some being allowed increases on 1990 levels. This collective commitment is known as the 'EU-15 bubble,' referring to the 15 countries that were EU members before its expansion in 2004. Projections released by the European Environment Agency (EEA) in 2004 estimate that the EU-15 countries will cut their total emissions by 7.7% by 2010. In addition to this, plans by six EU-15 states to use credits gained from the Kyoto Protocol's flexible mechanisms would contribute a further reduction of approximately 1.1%, taking the total to 8.8%.¹ The report also stressed that success in achieving the target is dependent on some countries making even greater cuts than they had committed to in order to compensate for others (Denmark, Italy, Portugal, Spain and, to a small extent, Germany) missing their targets. Without these excess cuts, the projected reduction will only be 6.5%.

These projections seem quite optimistic when compared with the real emissions data released by the EEA. In 2003, the EU-15 had only reduced its emissions by 1.7% below 1990 levels. Although emissions decreased in most economic sectors during this period, the transport sector (especially road transport) saw an emissions increase of 22%.² Although this 1.7% may appear to be a small but significant step in the right direction, it should be qualified by noting that the majority of this reduction is attributable to the cuts in emissions from Britain and Germany, which in turn are largely attributable to coincidental economic and industrial restructuring at the time in those countries. As such, the cuts are not the result of a concerted effort by these countries to address the climate crisis (see the individual profiles of these countries).

the european union emissions trading scheme

The beginning of 2005 saw the launch of the world's first large-scale GHG trading programme, the European Union's Emissions Trading Scheme (EU-ETS), covering around 12,000 factories and power plants³ (generically referred to as 'installations') in 25 countries and five major industrial sectors.⁴ The combination of its size and institutional complexity means that it is a

landmark in the development of market-based responses to climate change. Up until 2005, 95% of GHG credits traded have been created via project mechanisms such as Clean Development Mechanisms and Joint Implementation, but the EU-ETS has been created to increase the potential to create tradable allowances through domestic reductions. By facilitating trade and allowing for a more flexible determination of how and where emissions are reduced, the European Commission claims that Kyoto targets can be achieved at an annual cost of 2.9 to 3.7 billion (which is less than 0.1 per cent of the GDP in the EU), compared to double that cost (around 6.8 billion) without the EU ETS.⁵ However a briefing paper from the environmental consultants Enviro in 2004 shows that the leniency in allocating allowances will allow European industry to emit from 5-11% CO₂ more than on 2000 levels by the end of the 'warm-up' phase of the market.⁶

incorporate factors such as "the levels of effort and assessment of progress towards Kyoto targets, the competitive impacts between sectors and countries, consistency with other EU legislation, transparency, and the possibilities for technological improvement."⁷

Many felt that the NAPs were unrealistically generous. One market participant quoted by trade analysts Point Carbon said that, "the NAPs are far too lax, and all eyes are now on the European Commission to see how it will handle the situation. The EC needs to bear in mind that if the scheme is not taken seriously in the first phase, that will either put more pressure on the second phase or make it difficult for the EC to establish credibility for Phase II."⁸ The Enviro report warns that the lenient NAPs will lead to low allowance prices and deter investment in low-carbon technologies.⁹ In the majority of cases,

The 'warm-up' phase takes place from 2005-2007, followed by successive five-year periods with the second phase being timed to coincide with the first period of Kyoto commitment. The second phase is expected to involve tighter caps in line with the overall Kyoto targets, and may expand to include GHGs other than CO₂ as well as other industrial sectors. In its most simple form, industrial sites have been set emissions limits and if they fail to meet their targets in any of the phases, they will have to buy surplus credits (or 'allowances' as they are often referred to) from those sites that are below their target. Although only the EU-15 emissions are counted towards meeting the first Kyoto commitment, all the EU countries have National Allocation Plans (NAPs) and can trade within the market.

One of the most controversial aspects of the EU-ETS has been the allocation of emission allowances, which was negotiated between the respective installations covered by the scheme and the national governments responsible for the allocation. The NAP of each EU Member State describes how emission allowances have been distributed among the polluting sources covered by the scheme. The plans have proven to be enormously complicated to compile, claiming to

the permits were provided free of charge to industry which can now make substantial profits from selling this generous hand-out. Given that the most polluting industries have received such a generous slice of the emissions pie, the rest of the economy will have to bear the burden of making more expensive cuts in order to stay within the limit of what is left.

energy subsidies

Figure 3 shows the amount of subsidies allocated to the different energy industries for the year 2001 in the EU-15 according to the EEA. The report differentiates between two types of subsidy. It defines 'on-budget' subsidies as "cash transfers paid directly to industrial producers, consumers and other related bodies, such as research institutes", and are clearly visible on national budgets as government expenditure. In contrast, 'off-budget' subsidies are less visible and do not appear as a direct pay-out. They reflect the money that a government does not receive through a range of policies such as tax exemptions, credit and rebates. 'Off-budget' subsidies may also be registered as more abstract factors such as the preferential allocation of access to natural resources and planning consent.¹⁰ The EEA figures do not include

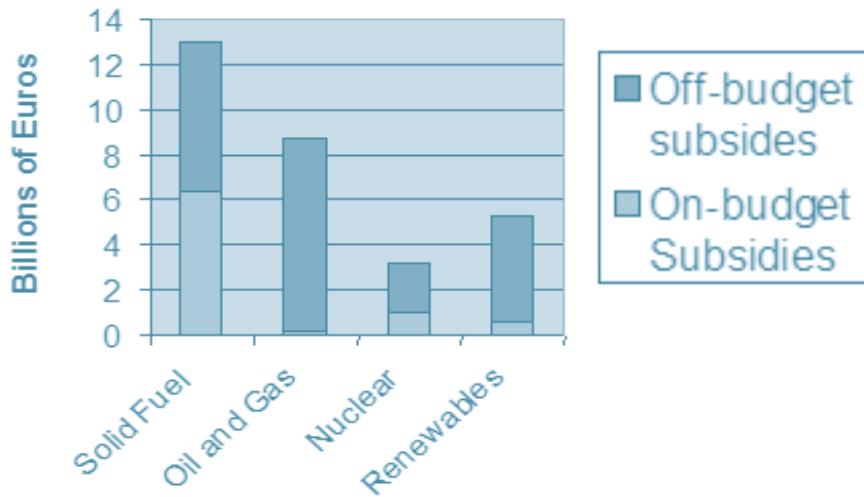


Figure 3 - 2001 Indicative Estimate of Total Energy Subsidies, EU 15
Source: European Energy Agency

environmental externalities - the damage that is caused to the environment through the production, distribution and consumption of energy such as the impacts of human-induced climate change or the long-term management of nuclear waste. If externalities were included, it would enormously increase the fossil fuel and nuclear energy subsidies relative to those of renewable energies, which have no or very localised impact.

Fossil Fuels - At 13 billion, this was the most heavily subsidised energy source in 2001. Germany was the single greatest subsidiser with over 4 billion in on-budget subsidies, and about 3.5 billion in off-budget subsidies through its exemption from taxation under the 1999 ecological tax reform. Between 1970 and 2003, the coal industry received 120 billion from the German government.¹¹ The highest levels of off-budget support for this energy sector occurred in Italy, the Netherlands and Britain. Britain supported oil and gas with reduced rates on VAT (5%) on domestic oil and gas, accounting for about 1.4 billion, while Italy's reduced rate of VAT on domestic gas (10%) amounted to a subsidy of about 0.9 billion. The low level of on-budget subsidies for this sector is a result of the bulk of oil reserve development occurring outside of Europe, and also the fact that the industry in Europe is largely privatised and receives very few on-budget subsidies.

Nuclear Power - It is important to remember that one subsidy that is not included in these figures is that under international treaty, the nuclear industry does not have to take out insurance to financially cover the catastrophic consequences of a serious nuclear incident. The

cost of insuring against this is too high for any insurer to undertake, and so the size of this off-budget subsidy actually makes the industry viable. The on-budget subsidies for nuclear energy come from research and development (R&D) grants from France, Germany, Italy and the European Community. Over the last 30 years, around 60 billion has gone into nuclear R&D from countries in the EU, more than for any other energy source.¹²

Renewable Energy - All of the EU-15 provide some measure of support for renewable energy through different means of off-budget support and very little in the way of on-budget assistance, but as the graph shows, this is somewhat dwarfed by the amount for fossil fuels. In 2001, the greatest levels of support came from Germany and Italy, where over 1 billion was provided, mainly in the form of 'feed-in tariffs', which is the price per unit of electricity that a utility or supplier has to pay for renewable electricity from private generators. Non-hydro renewable energy projects received funding worth 323 million between 1990 and 2003 from the European Investment Bank, out of a total of 18 billion that was loaned to energy projects.¹³ Despite the fact that promoting renewable energy production is said to be a policy priority across the EU, the funding reality does not seem to match the rhetoric.

“Powerful interests have hijacked the climate debate, and are forcing a corporate, free market approach - to the earth's peril,”

Tom Goldtooth,
Indigenous Environmental Network



part 2 fiddling while rome burns: the politics of kyoto

russian ratification and 'hot air'

The political arena in which Blair has positioned himself as a 'global leader' on climate change at the G8 is one characterised by the recent introduction of the Kyoto Protocol. The treaty could only become legally binding when ratified by enough countries to cover at least 55% of the 'rich' world's greenhouse gases at 1990 levels. When the US, which then accounted for about a third of these emissions, withdrew from the Kyoto Protocol in March 2001, it was necessary to bring Russia, and its 17% share of global emissions on board in order to bring the treaty into force.

Initially, President Putin would not commit to Russia's ratification. Commenting at a World Climate Change Conference in 2003, Putin explained his position: "People say we are a northern country and a temperature 2-3 degrees

warmer would not be scary, maybe it would be good... You would have to spend less money on fur coats and other warm things."¹ Andrei Illarionov, one of Putin's senior economic advisers, whose free-market influence is described by the *Asian Wall Street Journal* as being, "the best thing that ever happened to Russia,"² was so opposed to ratification that he described the protocol as, "a death pact... because its main aim is to strangle economic growth and economic activity in countries... an international Auschwitz."³

Behind such remarks, it appears that Russia has been involved in much political wrangling to maximise the benefit from its crucial ratification. Initially, Russia stood to benefit greatly from the Kyoto agreement through the trade in its 'hot air.' Industrialised countries pledged emission reductions in relation to the level of GHG



problems with kyoto: measurements and regulation

The fundamental problem with Carbon Trading and the Kyoto Protocol is that it relies on an accuracy of scientific measurement that is often impossible to attain. Establishing a solid, quantifiable basis for the trade of actual CO₂ emissions for hypothetical 'avoided' emissions through the use of carbon sinks, JI and CDM projects requires a biophysical knowledge of carbon flows among the atmosphere, biosphere and lithosphere that does not currently exist.¹ For example, after an enormous international research project in 2005 to quantify the flux of carbon dioxide between Russia's forests and the atmosphere, climate scientists in the journal *Nature* said that the range of uncertainty still varies from plus or minus 50%.² This uncertainty is of particular concern given that Russia received the largest allowance of any country for carbon sinks due to its large areas of forested land. In addition to the limitations of scientific knowledge in quantifying the flows in carbon cycles, there are also the various social and political obstacles to the accurate reporting and collecting of data, as in the case of Russia and the classified nature of emissions data relating to its defense complex in 1990.

Lack of regulation and enforcement present many problems in ensuring the accuracy of emissions data. In most countries the data is provided by polluting companies, resulting in an economic incentive for companies to cheat, and it appears that the prevention of such cheating is getting more lax rather than stricter. The Integrated Pollution Prevention and Control system monitors and controls industrial emissions across England and Wales and relies heavily on the emitters taking samples of their emissions and reporting the results to the British Environment Agency. A report from the Environmental Agency suggested that 40% of sites did not have satisfactory monitoring procedures in place. Despite this, from 2001 to 2005, the level of independent monitoring of industrial sites' emissions dropped by three-quarters.³

Regulation has also proved to be an issue with the implementation of CDM projects. There have been a string of incidents involving the companies that are authorized to ensure emissions reductions are actually taking place. One company had not even visited the project it was validating and was also part-owned by a parent-company that was an investor in the CDM project. After a meeting with the CDM Executive Board in 2005, the validators and applicant-validators agreed to take measures to avoid such incidents in the future, without specifying what such measures would consist of or how they would be enforced. Einar Telnes from the validation company DNV said, "We must establish self-justice internally."⁴

emissions in 1990. The collapse of the Russian economy in the 90s meant that its greenhouse gas emissions dropped by over a third.⁴ The resulting 'surplus' of unused emission permits allows Russia (and several other Eastern European countries), to now sell them to other industrialised countries who pledged to reduce emissions but might be tempted to buy their way out of domestic action by buying Russian 'hot air'.

On top of this 'hot air', Russian negotiators were able to exploit their crucial ratifying role during the 7th United Nations Climate Conference in Marrakech to forcefully and successfully push for an allowance of 33 million 'carbon sink' credits on account of its vast forests, which was double the figure that had been previously discussed. Russian figures are somewhat uncertain because all the data relating to CO₂ emissions of the Soviet

Russian credits. However, Canada announced in February 2005 that it will need to buy foreign credits in order to meet its reduction commitments.⁸ Japan, which does not appear on course to achieve its 6% reduction target⁹ may also be a potential customer.

Though the dramatic devaluation of the potential market dampened Russia's enthusiasm for the Protocol, it was still in a position to extract favours in return for its ratification, specifically as leverage with the EU to win more favourable conditions in negotiations on accession to the World Trade Organisation. In May 2004, Putin announced that, "the EU has met us halfway in talks over the WTO, and that cannot but affect positively our position on the Kyoto Protocol,"¹⁰ and in October 2004, Russia agreed to ratify the treaty. Previously the negotiations had stalled over

defence-industrial complex were classified at the time of the baseline year 1990.⁵ Even today Russia still lacks a standard unified system of reporting for industrial facilities, which is one of the many ambiguities that cast so much doubt on the supposed empirical base to emissions trading.⁶

These factors have left Russia with an enormous pool of surplus credits it can now sell. The existence of this 'hot air' is cause for concern as the excess supply of credits in the market may depress prices and undermine the incentive to invest in real reductions—even real reductions in Russia and other Eastern European countries.

Economists initially suggested that the permits might have fetched prices as high as \$200 per tonne, but the withdrawal of the US from the Kyoto Protocol meant that Russia lost the single biggest, wealthiest customer for its hot air surplus. Russia has been told by other European countries that there is no significant demand for its hot air, and figures as low as \$3.50 to \$5 per tonne have been suggested, with some in Russia arguing that this was an unacceptable figure while \$30-40 per tonne would be much more reasonable.⁷ It remains to be seen whether the European signatories will achieve their emission reduction targets without needing to purchase

the European Union's insistence that Russia end its practice of setting artificially low domestic energy tariffs, which Brussels claimed gave unfair trade benefits to Russian producers.¹¹ It would seem that Russia agreed to ratify the Protocol, while making a token increase in its domestic energy tariffs that would make it appear that it had acquiesced to the demands of the EU who would then accept its entry into the WTO. Russia, the largest nation to be left out of the 147-member world trade governing body, must still strike agreements with the United States and China before becoming a full member, giving it much greater access to lucrative foreign markets under very beneficial conditions.

Two other factors may have influenced Putin to push for Russia's ratification. Firstly, it may have bolstered his tarnished international reputation following recent heavy-handed crackdowns on independent provincial governors and dissident journalists. And secondly, Russia is still positioning itself to be accepted in the ranks of the economic elite of the G7 from which it is currently excluded, and its Kyoto ratification may have partially been an apparently unsuccessful attempt to gain favour in this endeavour. Next year, Russia will be hosting the G8, but it seems that Germany will inherit the chair of the G7 from the UK.



dioxide, mercury and other atmospheric pollutants through a package of tax incentives and tradable pollution credits. He committed his administration to cutting "greenhouse gas intensity" by 18% over the next 10 years, but crucially based the calculation of this intensity on greenhouse gases produced relative to the Gross Domestic Product (GDP). This linking of emissions to GDP reflects Bush's dogmatic belief that his "approach recognizes that economic growth is the solution, not the problem. Because a nation that grows its economy is a nation that can afford investments and new technologies."¹⁴ The ratio however

the question of the usa

One of the key questions of the G8 remains how to engage the US in taking action on emissions reductions. US President Bush has remained steadfastly opposed to any commitment to the Kyoto Protocol. In his statement in March 2001 when he rejected the treaty, he said that while he was in favour of the development of "technologies, market-based incentives, and other innovative approaches to meeting the challenge of global climate change", he would "not accept a plan that will harm our economy and hurt American workers".¹² The US administration argues that the fact that countries in the Majority World are not required to make any commitment to making emissions cuts in the first reduction period would give them an unfair economic advantage over US industry. While it is historically the West's profligate use of fossil fuels that has caused climate change, the emissions of rapidly expanding economies like India and China now rank amongst the worlds highest net emitters.¹³

Facing international criticism for his isolationist stance, in February 2001 Bush presented a domestic plan based on voluntary action in place of the mandatory emission cuts of the Kyoto agreement. Entitled the Clean Skies Legislation, it consisted of measures to cut power plant emissions of sulphur

observes the fact that no net cuts in emissions would be made under this plan. Chris Flavin, energy analyst and President of the Worldwatch Institute estimated that it would leave the US producing at least 35% more GHGs in 2010 than would be permitted under the Kyoto Protocol.¹⁵

The Bush administration intends its Clean Skies Legislation to be a model that other developing countries could aspire to as an alternative to the Kyoto Protocol, when after the first period of commitment, other countries will be obliged to commit to the treaty. Bush stated that, "The greenhouse gas intensity approach I put forward today gives developing countries a yardstick for progress on climate change that recognizes their right to economic development.... The United States will not interfere with the plans of any nation that chooses to ratify the Kyoto Protocol. But I will intend [sic] to work with nations, especially the poor and developing nations, to show the world that there is a better approach."¹⁶ A lot of NGO, governmental and civil society activity has gone into an unsuccessful attempt to pressure Bush to ratify the Protocol, while much less attention has been paid to how Bush might be influencing other countries' attitudes towards emissions reductions.

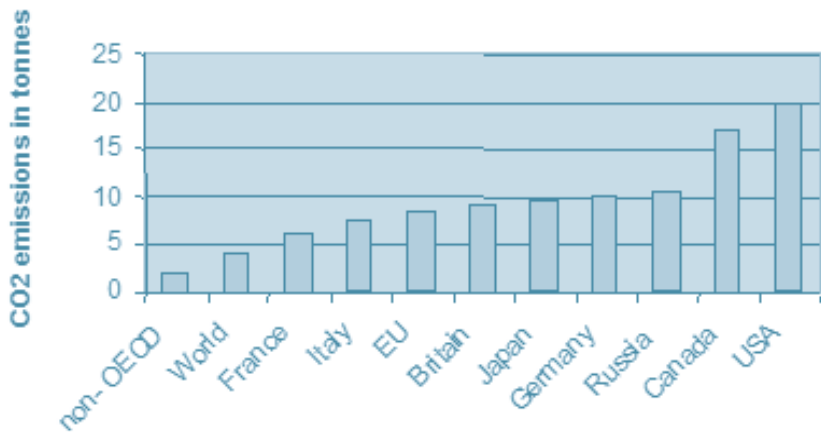


Figure 5 - *per capita* CO₂ emissions 2002

Source: International Energy Agency

It was reported in April 2005 that Blair was intending to use his 'special relationship' with the US and the political favour he had garnered with

by the Commission is to gather the 7 largest emitters as "a relatively small group - EU, US, Canada, Russia, Japan, China and India [...to] try to accelerate progress at the global level by discussing reductions [...] in parallel with the UN forum".²⁰

life after kyoto

Bush through his support of the invasion of Iraq to entice the US into a new climate initiative that could bypass the White House's disdain of the Kyoto Protocol. Downing Street confirmed that Blair had "lengthy discussions" with Bush on the matter, and The Times newspaper reported that the 'Kyoto-lite' deal involved "scientific agreement on the scale and nature of the threat, as well as an international programme to develop the technology needed for renewable energy and the reduction of carbon emissions."¹⁷

However, in the run-up to the 2005 summit, the US appeared to still be firmly opposed to Blair's attempts to draw them into any kind of commitment. At one of the G8 climate change meetings that took place in May 2005, US climate negotiator Harlan Watson reported that, "We're still not convinced of the need to move forward quite so quickly, particularly if we would risk not only our economy but the world's economy if we move too quickly."¹⁸ There is a great deal of discussion as to what will happen after the first period of commitment ends in 2012. According to the European Commission, "the first and biggest challenge will be to draw all major world emitters - including the US and China - into a binding pollution-cutting scheme."¹⁹ One idea being floated

In May 2005, experts nominated by more than 100 governments met in Bonn to officially start the lengthy discussions of the post 2012 regime. The talks immediately revealed a fault-line between those that want to continue with greater Kyoto-style commitments, and those who want to start again with a different set of targets or even no legally binding targets at all. Possible alternatives suggested included the US style measure of linking reductions to GDP, as well as targets based on commitment to the introduction of renewable energy technology.²¹

The desire to keep the US at the negotiating table resulted in all manner of concessions that greatly diluted the original Kyoto Protocol,²² a process aided and abetted by numerous corporate lobby groups.²³ The combination of this political will to include the US at all costs, the general trend towards market based 'solutions' and Bush's intention to act as a role model for Kyoto alternatives, undermines the probability of the stricter, genuine emissions cuts that are being hoped for in the second Kyoto period.

Prominent politicians including Bush, ignoring the significant CO₂ emissions involved in the extraction, transport and containment of nuclear material, are claiming that nuclear energy is emissions-free.

There seems to be a sudden resurgence in support for nuclear energy driven by the seriousness of the threat of climate change. Prominent politicians including

“Nuclear is consistently profiled at the G8 in terms of its role as a zero emissions technology. The USA and other G8 countries support the principle of future nuclear and there is agreement between the UK and the USA to collaborate more closely on licensing. This is announced alongside a major UK-US carbon capture and storage initiative to reduce emissions from fossil fuel industries in both

the nuclear option?

Bush, ignoring the significant CO₂ emissions involved in the extraction, transport and containment of nuclear material, are claiming that nuclear energy is emissions-free. Tony Blair’s chief scientific adviser stated in May 2005 that Britain might need one more round of nuclear power plants.²⁴ France already generates a staggering 78% of its energy needs from its 58 nuclear reactors.²⁵ Unexpected support is now coming from a number of prominent ‘green’ groups and individuals who are now also reluctantly advocating the expansion of nuclear infrastructure. The most prominent example of this is James Lovelock, scientist and famed creator of the Gaia hypothesis of the Earth as a self-regulating organism, who last year declared that, “civilisation is in imminent danger and has to use nuclear - the one safe, available, energy source - now or suffer the pain soon to be inflicted by our outraged planet.”²⁶

The nuclear industry, after having been severely discredited at the hands of public opinion and social movements in response to horrific accidents in the 70s and 80s, is suddenly being rehabilitated as a potential saviour. Many industry eyes are looking to the G8 for the re-launch of nuclear power as a clean, climate-friendly energy source. In one industry magazine, the writer hypothesizes the following possible scenario:

developed and transition economies. The UK is seen to partly deliver on its promise to bring the USA back on board in the battle against climate change, and nuclear is increasingly popularised as part of the solution, not the problem.”²⁷

In this statement, nuclear power goes hand-in-hand with carbon storage as simply another one of the technological solutions that we need to combat climate change. Blair’s repeated refrain for the G8 to “invest on a large scale in existing technologies and to stimulate innovation into new low carbon technologies for deployment in the longer term”²⁸ could be an implicit reference to nuclear expansion as part of the G8 climate measures. There has been recent media speculation that Blair “is drawing up secret plans to create a new generation of nuclear power stations as the centrepiece of the Government’s drive to combat climate change.”²⁹ It remains to be seen how much of these plans will be included in Blair’s climate change strategy at Gleneagles, although a draft communiqué leaked in June 2005 explicitly endorsed the use of “zero-carbon” nuclear power.³⁰



carbon capture and storage

One of the technological 'quick-fixes' being pioneered is that of carbon capture and storage. This involves capturing the CO₂ that would otherwise be emitted when fossil fuels are burnt in power stations in a chemical process using liquid solvents. This 'liquefied' CO₂ is then pumped out and stored underground in disused oil and gas fields or in locations on the seabed to avoid it entering into the atmosphere. In June 2005, the British government offered a \$48 million funding package for the development of plans to capture CO₂ and store it in depleted North Sea oil and gas fields.¹ Concerns about this process include:

- Uncertainty as to whether storage of 'liquefied' CO₂ can be made permanent. While oil and gas fields are reasonably well understood over periods of a few decades, the long-term performance of seals and the character of other formations such as saline aquifers is much less well understood. CO₂ would need to be trapped permanently - at least tens of thousands of years, and some see stored carbon as a bequeathed hazard for future generations.
- Health effects. Slow leakage through soils and catastrophic leaks from pipelines can affect human health and ecosystems. CO₂ in high concentrations asphyxiates.
- It would divert investment in the installation and development of renewable energy capacity in favour of the continued dependence on fossil fuels. Carbon sequestration and storage does nothing to address the other problems associated with the fossil fuel industry, such as the exploitation of the Majority World, health problems from air pollution, deforestation, oil spills and the support of repressive regimes.²

France - Total emissions 1990-2002

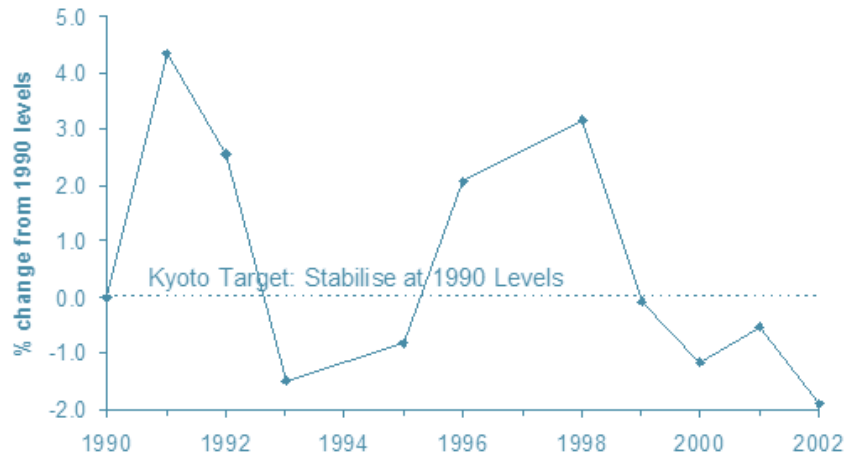


Figure 6 Source: International Energy Agency

country profile: france

likelihood of meeting kyoto targets

France has agreed to stabilise its emissions at 1990 levels by 2008-2012. To this end, a national climate plan was issued in 2004 including some 60 measures that were aimed at achieving its Kyoto target. This plan drew heavy criticism from environmental groups for relying largely on the good will of the major-emitters and information campaigns.

France has managed to keep its emissions relatively low throughout the 90s due to its heavy reliance on nuclear power, despite the fact that over the decade emissions from transport were up by 26% and up by 12% from domestic heating.¹ It seems that they will still not be able to achieve their targets without the use of flexible mechanisms. In March 2005, Prime Minister Jean-Pierre Raffarin proposed that France establish a 50 million carbon fund to purchase credits through CDM and Joint Implementation projects.²

emissions trading

The French NAP set itself a total allowance of 371.7 million tonnes of CO₂ for the first period of the trading scheme, which accounted for about 6.6% of the total allowances amongst the 25 EU countries.³ The initial NAP allocation from France was rejected by the EC on the grounds that it exceeded the projected cuts necessary to meet the overall EU Kyoto target, but in December 2004 the amended allocation was accepted by the EU.⁴ French state-owned entity Gaz de France is an investor in the World Bank's Prototype Carbon Fund.

"In an absurd contradiction the World Bank facilitates these false, market-based approaches to climate change while at the same time it is promoting, on a far greater scale, the continued exploration for, and extraction and burning of fossil fuels - many of which are to ensure increased emissions of the North."

Marcelo Calazans, FASE-ES, Brazil



part 3

'developing' the majority world: the g8, climate change and international financial institutions

"Export Credit Agencies (ECAs) are public agencies that provide government-backed loans, guarantees and insurance to corporations from their home country that seek to do business overseas in developing countries and emerging markets. Most industrialized nations have at least one ECA. They are collectively bigger than the World Bank Group (WBG) and finance more private-sector projects in the majority world than any other institution. Most of them however have no social or environmental standards, and are keen to offer credit with the least binding environmental restrictions possible, leading critics to accuse them of funding projects with harmful impact to both the environment and local communities."

ECA-Watch

the g8 and export credit agencies

Apart from a potential resurgence of nuclear power in Northern countries, there are a number of nuclear facilities being developed in the Majority World,

many of them with the direct involvement of G8 countries through ECAs. In 2001, 25 nuclear reactors were under construction throughout the world. Of these 14 were being funded in part by an ECA from a G8 country.¹ China is the key country for the construction of new reactors, accounting for over a quarter of them. All of these reactors receive financial support from at least one ECA of a G8 country. In 1992 alone, over \$6 billion of funds from the G8 ECAs was earmarked for the new reactors.² It is one of the serious concerns with regards to current nuclear expansion that agencies which have been so heavily criticised for lack of transparency and environmental and social regulation should be so engaged in the development of such potentially catastrophic technologies.

ECAs are also heavily committed to the development of fossil fuel projects in the Majority World. Instead of decelerating the dependence of

countries in the Majority World on fossil fuels, ECAs are investing heavily in their long-term consumption and therefore GHG emissions. A report from the World Resources Institute highlights the gravity of this situation, showing that from 1994-1999, ECAs co-financed (through loans, risk guarantees or investment insurance) \$103 billion in exports and projects for oil and gas development, fossil-fuel power, transportation infrastructure, aircraft sales and energy-intensive manufacturing.

The biggest recipients of this financing included the highest, developing country³ emitters, China, India, and Brazil, while the G7 countries provided the majority

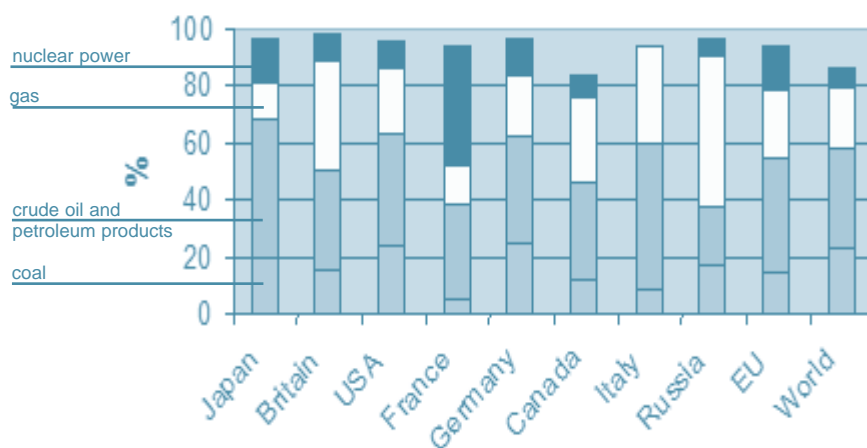


Figure 7: 2002 Primary Energy Supply (fossil fuels and nuclear power)
Source: International Energy Agency

of this funding through agencies which mostly had no formal environmental assessment policies, disclosed almost no environmental information to the public, and did not evaluate the emissions of the projects they financed.⁴

Investment in this fossil fuel infrastructure now results in increased emissions for decades to come, with the average power plant functioning for 30 to 40 years. There is a great deal of concern that the expansion of fossil-fuel plants by non-Kyoto signatories will negate the modest emissions cuts that are being aimed for. In his study "The Price of Power,"⁵ Andrew Simms gives the example of two major US-based ECAs, the Overseas Private Investment Corporation and the Export-Import Bank, which between 1992 and 2002 were responsible for the investment of about \$32 billion in fossil fuel extraction and power plant construction in the Majority World. One study estimated that a staggering 29.3 billion tonnes of CO₂ (roughly equivalent to the current annual global total of CO₂ emissions that humans are responsible for) could result over the lifetime of fossil fuel plants receiving support from these two agencies between the years of 1992 and 1998 alone.⁶ In 2004 there were plans in various stages of development to build nearly 850 new coal-fired power plants in India, China and the US. According

to an analysis of the construction data by the Christian Science Monitor, by 2012 these plants are expected to emit as much as 2.7 billion tonnes of CO₂ each year, while countries who adopted emission targets under the Kyoto Protocol are supposed to have cut their CO₂ emissions by some 483 million tonnes by this time.⁷

Civil society organisations have repeatedly called for ECAs to switch from financing carbon-intensive projects to renewable energy technologies. As has already been noted in this briefing, such institutional reform was also one of the key proposals of the G8 Renewable Energy Task Force, and at COP 7 in Marrakech, governments agreed as part of Kyoto that ECAs should be encouraging the global transfer of climate-friendly technologies. At the G8 Okinawa summit in 1999, the G8 heads of state agreed to negotiate common environmental guidelines for ECAs. To date, consensus has not been reached. Where there has been discussion, there has been a noticeable lack of reference to evaluating project impacts on greenhouse gas emissions or contributions to energy-efficiency improvements.⁸ This seems contrary to Blair's purported aim for the G8 to work "with the rapidly developing economies like China, India, Brazil and South Africa to find a way for them to grow and develop as low carbon economies".⁹

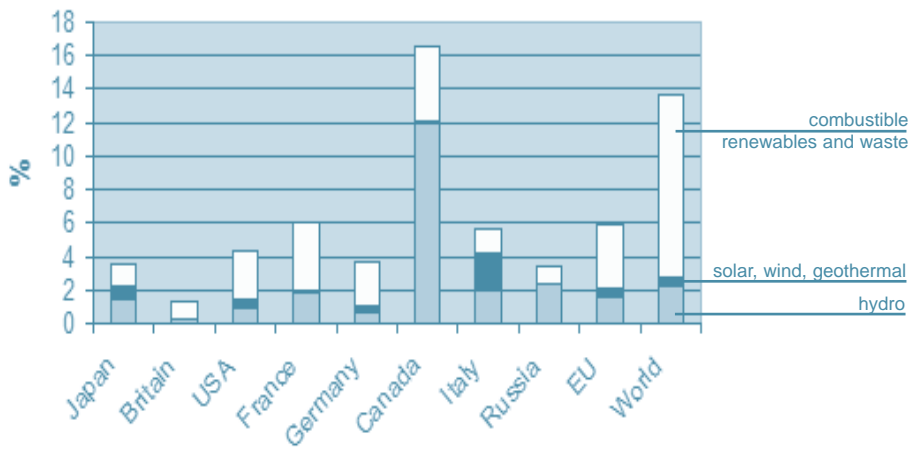


Figure 8: 2002 Primary Energy Supply (renewable energy)
Source: International Energy Agency

Note: The bars from each country in figures 7 and 8 add up to the total 100% of primary energy supply (excluding electricity trading between countries). They have been represented on separate graphs as the scale for the renewables energy percentages is so much smaller than that for fossil fuels and nuclear power.

subsidising the climate crisis

ECAs are not the only way that the G8 countries are expanding the carbon economies of the Majority World. Subsidies are difficult to quantify, as often they do not consist of a monetary value like a direct financial transfer, but could come in the form of trade restrictions, regulatory instruments, preferential tax treatment, company bail outs or publicly funded research and development. A large part of the workings of the G8, especially in terms of fostering consensus amongst the global economic elite can be seen as forms of non-financial subsidies that carry a great deal of influence. However in terms of purely monetary estimates, one well-researched study using a variety of sources suggests that between 1995 and 1998, fossil fuel energy in the OECD nations was subsidised at about \$73 billion per year, and in non-OECD countries, the figure was even higher - \$162 billion.¹⁰

The body of criticism of fossil fuel subsidies is overwhelming. A report from the United Nations Environment Programme and the International Energy Agency in 2002 reported that, "subsidies that encourage the production and use of fossil fuels are usually bad for the environment. They can also be very costly, placing heavy burdens on government finances, undermining investment in the energy sector and reducing incentives to use

the disadvantages of fossil fuel subsidies

"Subsidies that lower consumer prices lead to higher energy use and reduced incentives for energy efficiency

Direct subsidies in the form of grants and tax exemptions act as a drain on government finances

Consumption subsidies in developing countries either create higher demand for fossil fuel imports (or reduce amount of energy available for export), acting as a drain on foreign exchange earnings

Subsidies to specific energy technologies act as a drag on investment in research and commercialisation of other promising technologies

Subsidies tend to favour large-scale projects at the expense of small distribution systems, meaning that the main beneficiaries tend to be urban and wealthy consumers, rather than the poor"

(source: World Resources Institute)

energy efficiently. What's more, they often bring few benefits to the people for whom they are intended. Reforming energy subsidies must, therefore, be a central plank of government efforts to promote sustainable energy systems."¹¹ In March 2005, the Institute for Public Policy Research released a study calling on the G8 to end fossil fuel subsidies as part of its 2005 climate change agenda, with its author commenting that, "It is time for governments to put a stop to the multi-billion dollar hand-outs given to the fossil fuel industry. To prevent dangerous climate change, the playing field urgently needs to be leveled, so that clean, renewable energy technologies can compete fairly."¹²

Despite the broad body of evidence showing that fossil fuel subsidies are exacerbating climate change, in June 2005 a senior British energy official informed the *Financial Times* newspaper about a

package of tax-cuts and incentives for large oil companies on the Gleneagles agenda in order to stimulate refining capacity and reduce the risk of shortages.¹³ Again, the rhetoric of paying urgent attention to the threats posed by climate change is at odds with the G8's 'business as usual' commitment to ensuring the expansion of the carbon economy.

Hypothetically, removing subsidies and 'leveling of this playing field' is entirely consistent with the G8's commitment to free market reform. In reality, the lack of action on this matter illustrates the extent of the dependence of global economic expansionism on access to cheap fossil fuels. It also exposes the double standards of G8 economic policy, in carefully maintaining protectionist measures when in the interests of Northern corporate interests, and stripping them away if not.

the world bank prototype carbon fund (PCF)

The PCF is a fund invested in by seventeen companies and six governments and managed by the World Bank. It became operational in April 2000, and claims to "pioneer the market for project-based greenhouse gas emission reductions while promoting sustainable development."¹ Such projects are eligible to earn carbon credits, either as Joint Implementation in industrialised countries, or Clean Development Mechanism in the Majority World.

In April 2004, eighty environmental and social justice groups delivered a letter to the World Bank calling for the closure of the fund, condemning it as "destructive greenwash," and that instead of solving problems, it has "exacerbated existing human rights violations and furthered environmental destruction."²

One of the most well publicised and highly controversial PCF projects is the planting of 23,100 hectares of eucalyptus trees in a rural area of Minas Gerais in Brazil. The project claims to reduce emissions by using eucalyptus trees to make charcoal, supposedly avoiding a shift to the use of coal as an energy source, which emits higher level of CO₂. In addition to this, forestry company Plantar is seeking to gain credit for its industrial tree plantations it claims act as a carbon 'sink', temporarily storing carbon which will eventually be released back into the atmosphere when the trees are cut and turned into charcoal.

Critics state that the plantations have an enormous negative impact on biodiversity, create appalling conditions for the local labour force (many of whom have been impoverished after having been evicted from their land to make way for the plantations), and heavily pollute and reduce the surrounding water sources, devastating the livelihoods of farmers and fisherfolk.³ The Norwegian company that verifies carbon credit schemes, Det Norske Veritas, has stated that a lack of clarity on the rules means they could not guarantee that the project actually will have a permanent positive effect on the climate.⁴

In addition to projects such as Plantar, the PCF is also funding four large hydro-electric installations as CDM projects, none of which have demonstrated compliance with the World Commission on Dam's criteria and guidelines.

Five out of the G8 countries are donating large sums of money to the PCF, either as a government, as in the case of Canada and Japan (through the governmental institution, the Japan Bank for International Cooperation), or through some of the major corporations of that country. These include BP in Britain, Gaz de France in France, RWE and Deutsche Bank in Germany and Chubu Electric Power Co., Chugoku Electric Power Co., Mitsubishi Corp., MIT Carbon and Tokyo Electric Power Co. in Japan. As a PCF investor, the company is eligible for a *pro rata* share of credits from the PCF projects. Governments may use these credits towards their Kyoto targets, while companies can use them within markets such as the European Union Emissions Trading Scheme.

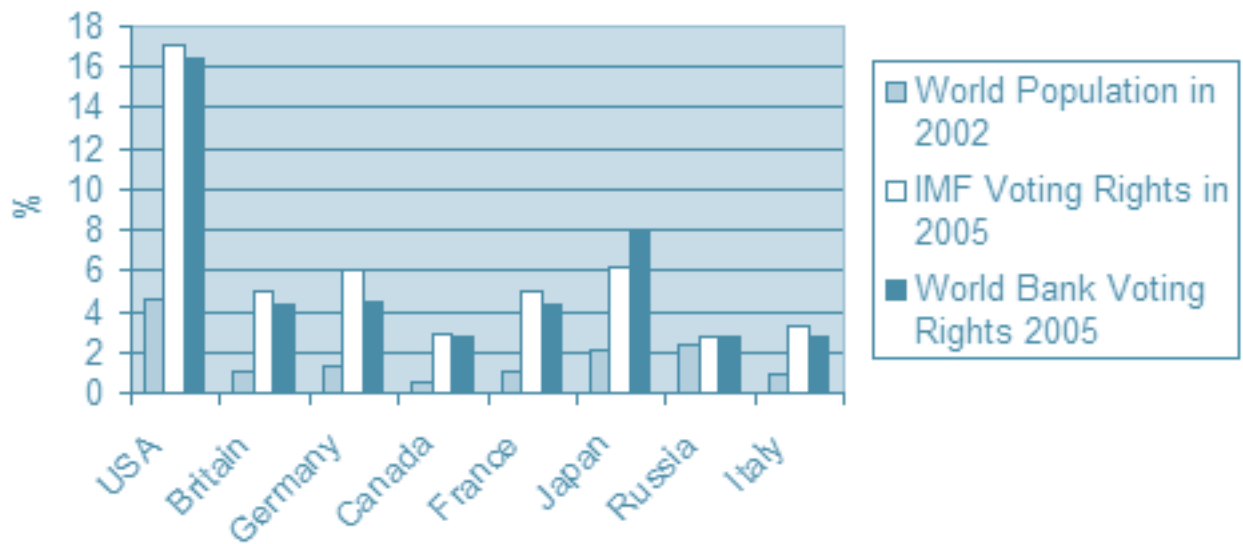


Figure 9 - G8 Voting Rights in the World Bank and IMF
Source: World Bank and IMF websites

the imf

In 2005 the G8 countries held 48% of the voting rights within the IMF (see figure 9).¹⁴ Created at the same Bretton Woods Conference that saw the creation of the World Bank in 1944, it aims to supply member states with money to help them overcome short-term balance-of-payments difficulties.

Such money is only made available, however, after the recipients have agreed to neoliberal policy reforms in their economies - in short, to implement a Structural Adjustment Programme. Although the IMF is not an environmental institution, its role in implementing economic stabilisation and structural adjustment policies means that it has a major impact on climate change.

One of the major goals of the IMF is to pressure developing countries to generate foreign exchange through exports. In order to meet the IMF's ambitious targets, the country often resorts to over-exploiting its natural resource base, which could be composed of fossil fuel deposits.

In such situations, the imposition of an import-export model opens up this resource base to foreign

Deforestation and land-use changes - often resulting from IMF-imposed Adjustment Programmes - are responsible for at least 20% of annual CO₂ emissions.

markets with all the ensuing problems that are examined in the next section in the context of the World Bank.

Governments are often instructed by the IMF to rapidly trim budget deficits, and it is often the budget that is allocated to environmental regulation that is seen as being expedient. Decreased spending weakens government's ability to enforce environmental laws and diminishes efforts to promote measures such as energy efficiency, cutting emissions and preventing illegal logging. Deforestation and land-use changes - often resulting from IMF-imposed Adjustment Programmes - are responsible for at least 20% of annual CO₂ emissions.¹⁶



image by quinder

the WBG invested in since 1992 were aimed towards export back to the West, according to a study by the Sustainable Energy and Economy Network, effectively resulting in a fossil-fuel subsidy to the West under the guise of 'development'.²⁰

Behind the statistics of dollars and tonnes, are countless stories of people whose day-to-day lives have been impacted by these projects. The WBG has faced a barrage of criticism for their projects involving a variety of human rights abuses, large scale displacement of local populations and inadequate environmental regulation.²¹ One recent WBG funded project that has proved controversial for these reasons is the Chad-Cameroon Oil Pipeline, where "thousands of people have had their lands expropriated, crops and other plants destroyed and water sources polluted without adequate compensation. Some victims received no compensation at all, as in the case of the Bakola and Bagyeli ('pygmies') in the forest zone in Cameroon."²² Another example is BP's Baku-Ceyhan

"...[the World Bank] over the decade from 1994 to 2003... approved over \$24.8 billion in financing for fossil fuel extraction and power projects while in the same period just \$1.06 billion went to renewable energy projects."

the world bank

The World Bank Group (WBG) is made up of five agencies that make loans or guarantee credit to its 177 member countries. Apart from financing projects such as roads, dams and power plants, the Bank also makes loans to restructure a country's economic system by funding Structural Adjustment Programmes. It manages a loan portfolio totalling \$200 billion and in 2004 loaned a record \$28.9 billion to over 80 countries.¹⁷

The World Bank is one of the major protagonists in the development of carbon-intensive projects in the Majority World, and its 'one dollar, one vote' voting system means that the G7 countries directly control some 46% of the voting rights (see figure 9).¹⁸ Each country has the privilege of electing its own executive director to sit on the 24-strong board which makes the decisions on project funding and thus have enormous influence on the WBG. According to a report by the Institute for Policy Studies of World Bank lending over the decade from 1994 to 2003, it approved over \$24.8 billion in financing for fossil fuel extraction and power projects while in the same period just \$1.06 billion went to renewable energy projects - a ratio of 23-1.¹⁹ A large part of the investment in fossil-fuel extraction flows straight back to the West. As much as 82% of oil projects that

pipeline, which will create a thousand mile militarised corridor through or near seven different conflict zones and three countries with very poor human rights records. The project, which has required the confiscation of people's land and which is causing economic and physical disruption to hundreds of communities along the route is carrying oil destined solely for the West, with no alleviation of the fuel-poverty of the region.²³

During the World Bank meeting in Prague 2000, in the face of mounting international criticism and a global PR crisis, then President, James Wolfensohn initiated the Extractive Industries Review, which pledged to evaluate the poverty alleviation impacts of the Bank's involvement in fossil fuel extraction in the Majority World. The Bank appointed Dr. Emil Salim, the former Indonesian Environment Minister under Suharto and a Director of Indonesia's largest coal company to direct the review, which was eventually released at the end of 2003. The report was strongly critical of the Bank's record in terms of development, human rights and the environment and concluded that there was little connection between the Bank's primary aims of poverty reduction and sustainable development and its support for the extractive industries sector. It recommended that the Bank adopt significant

reforms, including doing more to reduce poverty, immediately ceasing funding for coal projects worldwide and phasing out its support for oil production by 2008.²⁴

Despite the findings of the report and the fact that in October of 2001, James Bond, then the head of the World Bank's mining department, pledged on behalf of James Wolfensohn that "if the review determines that certain policies or programs have detracted from our goal of poverty reduction, we are committed to implementing changes to redress those problems,"²⁵ very little seems to have changed. When the Bank's Board of Directors finally discussed the report in August 2004, they endorsed some token commitments to change. For example, while they pledged to increase renewable energy financing by 20% annually, this increase was calculated using a baseline that was so low that the target for renewable energy support in 2005 was lower than the loans for renewable energy in 1994.²⁶

the region."²⁹ In a letter to CEE Bankwatch, defending its environment record, the EBRD complains that it cannot achieve better results on its environmental programs due to "the slow process of privatization" in much of the region.³⁰

IDB: a thirst for dams

A large part of the Inter-American Bank for Development (IDB) mandate involves easing the passage of neoliberal agreements in the region including the DR-CAFTA that creates a free trade zone between six countries in the Central America and the Dominican Republic. The bank advises policy-makers on developing "national and regional strategies for a competitive transition of agriculture and the rural economy of Central American countries in light of further trade liberalization." It also employs strategies similar to controversial structural adjustment policies by, for example, instructing impoverished countries such as Nicaragua to "rationalize public spending".³¹

regional banks

EBRD: fuelling the industry

Numerous initiatives have also been launched by the world's regional development banks such as the European Bank for Reconstruction and Development (EBRD) which is in the final stages of setting up its Multilateral Carbon Credit Fund (MCCF). The Fund is expected to provide \$50-150 million of financing for carbon offset schemes in Central & Eastern Europe and the Former Soviet Union. The move comes at a time when the EBRD has been under severe criticism for its financing of fossil-fuel and nuclear projects in the region, including the controversial BP-backed Baku-Tbilisi-Ceyhan pipeline, and Shell's Sakhalin-II pipeline in Russia. According to Friends of the Earth, the EBRD has provided \$1.8 billion in financing for oil and gas projects since 1993 representing a massive amount of greenhouse gas emissions.²⁷ The Baku-Tbilisi-Ceyhan pipeline alone is expected to contribute to 160 million tons of carbon dioxide per year - nearly 30% of the UK's total annual greenhouse gas emissions alone.²⁸

The EBRD primarily supports private sector initiatives and its carbon fund is no different. Jan-Willem van de Ven from the bank's Energy Efficiency Department admits that the EBRD intends to use the fund to "significantly expand the presence of the carbon market's private sector in

The IDB has also been expanding its lending in Latin America for carbon offset projects under the aegis of the CDM. In tandem with the World Bank's Prototype Carbon Fund, the IDB has been particularly focused on providing financing for a number of controversial hydroelectric projects in the region, claiming that the projects meet sustainable development goals. The IDB's financing of huge infrastructural projects in the region such as medium and large-scale hydroelectric dams has provoked much unease among local communities. Just recently, a group of 300 people occupied the offices of the IDB in Brazil in anger at its role in financing two dams in the North of the country.³²

Approximately 30% of the emission reductions purchased through the Prototype Carbon Fund are from Latin American and Caribbean nations over which the IDB carries significant leverage.³³ The allure of carbon investment by such funds combined with general pressure to open markets has provoked some governments in the region to liberalise investment in their energy sectors. For example, the IDB has been increasingly promoting private sector involvement in the development of small and medium-sized dams with the interests of leveraging carbon financing for them. In response, the Government of Mexico recently eased restrictions

Italy - Total emissions 1990-2002

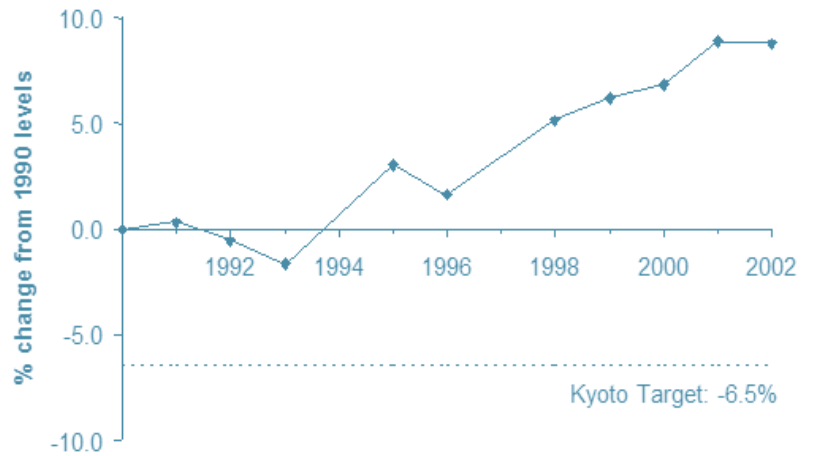


Figure 10 Source: International Energy Agency

on corporate investments in small and medium-scale hydropower projects under pressure from the IDB. For the first time in the country, private hydroelectric plants will operate and sell energy they produce to

country profile: italy

industry and municipalities for self-consumption and export. The Mexican government "gave the green light to construct these types of medium-scale plants and offered concessions for canals and dams so that the private sector can operate."³⁴ As one IDB economist observed ominously, "The Clean Development Mechanisms of the Kyoto Protocol may well enlarge the list of hydro projects that could be competitive in the new energy markets of the LAC [Latin American and Caribbean] region."³⁵

The role of the CDM in the financing of dams is a symptom of the trend to constrain environmental problem-solving within parameters set by free-market economic policy. In the context of the parallel economic forces at work in DR-CAFTA and the controversial Plan Pueblo Panama (PPP) and Free Trade Agreement of the Americas (FTAA) negotiations, Kyoto and aspirations to avert climate change become subsumed and reshaped to reflect business-as-usual. This is a common occurrence when environmental policy enters the orbit of the free market.

likelihood of meeting kyoto targets

In February 2005, the Italian Minister for the Economy, Domenico Siniscalco admitted that it was going to be a struggle for Italy to achieve its 6.5% reduction target, given the fact that in 2002, emissions levels were 8.8% higher than 1990 levels. The Minister concluded that domestic cuts would not be enough and that Italy would have to resort to the use of flexible mechanisms. In the same statement, Siniscalco disputed the legally binding nature of the Protocol, saying that "Kyoto coming into force is not ... a law but a process, a direction in which we are walking," and that "It is not that we should take these targets too literally."¹

emissions trading

In May 2005, the EC accepted Italy's long overdue NAP for the 2005-2007 trading period, after the Italian authorities agreed to lower significantly the total number of allocation by 23 million tonnes of CO₂ annually or 9%, enabling its delayed entry into the EU-ETS. The revised NAP is for an annual average of 232.5 million tonnes of CO₂ over the initial trading phase, which accounts for 4.1% of the total allocations amongst the 25 EU countries.² The added cut in the Italian plan helped send European CO₂ prices to a new high, at 19 per tonne emitted.

Italy has already established the World Bank-administrated Italian Carbon Fund with an initial endowment of \$15 million, with contracts for projects to allegedly reduce emissions by several million tonnes already contracted. It has also invested in a number of other World Bank managed carbon funds, namely the Prototype Carbon Fund, the BioCarbon Fund and the Community Development Carbon Fund.³

"The world is not made by specialists. There are people in the lands who know what they want and you do not hear them. And that's the important thing - to hear those people's ideas."

Daniella Meireles, Brazilian forest activist



part 4 costing the earth: the price of 'pricing nature'

"In the new era of scarce sky, there will, of necessity, be an economy of sky. Property rights will be established, prices will be charged, and money will change hands. A lot of money. As a result of the current global warming crisis, the establishment of these new property rights will occur soon. Owners of sky will collect rent that will flow back into the economy, just as land rent does now."

Peter Barnes and Rafe Pomerance,
'Pie in the Sky', 2000¹

A number of economists, agencies and NGOs have been working for some years now to promote the use of market forces to solve environmental problems. By assigning a price to nature's 'services', such as the earth's ability to absorb greenhouse gases, proponents believe that markets will begin to internalise this information in language familiar to commodities brokers in

the world's financial centres. This can be seen most clearly within the climate change debate where enormous amounts of time and energy have been devoted by business groups, NGOs, emissions brokers, government and UN agencies on affixing a price to the world's foremost greenhouse gas - carbon dioxide. "We are now living in a new world where carbon has a price...", says one NGO supporter of market-based solutions to climate change.² Another conservationist asserts that "we [environmental NGOs] can change them [polluting companies] by giving them the right incentives by putting a price to carbon."³ *The Economist* magazine recently reiterated its support for such market-based environmentalism adding its hope that, "perhaps soon, the best things in life will not be free."⁴

It has long been recognised that the economy tends to ignore⁵ the environmental 'externalities'



they began to seriously examine the question: "What are Mother Nature's life-support services worth?"¹² In an effort to formulate an answer, a number of economic models and tools for assessing the value of earth's 'natural capital' have been devised and have influenced the development of key reports such as the UN Millennium Ecosystem Assessment¹³ which Secretary-General Kofi Annan praised for setting-out "common-sense strategies" for preserving "natural capital for development."¹⁴ The Millennium Ecosystem Assessment itself is littered with such language and makes a number of recommendations for market-based 'solutions' to environmental problems such as various forms of emissions trading for land, air and water pollution as well as full pricing of 'ecosystem services'.¹⁵ "While some functions of nature will always struggle to be reflected in markets, new opportunities are emerging to put a price on services previously assumed to be free."¹⁶

(such as the cost of cleaning up pollution) associated with the production and consumption of goods and services.⁶ Some argue that markets need to factor in the real monetary costs to such things as air pollution and oil spills in order to change corporate and consumer behaviour towards more sustainable activities.⁷ While some environmentalists view any discussion of externalities and environmental costs to be largely a tactical one (so as to be able to highlight inequities in the economic system),⁸ there are those who believe that the spreadsheet is the best weapon in the fight to save people and planet.⁹ The latter view is shared by the likes of the US-based Competitive Enterprise Institute, a free-market think-tank, which prefers to see the problem of externalities "as a failure to permit markets and create markets where they do not yet - or no longer - exist."¹⁰

Pro-market rhetoric has become increasingly commonplace in environmental policy circles with strong ideological backing from agencies such as the World Bank and the UN Environment Programme as well as groups such as the World Resources Institute, IUCN-World Conservation Union, and the Ford Foundation.¹¹ But the shift in language accompanied action. By the early 1990s

Such inventories of nature's 'assets' have also gone hand-in-hand with elaborate proposals and concerted (and largely successful) efforts by corporate lobby groups and think-tanks to remove or 'structurally adjust' environmental regulations and install free-market policies in their stead.¹⁷ Terry Anderson, a neoliberal economist and co-author of the 1991 book 'Free Market Environmentalism' describes how attitudes in the US Government have changed over the years: "One example of how the rhetoric in resource management has shifted because of FME's influence is that years ago I was invited to speak in front of the Bureau of Reclamation of the Department of the Interior. The commissioner of the bureau burst out, 'I've had enough of you kiddie-car economists telling me what to do!' He was afraid to discuss even the possibility of markets working. But, recently, I was invited back to the bureau to discuss how the Department of the Interior might privatize water projects, which shows how the debate has shifted in favour of market solutions. The environmental community in general has embraced market approaches; from as far away as Africa, almost everybody is at least considering market solutions."¹⁸

Many years later, at the height of the Cold War,²³ US biologist and eugenicist, Garrett Hardin, expanded on Malthus's theories by championing privatisation as the most effective means to preserve nature against the 'threat' posed by 'overpopulation'. "The pollution problem is a consequence of population," which he says calls "for a redefinition of property rights."²⁴ According to Hardin, the struggle for freedom and justice should be anathema to the environmental movement.²⁵ Pursue "complete justice" and bring upon the world "complete catastrophe."²⁶ The ideological underpinnings for such schemes as emissions trading ride in the wagon-wheel ruts of his neo-Malthusian advocacy. "Effective demand can be reduced by converting community property into saleable private property, which is then sold by auction."²⁷ His essay, *The Tragedy of the Commons*, continues to serve as a rallying-cry for free-market environmentalists and neo-Malthusians to this day.²⁸ Its racist undertones

dubious origins: the legacy of Malthus



Many of the underpinnings of this discourse can be traced back to the work of neo-Malthusians¹⁹ in the post-WWII years who drew upon Thomas Malthus' brutal ideas about economics and population to champion an environmental case for enclosure and commodification of natural resources.²⁰ Thomas Robert Malthus (1766-1834) was an English clergyman and economist who posited a number of controversial theories about population dynamics, labour relations, class, poverty and sexual relations which continue to have an impact to this day. He advocated privatisation and the dismantling of commons management systems as a way to restore 'nature's equilibrium' and advanced policies that institutionalised misogyny, social exclusion, and helped undermine many of the progressive developments of his time. He challenged the notion of economic or social justice arguing that inequality was a natural phenomenon.²¹ "A man who is born into a world already possessed, if he cannot get subsistence from his parents, and if the society do not want his labour, has no claim of right to the smallest portion of food. At nature's mighty feast there is no vacant cover for him. She tells him to be gone."²²

can sometimes be heard in the climate debate when privileged groups in the North drum-up fears about the fossil-fuel consumption of populous countries such as China²⁹ as a way to shift the emphasis away from their own over-consumption. As US academic Betsy Hartman paraphrases, "better the one child family over there than a one car policy here..."³⁰

Malthus and Hardin have many contemporaries. London School of Economics professor John Gray rejects the notion that economic policies are to blame for environmental degradation. "The destruction of the natural world is not the result of global capitalism, industrialisation, 'western civilisation' or any flaw in human institutions. It is a consequence of the evolutionary success of an exceptionally rapacious primate."³¹ Mark Lynas, author of *High Tide: How Climate Crisis is Engulfing Our Planet*, virtually channels Malthus in an article in which he likens humans to "cockroaches" and is appalled that "this species has been reproducing at bacterial levels."³² Writing as a "former left-winger", Lynas chastises leftists for "neglecting ecological concerns in favour of their enduring obsession: human equality."³³

“The disastrous road to serfdom can just as easily be paved with green bricks as with red ones.”

Competitive Enterprise Institute
US-based free-market think-tank

paradigms lost: the greening of neoliberalism

Over the last few decades, economic policy and public attitudes towards government and the economy have been influenced by the development of what has come to be known as ‘neoliberalism’.³⁴ In short, neoliberalism de-emphasises the role of government in managing the economy (or the climate for that matter) in favour of the market and the private sector. It encompasses the basic elements of classical free market theory but extends further into areas such as its promotion and protection of intellectual property rights and enclosure, unbridled corporate power, and its reliance upon strong supra-national institutions to ‘govern’ the global economy such as the World Bank, the IMF, the World Trade Organisation, various UN agencies and the G8.³⁵ This last means that it would be wrong to characterise neoliberalism in terms of strict ‘deregulation’ since, paradoxically, it requires strong regulatory frameworks that operate in the interests of maintaining ‘free’ markets and trade. It would therefore be more appropriate to talk about it exemplifying a ‘re-regulation’ agenda, one in which rules are changed to restrain the activities of governments rather than those of corporations. Former US Trade Representative Mickey Kantor put it

succinctly when he remarked: “I don't believe in free trade. There is no such thing. We want rules-based trading systems, not free trade. Free trade is chaotic. I don't know anybody that wants free trade.”³⁶

Where neo-Malthusianism helps to undermine sophisticated commons patterns³⁷ for managing natural resource use and creates new property rights for ‘environmental markets’, neoliberalism ensures that governments and state actors are prevented from interfering with such markets. Government regulations, such as the imposition of pollution controls, are treated as barriers to ‘efficient’ environmental policy. “We have reached the limits of centralized environmental regulation. Indeed, in some cases we have already surpassed those limits and environmental programs themselves stand as the greatest obstacles to continued cleanup and conservation,” writes Jonathan H Adler in the *Harvard Journal of Law and Public Policy*.³⁸ Lynn Scarlett, one of the architects of US President George W Bush's ‘new environmentalism’ policy doctrine agrees, affirming her belief that free-market theorist “Adam Smith's invisible hand has a green thumb.”³⁹ This sunny optimism in the market's ability to deliver ecological

improvements is often accompanied by a visceral reaction by free-market environmentalists towards any but the most narrowly-defined form of regulation. Take, for instance, the US-based Competitive Enterprise Institute which lumps environmental regulation of markets in the same category as medieval oppression: "The disastrous road to serfdom can just as easily be paved with green bricks as with red ones."⁴⁰

This 'double revolution' is also taking place at the national level in Europe, with the UK and the Netherlands taking the lead in implementing regulatory 'modernisation programmes' and market experiments. In March 2005, for example, Gordon Brown, the UK Chancellor of the Exchequer, together with Prime Minister Tony Blair, announced a set of radical reforms aimed at "reducing the burden of regulation on business."⁴⁴

global restructuring: the 'double revolution'

As neoliberal ideas continue to gain currency, the pressure on government regulatory agencies such as environment ministries to cease-and-desist from interfering with markets has been mounting. In the G8 countries this trend has been spurred on by the aggressive campaigns of corporate lobby groups and alliances which have been aided by restructuring agreements, for example in the EU where the 1997 EU Single Market Action Plan and the 2000 'Lisbon Process' were both heavily influenced by the recommendations of Europe's most powerful transnational corporations.⁴¹ These agreements entail, in the words of Amsterdam-based Corporate Europe Observatory, nothing less than a "sweeping neoliberal restructuring of European societies."⁴² Baron Daniel Janssen of chemical giant Solvay and member of the Brussels-based lobby group, the European Roundtable of Industrialists, describes this corporate-led restructuring process as a "double revolution" in which corporations and market forces are successfully "reducing the power of the state and of the public sector in general through privatisation and deregulation" on the one hand, and "transferring many of the nation-states' powers to a more modern and internationally minded structure at the European level."⁴³

The British reform agenda was assisted directly by business leaders such as mobile-phone operator O2's David Arculus and supermarket chain Sainsbury's Phillip Hampton.⁴⁵ David Arculus has since been selected to become the new head of the Confederation of British Industry, the UK's most powerful corporate lobby group. Both business leaders produced influential reports recommending much more relaxed regulatory attitudes towards business and radical changes made to the way Government legislates.

risky business

The recommendations were well received by Prime Minister Blair⁴⁶ who subsequently called for a drive to reduce regulation by implementing a 'risk-based approach', where only the most vaguely-defined 'risky' activities would fall under regulatory scrutiny. Meanwhile the majority of business operations will receive "not just a light but a limited touch," according to Gordon Brown.⁴⁷ "This risk-based approach will help move us a million miles away from the old belief that business, unregulated, will invariably act irresponsibly," he added.⁴⁸

But such sweeping reforms to state regulatory controls are themselves risky. As Environment

Data Services (ENDS) reports, the kind of regulatory inspections that the Environment Agency (the largest Government regulator and most criticised by business⁴⁹) has now committed to do away with, “revealed almost 40 breaches of emissions limits at 23 sites” in 2004. This amounted to almost 20% of the total number of all on-site inspections for that year.⁵⁰ ENDS cite the example of the chemical company Sevalco, a

Corporate polluters have already been operating with virtual impunity as Government inspections of polluting sites have nearly halved since 1998, while visits to waste management sites have dropped by a third over the same period.⁵⁸ With the introduction of various 'market-based' schemes to managing pollution levels, the situation becomes even more precarious, as the lack of effective Government oversight over

“As intended, all this [cost-benefit analysis] sounds professional and innocent. In reality it is a velvet glove for the iron fisted insistence on business-as-usual.”

Global Commons Institute

member of the chemical industry's voluntary 'Responsible Care' initiative, that was fined \$450,000 in 2004 for “excessive discharges of cyanide into the Severn Estuary”.⁵¹ Inspectors found that “for over four years, senior staff falsified monitoring records to conceal the breaches.”⁵²

in the absence of oversight

Despite this, the new Government reform agenda as articulated in the Hampton Report, demands that “there should be no inspection of business without a reason,”⁵³ preferring to rely on industry self-monitoring and voluntary reporting.⁵⁴

Corporate groups have also demanded the creation of a cabinet-level body to enforce this new deregulatory culture in Government and “throw out proposals likely to have a major impact on business that do not pass these key tests of quality.”⁵⁵ Similar reforms are taking place in many of the G8 countries and Tony Blair has announced that he will use the UK's Presidency of the EU to advance some of these sweeping structural adjustments on the EU as a whole in the coming months.⁵⁶

The implications of this unprecedented corporate-driven “red-tape revolution”⁵⁷ are devastating.

polluting sources means that the whole system increasingly relies upon the goodwill of corporations to report their emissions honestly.

Commenting on the state of emissions trading markets generally, Ron Southern, CEO of Canadian Utilities Ltd which owns the ATCO Group of power companies, believes “people with duplicitous intentions will find ways on either the supply or the buying side to do things which on the surface may seem proper and appropriate... It's naive to think everybody involved will act within the intent of the legislation.”⁵⁹

The success of the corporate lobby campaign to weaken environmental protection provisions in the name of competitiveness and the greater possibilities for fraud and malfeasance it affords, calls into question some of the basic foundations of the new 'environmental markets' paradigm and its capacity to solve such urgent issues as climate change. The effects of these 'reforms' will be difficult to roll-back, and the impacts will likely be felt for generations to come if the elevated role of corporations over institutions governing the global economy continues unchecked.

magazine seized on the news and was quick to admonish “green scare-mongers and their credulous servants in the media,” for stirring up public concerns about global warming.⁶⁴ *Time* magazine named him one of the 100 most influential people in 2004.⁶⁵ The secret to his success has been to confine the parameters of what should be a political debate to a question of numbers. Regardless of their accuracy or relevance, numerical arguments have long had the power to seduce. They carry with them an air of indisputability. The pressure was now on to ‘rationalise’ efforts to avert catastrophic climate change on the basis of cost-benefit arguments.⁶⁶ Lomborg railed against the hundreds of scientists and experts who make up the Intergovernmental Panel on Climate Change (IPCC) for their decision

of maths and markets: cost-benefit analysis



In justifying his support for a ‘risk-based’ approach to regulation, Prime Minister Blair refers to the need to recognize that “there are trade-offs, dilemmas, balances between costs and benefits in every decision.”⁶⁰ But reducing debate about issues such as climate change to a question of costs and benefits can be a dangerous and ultimately self-defeating strategy. Take for example, Danish statistician Bjorn Lomborg’s assertion that the possible benefits of minimising climate change can lead to an “aggregate \$5 trillion benefit” globally, but then goes on to suggest that the cost of controlling global warming could run “from \$3 to \$33 trillion.”⁶¹ As a result, Lomborg concludes, “the money would be better spent elsewhere.”⁶² Lomborg’s ‘sceptical environmentalism’, has been warmly embraced by neoliberal think-tanks and their mouthpieces such as *The Economist* magazine not least because it drew upon the seductive language of cost-benefit analysis to claim to portray the “real state of the world”.⁶³

Lomborg’s assessment that the costs outweighed the benefits with respect to climate change provided ammunition to those who preferred to bury their heads in the sand. *The Economist*

not to rely on his methods in their influential assessments: “A political decision stopped the IPCC from looking at the total cost-benefit of global warming.”⁶⁷

murder by numbers

Ironically the IPCC did flirt with a shameful piece of cost-benefit illusion when it suggested that rich people were worth more than poor people when calculating the human cost of climate change.⁶⁸ The 1995 study by researchers at the Centre for Social and Economic Research on the Global Environment (CSERGE), University College London, evaluated the cost of human lives lost due to climate change by estimating how much people would pay for adaptive measures that prevent death.⁶⁹ By using such a methodology, inevitably, those from the affluent North could pay more than those in poorer countries, (in some cases by a factor of 15 to 1). Their final conclusion was that the costs of climate change, in terms of human lives, was higher in the North than in the Majority World. In one paper produced by CSERGE, the dollar value of a ‘statistical life’ in the North was assessed as being approximately \$1,500,000 per head, while in countries such as China, it was only \$150,000.⁷⁰

The IPCC was eventually forced to publish a summary opposing the findings within the same report due to the massive controversy that ensued. Nonetheless, the results from the original cost-benefit analysis remained in the report, prompting the Global Commons Institute to decry it as an “economics of genocide”. They added: “As intended, all this [cost-benefit analysis] sounds professional and innocent. But it is conceptually skewed, factually inaccurate and

required to perform cost-benefit analyses as a matter of course. For instance, the European Commission's Clean Air for Europe Programme (CAFE) which aims to “protect against significant negative effects of air pollution on human health and the environment.”⁷⁴ The programme will form the basis of EU policy on air pollution for years to come.⁷⁵ However the analysis excludes a number of externalities associated with air pollution including impacts on ecosystems and cultural

“The world may yet leapfrog from the dark ages of clumsy, costly, command-and-control regulations to an enlightened age of informed, innovative, incentive-based greenery.”

The Economist magazine

politically devious. In reality it is a velvet glove for the iron fisted insistence on business-as-usual.”⁷¹

Rattling the abacus against such vastly complex issues as climate change is ultimately a futile exercise. As many of the IPCC scientists already acknowledge in their assessments, the anticipated effects of climate change go well beyond the calculable. Cost-benefit analysis can not properly account for effects such as that of human lives lost, species extinction, and massive social changes. As Tom Burke of Imperial College, London observes, “The reality is that applying cost-benefit analysis to questions such as these [climate change] is junk economics... It is a vanity of economists to believe that all choices can be boiled down to calculations of monetary value.”⁷² US academic David M Driesen agrees, arguing that “regulators must see themselves not as balancers of costs and benefits, but as catalysts for change.”⁷³

But the calculus of climate change has its fan-base in government departments and policy committees, corporate boardrooms, consultancies and UN agencies. Many government programmes and environmental impact assessments are now

heritage, arguing that “inclusion of these effects would further increase the results.”⁷⁶ In other words, if these factors were included, the social and environmental costs of air pollution by, for example, coal-fired power stations, would be deemed too high for the industry to be allowed to continue operating them.

It is here where the alchemy of cost-benefit kicks in and the underlying politics of the exercise can sometimes be glimpsed. When something cannot be reliably calculated in monetary terms, such as mortality rates, instead of casting doubt on the accuracy of the cost-benefit analysis, the offending incalculable item is ignored. For example, the CAFE analysis lists a whole host of potential impacts it ignores from its assessment, such as effects on water quality and biodiversity as well as mortality rates, due to ‘limited data availability’.⁷⁷ Nonetheless the final flawed analysis is being used by the European Commission to calculate the costs of its air pollution policies such as the EU Emissions Trading Scheme and will inform official EU decision-making on air pollution for the foreseeable future.



forums for managing scarce resources – the effect is to drastically narrow the parameters of debate and points of common reference. Thus, in the case of climate change, the debate gravitates towards price forecasts and carbon derivatives rather than a more all-encompassing political discussion where issues such as democracy, justice, equity and ecological integrity can come to the fore. As one WWF campaigner admits, “we are talking about transforming a market.”⁸⁰

The climate talks have been reduced to a numbers game and those disempowered by the lexicon of free-market environmentalism and cost-benefit analysis end up short. *The Economist* magazine editors applaud this trend: “Whether the big environmental groups join or not, the next green revolution is already under way. Rachel Carson, the crusading journalist who inspired greens in the 1950s and 60s, is joining hands with Adam Smith, the hero of free-

a question of tactics

In returning back to the question of assigning a ‘price’ to carbon, it is important to consider how engaging in cost-benefit analysis reduces critical debate about complex issues such as climate change down to a discussion about numbers and fixed absolutes. It is a line of argument that economists and business leaders are far better equipped to deal with on terms eminently more favourable to them.⁷⁸ Some climate activists attempt to play along, restricting themselves to technocratic lines of argument about emission caps and quotas, market data, allocation units and financial mechanisms, but as Larry Lohmann from The Corner House observes: “From a tactical point of view, the notion that people in power can be ‘reached’ by cost-benefit analysis just because it is phrased in a numerical ‘language they can understand’ and uses the word ‘dollars’ is childish. As John Adams notes, ‘treasuries and big business are better equipped than most to notice when someone is speaking nonsense in their own language’.”⁷⁹

Combined with a political bias among many decision-makers and global economic institutions towards a neoliberal worldview – one in which markets are considered to be the most ‘efficient’

marketeters. The world may yet leapfrog from the dark ages of clumsy, costly, command-and-control regulations to an enlightened age of informed, innovative, incentive-based greenery.”⁸¹

The problem is a systemic one. The political culture of international policy-making often proceeds from the same basic starting points. Assumptions about common terms of reference, language, ‘stakeholder’ identification and aims are made and develop a momentum and culture all their own. As a result, one is unlikely to hear the words ‘justice’ or ‘democracy’ in the meeting rooms of the official climate talks, but ‘competitiveness’, ‘economic growth’, and the full nomenclature of the market are regularly bandied about. This deep cultural and political bias is reflected in the outcomes of these deliberations. Outcomes so market-based in orientation that Aaron Cosbey from the UK-based Royal Institute for International Affairs suggests that, “the Kyoto Protocol and the UN Framework Convention on Climate Change (FCCC) may be the most important economic agreement penned in the 20th century.”⁸²

Britain - Total emissions 1990-2003

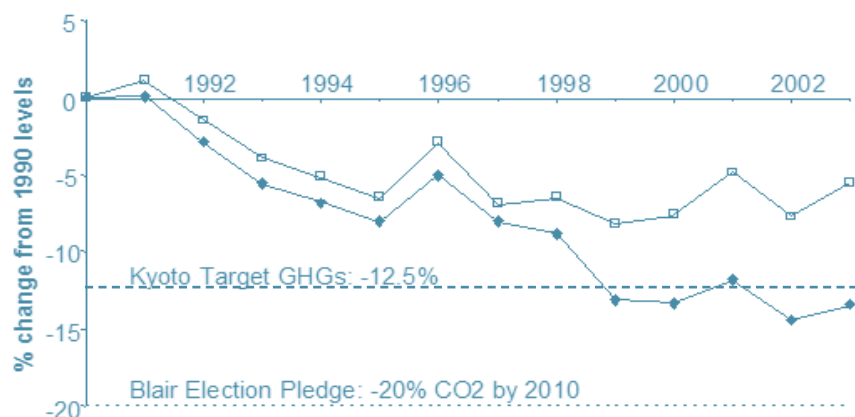


Figure 11 Source: International Energy Agency

country profile: britain

likelihood of meeting kyoto targets

The replacement in the early 1990s of polluting coal-fired power stations with cleaner gas plants, meant that up until 2000 it appeared that Britain was well on its way to achieving its Kyoto commitment of reducing its GHG emissions by 12.5% below 1990 levels. However consecutive increases in CO₂ output in 2003 and 2004 now mean that it is uncertain whether or not the target will be met. Although the latest projections from Friends of the Earth put Britain at 12.6% below 1990 levels in 2004, they no longer have another CO₂ 'windfall' like the 'dash for gas' of the 1990s, and they will find it very hard to keep this figure below the target level in the coming years.

emissions trading

The original NAP submitted by Britain in April 2004 allocated 736 million tonnes of CO₂ for British industry to emit during the first trading period (13.2% of the total EU allocations¹), and was accepted by the EC in July of the same year. However in October Britain claimed that it had miscalculated and submitted a revised version which brought the UK total up to 756 million tonnes, which was rejected by the Commission. In March 2005, Britain said that it would go ahead with the original NAP allocation to enable companies to start trading on the market, but that

it was simultaneously initiating a legal challenge in the European Court of Justice. Like the other G8 leaders who submitted NAPs, Prime Minister Blair was widely criticised by both environmental groups and actors within the emissions market for over-allocating permits.

Britain also pioneered the world's first national GHG emissions trading scheme, which was launched in March 2002. The scheme is due to run until 2006, with thirty one 'direct participants' involved who have an absolute cap on emissions against 1998-2000 levels, as well as 6,000 companies eligible to take part.²

Labour MP Gerry Steinberg, a member of the House of Commons Public Accounts Committee, described the scheme as a "mockery" and "outrageous waste of public money," following an investigation of the scheme by the National Audit Office. Over-generous baselines meant that four companies massively over-complied in the first year of the scheme. The fact that their GHG emissions were already controlled under other environmental regulations lead Edward Leigh, the Conservative chair of the committee to observe that the scheme "seems to be paying [Ineos Fluor, Invista, BP and Rhodia] \$190 million for keeping emissions down to levels they had already achieved before they joined."³

Canada - Total emissions 1990-2002

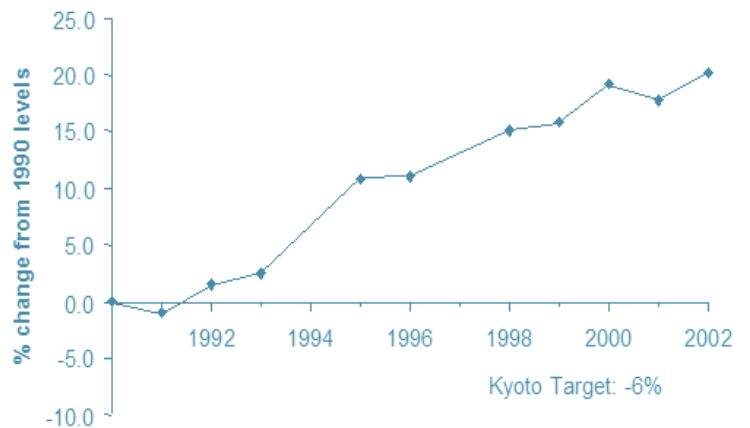


Figure 12 Source: International Energy Agency

country profile: canada

likelihood of meeting kyoto targets

As of May 2005, Canada has increased its GHG emissions by 22.6% above 1990 levels when, under Kyoto, it is supposed to be achieving a reduction of 6% by 2012. It seems highly unlikely that this target will be achieved through purely domestic measures. The Canadian government has been reluctant to legislate reduction targets for Large Final Emitters (industry and energy generators), refused to legislate emissions standards for automobiles, and continues to subsidise the exploration and development of oil and gas reserves. Canada has admitted that it will need to purchase emissions credits from other countries in order to meet its Kyoto target.¹

emissions trading

Unlike its southern neighbour, Canada has very little experience with domestic emissions trading policies, having conducted only two small pilot projects in British Columbia and Ontario during the late 1990s. In 2003, Canada invested \$12 million to the World Bank Prototype Carbon Fund, has also invested in the World Bank BioCarbon fund and looks poised to make more such investments in the future. In April 2005, Canada released its \$8 billion plan to reach its Kyoto Protocol targets, named Project Green, \$4 billion of which is going into the Climate Fund. This is intended to help stakeholders meet their targets and to purchase international emissions credits.² It is unclear as to

what percentage of its emissions reductions Canada plans to meet through international emissions trading and CDM and JI projects, but it is rather telling that up to half of the money allocated to meeting the Kyoto targets is available for this.

energy subsidies

Canada has a long history of subsidising the energy sector, with the oil, gas and nuclear industries being the largest benefactors. In 2002, the Government spent \$1.3 billion on oil and gas taxation expenditures (non-direct subsidies in the form of tax breaks), and at least \$160 million more in direct subsidies and programme expenditures.³ Since 1970 it is estimated that it has provided over \$53 billion in direct subsidies, program spending, and tax expenditures on the fossil fuel industry (oil, natural gas, and coal).⁴ In addition, the Government spent \$168.5 million on direct subsidies in 2002 on Atomic Energy of Canada Limited (AECL); the corporation that designs and markets CANDU reactors, and conducts other nuclear-related activities. In the last 50 years AECL has received \$14 billion in direct subsidies.⁵ In comparison, Canada spends less than \$24 million per year on renewable energy (\$10.3 million of that as research and development) though it has committed to a \$202 million program to encourage wind energy production.⁶

Japan - Total emissions 1990-2002

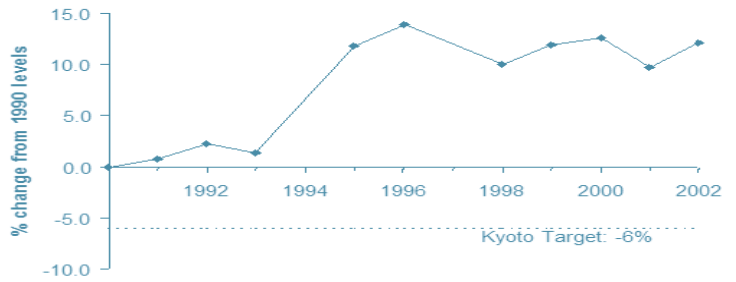


Figure 13 Source: International Energy Agency

likelihood of meeting kyoto targets

According to Japan's Global Warming Prevention Headquarters, GHG emissions in the country during 2002 actually increased 2.2% from the previous year, when they are supposed to be moving towards a cut of 6% below 1990 levels under Kyoto. Instead, however in 2002 its emissions stood at 12.1% above

opposed" to emissions trading, arguing that they would dampen corporate activity and reduce competitiveness.² Industry groups argue that Japan is unlike Europe where cheap reduction options exist within the region. In a Japanese emissions market, it is thought that most of the actors would be buyers rather than sellers, which would drive up

country profile: japan

the 1990 baseline. One of the major reasons for the year-on-year increase was the temporary closure of nuclear power plants stemming from the revelation that utility operators had submitted false reports regarding their safety. As a result, electric power companies had to increase output from fossil-fuel-powered plants to make up the shortfall in energy requirements. However, this was not the sole factor. The industrial sector, which includes the manufacturing and mining industries, increased output in step with the country's economic recovery. Maintaining this growth while making the necessary emissions cuts will be a substantial challenge, and one which the current policy response might not be capable of meeting.

emissions trading

Japan has the highest number of corporate contributors to the World Bank Prototype Carbon Fund, with 8 out of the 17 corporate investors being Japanese corporations, as well as the Government's own Japan Bank for International Cooperation. In March 2005, the Government announced that it will spend roughly two years studying potential domestic emissions trading systems before deciding whether to introduce them when it reviews its GHG reduction-target plan in 2007. However, officials claim that the industrial sectors remain "adamantly

the price of permits and make it very expensive for emitters to achieve their targets.

energy subsidies

Japan is almost completely dependent on imported fuel, which makes its energy prices among the highest in the world. In response, the Government has worked for a decade to build up its renewable energy resources, giving some \$25 million annually to solar R&D alone.³ Through generous subsidies solar-powered houses are common and the country dominates the global photovoltaic market.

However the nuclear industry, in the absence of competition from any domestic fossil-fuel production, receives a great deal of support from the Government. Despite a current wave of unpopularity following a string of incidents in nuclear facilities in Japan (including one involving the doctoring of plant-safety records), the Government budget for renewable energy subsidies at the turn of the century was less than 1% of that for nuclear power.⁴

The Government also offers 'grants' to local communities willing to host nuclear facilities.⁵

"Global capital invents new values in environmental services. So in this new world order, development and conservation are becoming synonymous. And they are basically geared towards a similar goal, that is 'disguised profit'. But profit nonetheless."

Soumitra Ghosh, forest and climate activist



part 5 when worlds collide: trade and environment

"Investment is a desirable and desired thing... Nonetheless, governments still sometimes find it threatening, because free direct investment limits administrations' ability to control and shape their countries' economic destiny. This is a small price to pay for allowing private sector decision-makers to generate economic benefits worldwide. But it is a price that some governments in some sectors still find difficult to pay. That is a tragedy."

Sir Leon Brittan, former EU Trade Commissioner.¹

While free trade in goods continues to remain a hot topic of international political efforts, there is a widely held view that the 'cutting-edge' issues for neoliberal policy-makers lie in the fields of investment and services which make up the bulk of global economic activity. With respect

to climate change policy and international efforts to 'green' investment flows towards more environmentally friendly development projects, the implications of investment and services liberalisation are profound. As market-based schemes such as emissions trading emerge as a principle component of international climate change policy, the rules governing its use will have to coexist with rules governing trade and investment. Increasingly, these rules continue to develop and expand in scope and power affecting more and more aspects of human activity as well as to influence the shape and direction of government policy. Any efforts to improve the laws governing emissions trading or to curb its use in favour of direct regulation, will be forced to contend with these wider forces.



Attempts in the past to liberalise global investment rules, such as through the ill-fated efforts to negotiate a Multilateral Agreement on Investment (MAI) in the OECD, have been met with exuberant support from the world's corporate lobby groups and fierce resistance from civil society and many governments wary of the dramatic implications.² Despite numerous setbacks since the early 1990s when a comprehensive treaty to liberalise investment rules was first tabled at the WTO,³ investment has continued to be on the agenda of the G8, usually referred to as the 'Quad' group of countries (EU, US, Japan, Canada).

In the absence of a WTO agreement on investment, countries have instituted a vast array of liberalisation programmes across the world. These rules include approximately 2,300 bilateral investment treaties and a similar number of so-called 'double-taxation treaties' and other international investment agreements. Various investment-related provisions exist in free trade agreements such as within the North American Free Trade Agreement (NAFTA) and the EU's Common Market, and the rules embodied in the WTO system itself.⁴ According to the UN, in 2004

there were 220 changes to laws worldwide affecting foreign direct investment "in the direction of more liberalisation."⁵

Despite the perception of stalled 'progress' in talks at the WTO level, countries across the globe have been busy tying themselves to a dizzying panoply of bilateral and multilateral 'lock-in' agreements that are designed to remove barriers to the free flow of capital. In 2004, there were on average two bilateral investment liberalisation agreements signed every week and the trend continues.⁶ The furious pace of liberalisation in the realm of investment prompted Karl P Sauvant, of the UN Conference on Trade and Development to speculate that, "it may well be that, as the second half of the 20th century was characterized by the establishment of an international trade law system, the first half of the 21st century may be characterized by the establishment of an international investment law system."⁷ Market-based mechanisms in environmental agreements such as Kyoto take place in the context of these immense liberalising forces. This can undermine any regulatory safeguards government and NGOs attempt to put in place as trends move towards less intervention, not more.

Despite some unique characteristics, carbon capital must still abide by the rules governing cross-border investment and economic activity. This layer-cake of liberalisation prescribes what governments can do when it comes to controlling corporate investments in their country. Such agreements often codify a list of 'rights' on the part of the investor (corporation) and a list of 'responsibilities' on the part of the host (host-country government).

Investment decisions can have profound impacts on the local economy as evidenced by recent popular protests in Bolivia, in which people have

the right climate for investment

In climate policy circles there is overwhelming support for encouraging 'green investment' flows to finance development. The flexible mechanisms of the Kyoto Protocol have emerged as the main vehicle to facilitate such capital flows with the added promise that the resultant 'technology transfer' would enable the Majority World to 'leapfrog' dirty industrialisation. By offering the prize of tradable carbon credits, some hope that companies will base more of their investment decisions on their emissions footprint. The Kyoto Protocol seeks to achieve this by targeting both project-based Foreign Direct Investments (FDI) as well as pure capital flows (portfolio investment).

But talk of 'greening' investment belies a disturbing naiveté about the nature of the global economic system. For example, the UN Conference on Trade and Development (UNCTAD), reports that of all the Foreign Direct Investment flows to the Majority World, an average of 70% has been in the form of mergers, takeovers and acquisitions of Southern companies by Northern transnationals.⁸ Consolidation of corporate power through increased investment liberalisation pose serious obstacles to encouraging any hope of market transformation.

been demanding control over their country's gas reserves and a share of the benefits (Bolivia has the second largest gas reserves on the continent). The people have also been protesting the presence of predatory 'investors' such as Petrobras, BP, and Repsol encouraged to exploit the country's resources through World Bank and IMF strictures with the aim of exporting gas through Chile and on to the US. Seemingly 'benign' investment decisions ultimately sparked a revolution in the country, with the full narrative still unfolding.

Increasingly, many investment treaties also specify a set of actions a corporate investor can take against a government that might 'infringe' upon its rights such as 'investor-state' provisions whereby a corporation can directly sue a government for any perceived violation of its 'rights' using international courts such as the World Bank International Court for the Settlement of Investment Disputes (ICSID).⁹ With an arsenal of legal and technocratic expertise, large transnational corporations are well placed to benefit from such provisions, allowing them to use legal threats to impose a 'chill effect' on governments seeking to exert control over their activities.

services represents a dramatic increase in the trade body's policing of the rules and functions of the global economy. According to the WTO, "services represent the fastest growing sector of the global economy and account for 60% of global output, 30% of global employment and nearly 20% of global trade."¹⁰ Under the WTO, the definition of 'services' includes sensitive areas such as public health and social services, education, water provision, communications, and energy. It also includes so-called 'environmental services' such as waste management and pollution control.

are you being served?: the potential impacts of GATS

In parallel to the drive for greater investment liberalisation, governments are also currently involved in negotiations to expand the scope of the World Trade Organisation's remit in the area of 'services'. The General Agreement on Trade in Services (GATS) is one of the core trade agreements of the WTO and is broadly concerned with 'freeing' trade in services (such as tourism and finance) rather than goods (widgets and maize). The GATS agreement requires that governments explore ways to further liberalise trade in the services sector through a successive series of mandated negotiations. This state of 'permanent negotiations' is intended to ensure that WTO members continuously expand the agreement to cover new sectors and promote further liberalisation and harmonisation of rules governing trade in all manner of services. Due to political disputes over issues such as agriculture following the collapsed of talks in Seattle and Cancun, the services agenda has been subsumed into a package of negotiations which has controversially come to be known as the 'Doha Development Agenda' after the WTO Ministerial Conference at Doha, Qatar in 2002.

The expansion of the WTO's remit to include

Liberalisation commitments under GATS are 'bound' and 'negotiated'. Once a government agrees to open up a service sector to international competition (for example allowing foreign companies to provide energy) it can only be closed off again after explicit agreement of all the countries potentially affected by the change. According to the WTO, reversing any liberalisation commitment ('unbinding' in WTO-speak) is extremely difficult as "the commitments are virtually guaranteed conditions for foreign exporters and importers of services and investors in the sector to do business."¹¹ GATS therefore offers a very strong guarantee of market access which can often have unpredictable consequences.

When a government finds that it has unintentionally committed itself to offering market access in a particular sector, it may discover that it is virtually impossible to withdraw. When officials declare an intention to restrict market access to a liberalised sector, the threat of trade sanctions can be a powerfully immobilising force. As the Kyoto Protocol begins to take-off and future rounds of negotiations begin to involve commitments by Southern



countries, the question of market access may figure even higher on the agenda. Northern corporations and specialist firms such as emissions brokers and consultants may look South for expanding their investments in 'environmental services'. GATS commitments in the sector may help ease their way.

The allure of 'clean investment' is being used to boost the services liberalisation agenda. As Pascal Kerneis, Managing Director of the corporate lobby group European Service Forum (ESF) explains, "it seems to me obvious that developing countries should indeed favour investment in this area [environmental services] that is indeed linked to the Kyoto mechanisms... Industrialised countries companies will be interested to invest in the countries where there is a clear and secure legal environment, and where they can insure a follow-up of their investment by being allowed to supply a proper service to the investment in a 'clean project'... Therefore, I believe that developing countries should be encouraged to look at the synergy between the two issues, given the link between CDM-related investments and GATS commitments."¹²

The environmental services agenda within the

WTO is becoming a prime driver of trade-climate interaction. For example, as early as 2003, the US Government, despite having not ratified the Kyoto Protocol, submitted detailed proposals in the WTO's Doha round of negotiations on GATS which included liberalisation commitments for the "air quality and climate services sub-sector".¹³ Similarly, negotiations in financial and energy services will have dramatic impact on the ability of governments to restrain the activities of carbon hedge funds and oil companies respectively as governments commit to greater market access in these sectors.

The difference between the services and investment agenda with the context of climate policy and their effects has to do with the nature of the markets. When companies invest in a project directly with the express aim of generating carbon credits, most of that transaction can be said to fall under the rubric of traditional foreign direct investment and its attendant infrastructure. But if the market shifts towards a services-oriented one in which companies buy, say a 'climate mitigation service' from a provider, then it could eventually fall within the GATS domain. In this context, GATS, and more generally, the complex web of treaties

operating at the international level that liberalise (and protect) foreign investment flows, further undermines the already questionable sustainable development benefits of the Kyoto instruments such as the Clean Development Mechanism.

From the perspective of decision-makers and policy analysts, there is very little difference

Business Council for Sustainable Development have long been proponents of “free trade in greenhouse gases”.¹⁷ The crowbar of liberalisation as enshrined in a multitude of overlapping bilateral and multilateral trade and investment agreements can be a convenient tool in advancing this cause.



between traditional forms of investment and the market-based mechanisms of the climate regime. “CDM is important for us not only because we think we can get investment, but also because it provides a good example of how the environment and business can go together”, explains Nazareno Castillo, Clean Development Mechanism co-ordinator for the Argentine Ministry of Environment.¹⁴

Efforts to rationalise ‘ecosystem services’ in terms of their economic value, as the UN Millennium Ecosystem Assessment’s has, should also be met with extreme caution.¹⁵ The ongoing development of international markets in ecosystem services will not be exempt from WTO scrutiny, and may one day ultimately fall under GATS disciplines, extending the competency of the WTO even further, while posing great risks to the ‘sustainability’ aims of these markets. Moves to further liberalise markets in water are already underway,¹⁶ bringing the prospect of liberalised carbon markets into the realm of possibility. The introduction of emissions trading schemes with their requisite assumption of property rights paves the way for such possibilities to manifest. Groups such as the UN-backed International Emissions Trading Association and the World

a rose by any other NAMA

As if to net any remaining areas of economic activity, current WTO negotiations in the so-called Non-Agricultural Market Access negotiations threaten to confine government’s ability to regulate the market even further. The wide-ranging negotiations target such things as eco-labelling and certification schemes (which raises doubts over the viability of initiatives such as the WWF’s ‘Gold Standard’ certification for CDM projects), ‘environmental goods’ (such as pollution control equipment) and environmental standards. Friends of the Earth’s Tony Juniper and Ronnie Hall warn that ‘trade-offs’ in these negotiations could spell disaster for the environment. “There is a real possibility, too, that negotiators will seek to trade reductions in environmental standards in Europe, and other industrialised countries, for corporate access to ever more and cheaper natural resources in developing countries.”¹⁸



image by steve ford elliot

the feeling's mutual: climate and commerce

The overwhelming majority of existing trade-environment discourse has tended to be based on the assumption that trade liberalisation and sustainable development are mutually reinforcing. This is reflected in the treaties themselves. For example, the Kyoto Protocol's Article 2.3 commits parties to, "strive to implement policies and measures... in such a way as to minimise adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties."¹⁹ Article 3.5 of the Framework Convention on Climate Change commits signatories to the principle that "parties should cooperate to promote an... open international economic system" and ensure that "measures taken to combat climate change, including unilateral ones, should not constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade."²⁰

Some WTO agreements in turn refer to the importance of sustainable development and environmental protection. A WTO communiqué released at the launch of the Doha negotiations declared: "The aims of upholding and safeguarding an open and non-discriminatory multilateral trading system, and acting for the

protection of the environment and the promotion of sustainable development can and must be mutually supportive."²¹ It is important to note, however, that while the references to trade in the climate treaties are embedded within the core of the Framework Convention on Climate Change and the Kyoto Protocol, the WTO language on sustainable development and environmental protection remains largely in non-binding communiqués and preambles which is an important legal distinction. Nonetheless, the prevailing institutional opinion is fairly clear on this point - trade liberalisation in most respects is synonymous with 'sustainable development'.

The existence of reassuring language in what are essentially the constitutions for the global economy and global efforts to combat climate change respectively, has placated many analysts.²² But this optimistic outlook has been very narrowly focused around technical details rather than wider analysis of competing influences. This lack of deeper consideration of the various forces affecting environmental policy represents a dangerous underestimation of the conflicts. In the final analysis, the quest for 'mutually supportive frameworks', represents the primacy of neoliberal dogma in the trade-environment discourse.



image by cottergarage

free-market environmentalism gains new ground

The success of this new discourse can be measured in the rapid development of new markets in 'ecosystems services' and ever more elaborate pollution trading schemes. Preference for these models is increasingly evident in policy circles and is becoming the default position when approaching environmental issues in many countries. In the UK and US this trend is especially dominant. However countries such as the Netherlands, China, India, Australia and New Zealand are also experimenting with 'environmental markets' as well as many other countries where free market environmentalist discourse is gaining traction. Here we present a few notable developments.

Mercury is a toxic substance that at high levels may damage the brain, kidneys, and foetal development. The US National Research Council estimates that 60,000 children are born each year at risk of adverse neuro-developmental effects due to exposure to mercury in the womb.¹ Mercury does occur naturally but among anthropogenic sources, coal-fired power plants account for over 40% of emissions in the US.² Therefore the focus of legislation has been upon reducing emissions from industrial sources.

However, George W. Bush's Clear Skies package has taken a more business-friendly approach by allowing industry to trade in emissions of the pollutant.

The first mercury trading system in the world, Bush claims it will achieve a 70% reduction in mercury emissions. However the Sierra Club estimate that by the fifteenth year of the plan, "9.5 more tons of mercury would be allowed than under strong enforcement of existing Clean Air Act programs."³ Critics go further saying that the US Environmental Protection Agency (EPA) has stated that 90% reductions are possible using existing technologies, therefore trading is an unnecessary system.

Further problems arise when a system allowing varying levels of pollution around different plants is allowed. Communities most at risk are those living near coal-fired power plants as mercury is produced in these processes and finds its way into the air and water directly around the plants. Under a trading system individual plants are able to buy credits from other facilities, therefore local people around poor performing facilities continue to be exposed to high risk. Linked to this phenomenon are environmental justice

impacts whereby indigenous communities in the US claim to suffer disproportionately from mercury poisoning of rivers as their livelihoods depend on fishing and hunting.

oil pollution trading

Oil discharge is created from the extraction process as seawater is pumped into oil deposits in order to push the oil to the surface. The water, which contains residual oil and other organic compounds, is then either dumped at sea or injected back into the empty oil deposit.

Currently Britain is the largest source of oil discharge in the North Sea with 5,500 tonnes dumped each year. In order to tackle this type of pollution, the OSPAR Convention was set up in 1992 to protect the marine environment of the north-east Atlantic, setting a target of reducing

trading scheme, installations can exceed those limits and simply purchase the permits they need to fulfil their obligations, in direct contradiction with the international agreement.

The DTI have been accused by commentators of being a 'soft touch' when dealing with the oil and gas industry on pollution issues. Walmsby would agree stating that "There's a conflict of interest with the DTI sponsoring and regulating industry." Although standards in Europe are high, enforcement is problematic and there is over-reliance on self-reporting. This becomes clear by there having been only two prosecutions for spillages in the past thirty years. The lack of political will for systematic monitoring and unannounced inspections seems to have evolved further in a whole-scale shift from, albeit weak,

oil discharge by 15% by the end of 2006.⁴ In response to OSPAR, the UK government, together with offshore operators, have devised the first tradable permits scheme for oil discharge. The trading scheme is due to begin in January 2006, covering 44 off-shore oil field operators in the North Sea and north-east Atlantic.

Independent analysis of the scheme is scarce and there has been no public discussion on the policy, with the UK's Department of Trade and Industry (DTI) stating that little would be added by a debate and there was in fact "no overriding legal requirement" for public consultation.⁵ However environmental groups active on marine protection have voiced frustration about the plans. Simon Walmsby from WWF UK stated, "The scheme doesn't have environmental criteria to account for sensitive areas. So it means that an oil platform in a less sensitive ecological area can sell credits to an operation in an extremely sensitive area and continue to do harm."⁶ His concerns are echoed in the original OSPAR agreement where it states that "*no individual offshore installation* should exceed a performance standard for dispersed oil of 30 mg/l for produced water discharged into the sea." [emphasis added] However, under the British

government regulation to a trading scheme managed and monitored by the polluters. Walmsby concludes that "from a cynical perspective [trading means] industry just don't have to make any cuts." Other large polluters such as Norway have taken a different approach. Utilising traditional command-and-control methods, they claim they will achieve zero emissions by the end of 2005.

wetlands banking

As part of the Clean Water Act in the US, developers are required to obtain permits to build on wetlands. The permit requires the developer to create wetlands elsewhere to 'compensate' for the loss of the habitat destroyed in the course of the construction. Gradually this system has evolved into a trading scheme whereby private wetlands 'banks' are now created to sell credits to developers. There is no national data from the US evaluating these schemes, particularly as State and federal regulatory processes can create diverse sets of results from place to place. However, some observations can be made from the existing body of data available. The State of Indiana has seen 87% of its wetlands destroyed since pre-settlement times. Wetlands are crucial for flood control, water filtration and

contain enormous biodiversity, therefore impacts from the destruction of these ecosystems can be far-reaching. Since the Clean Water Act in the early 70s, the State has also seen the gradual deregulation of protection for wetlands. In 2003 a new law was pushed through the State apparatus to redefine the classifications of wetlands. This law will now allow thousands of acres of natural wetlands to be destroyed as many types of wetlands are excluded from the classifications. Further, the new laws mean that many wetlands are left unprotected as even those included can be destroyed provided developers create compensatory wetlands.⁷

In California, University of California Los Angeles (UCLA) researchers conducted a study on the quality of created wetlands under the compensatory system from 1991-2002. They found that up to 58% of created wetlands were failed to qualify as functional replacements for natural wetlands. Only 4% were considered optimal

landfill sites. If it exceeds its quota then the authority has to seek credits from other authorities or pay a fine.

However critics state that the trading scheme is set to provide incentives for major capital projects as solutions to reducing landfill, such as incineration and mechanical and biological treatment. As targets loom and credits in the scheme do not discriminate on environmental or social impacts, authorities will be forced to opt for these 'quick fixes' over recycling or waste prevention. Additional environmental justice impacts appear as incineration becomes the solution of choice for local authorities. Friends of the Earth found that 50% of incinerators were in the poorest 10% of UK wards, highlighting the unseen side effects of blunt economic instruments such as trading.¹⁰

Many authorities are unhappy with the scheme and the Local Government Association (LGA) state

wetlands.⁸ The assumption that created wetlands are equal to natural ones turns out to be false. However these mitigation schemes exist in parallel to trends to undermine existing legislation. Differential impacts are also evident as more habitats are targeted by developers in urban areas than in rural areas. Therefore urban environments become more vulnerable to the impacts of wetlands degradation, such as risks of floods and groundwater loss. Additionally even if all replacement wetlands were optimal, there is often a six year time difference between the destruction of a habitat and the creation of the mitigation project. As Bowden Quinn from the Sierra Club in Indiana sums up, "the best approach is still to avoid destroying wetlands whenever possible, and we aren't doing that nearly enough."⁹

landfill trading

First proposed by the UK government in 1999, the Landfill Allowance Trading Scheme (LATS) began in April 2005, the first of its kind in the world. Covering local authorities responsible for landfill disposal but not commercial users, the scheme is the Government's response to targets set by the EU Landfill Directive. Each authority has received a quota of allowances that enable it to dump at

those struggling need more funding and not penalisation. They predict that most authorities will not be able to meet their 2020 targets and the trading scheme will not be able to provide enough credits to aid those with problems. The LGA claim that authorities face up to £13 million in fines and that these losses will have to be paid from increases in council taxes.¹¹ Despite dissent from local authorities and criticism from environmental groups, the Government's obsession with trading schemes remains relentless. As Julian Rose from Environmental Data Services puts it: "Normally with these issues, there would be a big debate and politicians would have to make unpopular decisions. The beauty of LATS is that no-one has to make a decision at all and they can just leave it up to the market."¹²

There are also many other schemes being developed or under way including: tradable permits in recycling, endangered species trading, personal carbon credit cards, water pollution trading and many others. The relentless proliferation of these schemes in the area of environmental protection is set to accelerate as parallel trends in international economics veer towards deregulation and voluntary agreements. This is just the beginning.

Russia - Total emissions 1990-1999

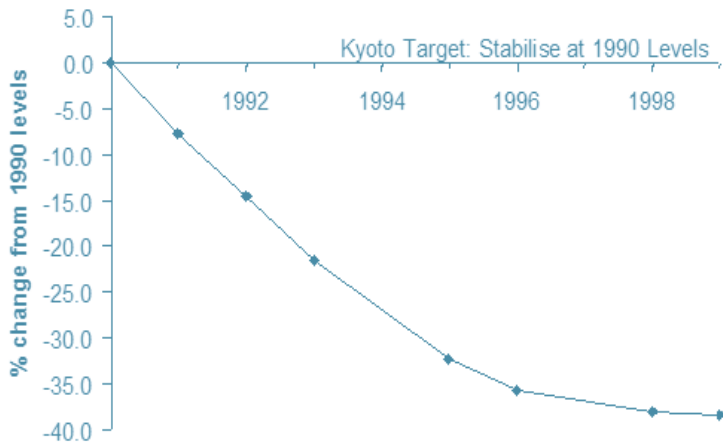


Figure 14 Source: International Energy Agency

country profile: russia

likelihood of meeting kyoto targets

The collapse of the Russian economy in the 1990s means that it is guaranteed that it will meet its Kyoto targets .

emissions trading

Unsurprisingly, Russia has been one of the most enthusiastic proponents of emissions trading as it stands to benefit the most from any international scheme that would allow other countries to buy its many emissions permits resulting from its massive contraction in the economy since 1990. It expects to receive even more permits as a result of its massive forest cover. When the US pulled out of Kyoto, the Russian Government was quite concerned that it had lost the largest potential purchaser for its emissions permits. In the meantime, Russia continues to look to Annex 1 countries who are likely to buy its permits to meet their Kyoto obligations.

energy subsidies

Precise information on subsidies for the energy sector in Russia were unavailable. Given that all of the major fossil fuel companies are still in state hands (i.e. RosUgol, the largest coal producer in Russia and the recently renationalised Yukos), substantial public dollars are being spent on dirty forms of energy. Moreover, Russia uses almost no renewable energy.

relevant facts

In 2004, Russia's Gross Domestic Product (GDP) grew by approximately 7.1%, surpassing average growth rates in all other G8 countries, and marking the country's sixth consecutive year of economic expansion. Russia's economic growth over the last five years has been fuelled primarily by energy exports, particularly given the boom in Russian oil production and relatively high world oil prices.

USA - Total emissions 1990-2002

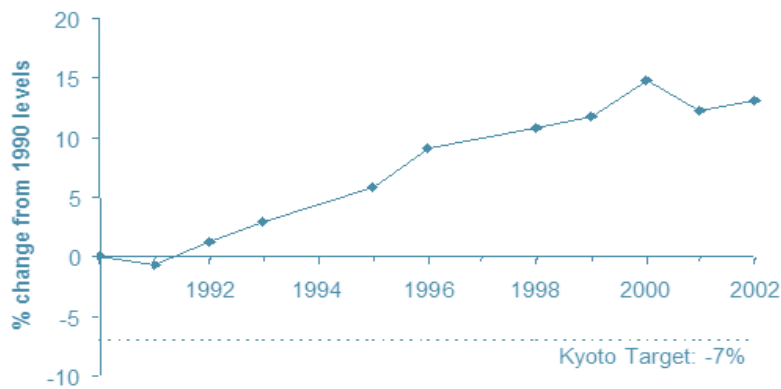


Figure 15 Source: International Energy Agency

country profile: usa

likelihood of meeting kyoto targets

With George W Bush in the White House until 2008, the US shows no signs of ratifying the Protocol or of meeting its original target of reducing its emissions by 7% of 1990 levels by 2012. However a number of emissions-reduction programmes are currently in place at the State Government level in many parts of the country including renewable energy targets, mandatory GHG reporting, and public benefit funds. Given the fact that some individual States emit more GHGs than some countries (for example, Texas emits more than France, and California more than Brazil), these measures implemented at the State level may have some impact on global emissions as well as a possible influence in determining national policy.¹

emissions trading

The US was the first country to experiment with emissions trading as the Environmental Protection Agency began testing out pilot projects back in the 1970s. In 1990, the US Congress amended the Clean Air Act to set up a nation-wide emissions trading system in sulphur dioxide emissions from coal-fuelled power stations, the main cause of acid rain. The Climate Stewardship Act was reintroduced to the House of Congress in February 2005 after narrowly being rejected in 2003, which proposes to

cut GHG emissions to 2000 levels by 2010, by introducing a nationwide 'cap and trade' system modelled on the sulphur dioxide emissions market.² The lack of US Kyoto Protocol ratification means that for the meantime, the US will not formally be taking part in the international GHG emissions market. However several private sector initiatives, including the Chicago Climate Exchange, are trading in carbon 'offset' credits.

energy subsidies

The central question concerning the United States' support of the energy sector is not whether it happens but how to measure it. There is no clear consensus as to what actually constitutes a subsidy, with some arguing that part of the astronomical US defence budget should be included as a subsidy towards energy security. This explains the variance in estimates for the size of subsidies, an example being that of the estimate for subsidies for exploration, transportation, and production in the oil sector in 1995, which ranges from \$15.7 billion to \$35.2 billion.³ In comparison, the total amount of money that Congress allocated for renewable energy research in 2000 was \$390 million. In the last 50 years, nuclear energy subsidies have totalled close to \$145 billion; renewable energy subsidies total close to \$5 billion.⁴

Germany - Total emissions 1990-2002

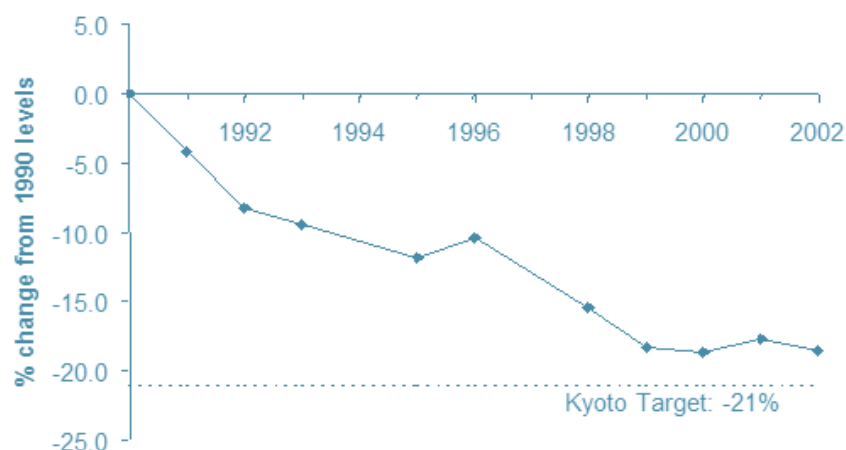


Figure 16 Source: International Energy Agency

country profile: germany

likelihood of meeting kyoto targets

Germany has one of the most ambitious Kyoto targets, promising to cut its emissions by 21% of 1990 levels by 2012 and it appears that this target is within its reach. This cut accounts for almost 3/4 of the EU's total emissions reduction commitment, but a large part of the dramatic drop in German emissions during the 1990s was attributable to the immense economic slump in the Eastern part of the country. This drop reflects a special, one-off cut that was a by-product of socio-economic circumstances rather than any conscious effort to reduce emissions, comparable to the British 'dash for gas' and the collapse of the Russian economy during the 1990s. The German government made an additional internal target to reduce its CO₂ levels by 25% by 2005 which it seems unlikely to achieve, given that in 2002 it was still almost 10% short.¹

emissions trading

Germany was allocated 1497 millions tonnes of CO₂ for the first period of the EU emissions trading scheme under the German National Allocation Plan, which accounted for 26.7% of the total allowances.² 1,849 installations belonging to around 1,200 energy companies and the energy intensive industries from Germany are participating in the EU-ETS. The entire allocation of allowances is free of charge in Germany, whereas some other Member States are selling or auctioning a small percentage of their EU allowances. German companies RWE and Deutsche Bank are investors in the World Bank's Prototype Carbon Fund.



“What we call Man's [sic] power over Nature turns out to be a power excercised by some men over other men with nature as its instrument.”¹

conclusion

C S Lewis, British author and scholar

For too long, much of mainstream climate activism and NGO lobbying efforts have operated as if climate policy existed in a vacuum. But to continue to presume so, is a tragic under-estimation of the various forces that shape environmental decision-making and their conflicting motivations and aims. Numerous factors influence the pitch and timbre of climate discourse. But amidst the cacophony of ideological, economic, and political manoeuvring lies the reality of climate change and the dangers it poses to people and planet.

G8 posturing, corporate greenwash, and the sclerosis of pro-market NGO politics pose numerous obstacles to effective action on climate change. The impotence of both the G8 governments and the 'Green 8'² big environmental NGOs to address fundamental issues of democracy and power within the climate talks, in the final analysis, contributes to the relegation of alternatives and the narrowing of political space that allows them to flourish. The neoliberal ethic that pervades the climate debate is neither natural nor self-evident. It is constructed and replicated by thousands of

multiplying agencies that transport the pollen of market fundamentalism into the landscape of environmental discourse.

The G8 and free-market environmentalists have been at the forefront of championing a rosy narrative of 'win-win' scenarios where the quest to maximise corporate profits can be ameliorated with wider goals of pursuing social and environmental justice. But the commod-ification agenda implicit in such a paradigm is deeply contentious. As Soumitra Ghosh from the National Forum for Forest Peoples and Forest Workers in India characterises it, moves to marketise ecosystem services represents a “very crass, very gross commercialisation of resources.”³

Free-market environmentalists themselves appear to be acting more on faith than their ability to point to demonstrable outcomes. When asked whether greenhouse gas trading will help solve climate change, a representative of the UN-backed corporate lobby group, the International Emissions Trading Association, recently admitted: “It's too early to tell, but it has to!”⁴ Nevertheless, the green evangelism of emissions brokers and marketeers wins hearts and minds.

Whereas other forms of market-based approaches such as taxation sit uncomfortably with politicians and industry, models such as pollution trading allow decision-makers to 'leave it up to the market'. Meanwhile the opaque and volatile nature of commercial transactions and an increasingly lax regulatory culture makes the pursuit of even the most basic information a monumental task. Industry self-monitoring, hamstrung regulatory agencies and a barrage of public relations noise all help obfuscate the truth about corporate environmental performance.

Tacit endorsement of the investment agenda pervading the climate regime is also a disturbing trend. Despite the flowery rhetoric of the 'Doha Development Agenda' and the promise of 'clean development', the increasing expansion of corporate-friendly trade and investment regimes both in the WTO and through parallel processes,

"History has seen attempts to commodify land, food, labour, forests, water, genes and ideas. Carbon trading follows in the footsteps of this history and turns the earth's carbon-cycling capacity into property to be bought or sold in a global market. Through this process of creating a new commodity - carbon - the Earth's ability and capacity to support a climate conducive to life and human societies is now passing into the same corporate hands that are destroying the climate."

Durban Declaration on Carbon Trading

"threatens to dismantle a wide range of national laws protecting the environment, social well being and health," according to campaigners.⁵

The clamour to break down the barriers to trade in carbon commodities and services under the pretence of promoting 'sustainable development' is a red herring. In the case of emissions trading markets, efforts to 'maximise environmental gains' by introducing various forms of restrictions⁶ will inevitably bump up against the unrelenting drive towards 'freeing' the market. In the context of the Clean Development Mechanism and the promise of 'leapfrogging industrialisation', it is important too to recall the failure of traditional commodity export dependence as promoted by the G8 to lift countries out of poverty.

Carbon commodity fetish represents one of the greatest threats to averting the climate crisis. As the signatories to the *Durban Declaration on Carbon Trading* attest: "History has seen attempts to commodify land, food, labour, forests, water, genes and ideas. Carbon trading follows in the footsteps of this history and turns the earth's carbon-cycling capacity into property to be bought or sold in a global market. Through this

process of creating a new commodity - carbon - the Earth's ability and capacity to support a climate conducive to life and human societies is now passing into the same corporate hands that are destroying the climate."⁷

The waltz of corporate, NGO and government (mis)steps towards enclosure and commodification that characterises the state of the official climate talks is reminiscent of what, in 1982, radical Austrian-US ecologist and educator Ivan Illich warned of a coming "oligarchic, undemocratic and authoritarian expertocracy governed by ecologists."⁸

All these factors and more represent serious obstacles towards achieving environmental objectives. Activism on climate change must begin to grapple with these wider issues, and promote greater synergies with other important struggles in the areas of trade, finance, human rights, environmental justice and democracy, if an effective challenge to the neoliberal paradigm is to be mounted. In the interests of broader ambitions for people and planet, or even the more specific and urgent need to combat the root causes of climate change, we simply cannot afford to do otherwise.

glossary

carbon sequestration

The process by which CO₂ is removed from the atmosphere and stored in carbon sinks, but also refers to the process of carbon capture and storage (see page 19).

carbon 'sink'

A carbon dioxide sink or CO₂ 'sink' is the opposite of a carbon source. The main 'sinks' are the oceans and growing vegetation. The concept has become widely known through the Kyoto Protocol. The idea is that growing vegetation absorbs carbon dioxide, so that countries that have large areas of forest (or other vegetation) can deduct a certain amount from their emissions, thus making it easier to achieve the desired emission levels. However, the effectiveness of the proposed 'sinks' as well as their impact on local communities and ecosystems is extremely controversial.

clean development mechanism (CDM)

The Clean Development Mechanism is one of the three so-called flexible mechanisms of the Kyoto Protocol. These mechanisms are designed to make it easier and cheaper for industrialised countries to meet the greenhouse gas (GHG) emission reduction targets that they agreed to under the Protocol. The CDM is also mandated to "assist developing countries

in achieving sustainable development". What constitutes sustainable development is decided by the host party.

Under the CDM, an industrialised country with a GHG reduction target (an Annex B country) can invest in a project in a developing country without a target (non-Annex B), and claim credit for the emissions that the project achieves. For example, an industrialised country may invest in a wind power project in a developing country that replaces electricity that would otherwise have been produced from coal. The industrialised country can then claim credit for the emissions that have been avoided, and use these credits to meet its own target. For industrialised countries, this greatly reduces the cost of meeting the reduction commitments that they agreed to under the Kyoto Protocol.

export credit agency (ECA)

ECAs are public financial institutions that help companies conduct business overseas in developing countries and emerging markets. ECAs provide government-backed loans, guarantees and insurance to corporations in the home ECA country.

european union emissions trading scheme (EU-ETS)

See page 10

greenwash

Greenwash (a word created from green and whitewash) is a term that environmentalists and other critics give to the process of presenting a positive public image for environmentally unsound practices. The term arose in the aftermath of the Earth Summit held in Rio de Janeiro in June 1992. Corporate lobby groups saw the Earth Summit as a prominent platform from which to redefine their role and to shape the emerging debate on environment and sustainable development.

international monetary fund (IMF)

The IMF is the international organization responsible for managing the global financial system and for providing loans to its member states to help alleviate balance of payments problems. Part of its mission is to provide assistance to countries that experience serious economic difficulties. In return, the countries are obliged to launch certain reforms such as Structural Adjustment Programmes.

market theory but extends further into areas such as its promotion and protection of intellectual property rights and enclosure, unbridled corporate power, and its reliance upon strong supra-national institutions to 'govern' the global economy such as the World Bank, the IMF, the WTO, various UN agencies and the G8.

neo-Malthusianism

Neo-Malthusianism is a set of doctrines which have their precedent with Thomas Malthus's concept of limited resources keep populations in check and reduce economic growth. (see footnote 19 on page 60)

organization for economic cooperation and development (OECD)

The OECD is an international agency which supports programs designed to facilitate trade and 'development'.

joint implementation (JI)

One of the three market mechanisms established by the Kyoto Protocol, whereby an industrialised country can receive 'emissions reductions units' when it helps to finance projects that reduce emissions in another industrialised country (including countries with economies in transition).

liberalisation

Liberalisation is a political philosophy that supports a reduced government role in the economy. It believes that markets should, as far as possible, be left to the forces of supply and demand.

national allocation plan (NAP)

A national plan for each Member State of the EU that outlines the total quantity of carbon dioxide emission allowances that it intends to allocate for that period and how it proposes to allocate them under the European Union Emissions Trading Scheme (see page 10)

neoliberalism

Neoliberalism is an economic philosophy that de-emphasises the role of government in managing the economy (or the climate for that matter) in favour of the market and the private sector. It encompasses the basic elements of classical free

regulation

In the context of government and public services regulation (as a process) is the control of something by rules, as opposed to its prohibition. In economics, it is part of the government relationship with markets, often seen as the opposite of deregulation.

world bank

Officially the International Bank for Reconstruction and Development, the World Bank is an international organisation established in 1945 that assists governments around the world in economic development efforts.

world bank prototype carbon fund (PCF)

See page 25

world trade organisation (WTO)

The World Trade Organisation is an international organisation formed to develop and enforce worldwide rules to promote international trade, including lowering tariffs and removing national trade barriers that restrict imports or exports of goods and services.

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conclusion

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“What we call Man's [sic] power over Nature turns out to be a power exercised by some men over other men with nature as its instrument.”

C S Lewis, British author and scholar
(1898-1963)

This briefing examines the relationship between free-market economic forces and climate change policy while scrutinising the rhetoric and reality behind promises on climate made by the most powerful politicians in the world - the G8. It also explores the origins of free-market environmentalism and analyses the conflicts and synergies that arise when the worlds of trade and environment collide.

For too long, much of mainstream climate activism and NGO lobbying

efforts have operated as if climate policy existed in a vacuum. Activism on climate change must begin to grapple with these wider issues, and promote greater engagement with other important struggles in the areas of trade, finance, human rights, environmental justice and democracy, if an effective challenge to the neoliberal paradigm is to be mounted. In the interests of broader ambitions for people and planet and the urgent need to combat the root causes of climate change, we simply cannot afford to do otherwise.