

# CLEARING THE AIR

MOVING ON FROM CARBON TRADING TO REAL CLIMATE SOLUTIONS



**Friends of  
the Earth**

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## ABOUT THIS REPORT

This report has been prepared by Friends of the Earth England, Wales and Northern Ireland as part of its campaign for a fair, strong and binding international agreement to tackle climate change.

The report outlines why carbon trading is not the solution to climate change and sets out some of the real solutions for cutting greenhouse gas emissions and delivering climate finance. It calls on national governments to urgently dedicate time and resources to develop and implement these and other more viable, equitable and effective solutions to the climate crisis.

This summary report is available online at: [www.foe.co.uk/resource/reports/clearing\\_air\\_summ.pdf](http://www.foe.co.uk/resource/reports/clearing_air_summ.pdf).

The references for this summary report are all available in a separate online document at: [www.foe.co.uk/clearing\\_references](http://www.foe.co.uk/clearing_references).

The full report on which this summary is based is available at: [www.foe.co.uk/resource/reports/clearing\\_air.pdf](http://www.foe.co.uk/resource/reports/clearing_air.pdf).

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# 1. EXECUTIVE SUMMARY

The current obsession with carbon trading as a primary tool for tackling climate change is high risk, irresponsible and dangerous. It is a distraction from more viable, more equitable, more effective solutions for tackling greenhouse gas emissions and providing adequate finance to developing countries for tackling climate change and adapting to its impacts. Carbon trading is unreliable, unproven and burdens developing countries with unfair responsibility for tackling climate change. The barriers to reforming carbon trading are insurmountable in practice within the time we have available to avoid catastrophic climate change. In addition, carbon market offsets are not a legitimate source of climate finance, and cannot guarantee a predictable flow of finance to developing countries. This type of finance rarely supports genuine low-carbon development. The biggest financial beneficiary of carbon trading is the Northern carbon-trading industry.

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## Real solutions for climate change mitigation

- **Energy:** A global feed-in tariff programme with investment of US\$100 billion per year over 15 years would bring down the costs of renewable technologies to a universally affordable level. This would enable renewable energy to become “the default choice of the world as a whole.”<sup>1</sup> Stronger regulations on energy efficiency combined with increased taxation on carbon and energy will also drive energy savings.
- **Agriculture:** The expansion of small-scale, sustainable agriculture has the potential to bring about a dramatic reduction in global greenhouse gas emissions through reduced fossil-fuel use in agriculture and carbon sequestration in plants and soils. It is also critical to tackle global demand for products associated with damaging intensive agriculture, including excessive consumption of meat and dairy products.
- **Forests:** Tackling emissions from deforestation and forest degradation necessitates measures to tackle the core drivers, most notably demand for agrofuels, meat and forest products. Improvements in forest governance are also essential, including protection of the rights of forest-dwelling communities and Indigenous Peoples and the extension of community forest governance. Funding must also be provided to incentivise the shift away from development based on forest destruction.
- **Industry:** To prevent polluting companies from using the threat of offshoring or so-called carbon leakage to avoid taking action, the starting point must be an agreement at the international level on the introduction of common standards on the use of best available technology. This will reduce carbon leakage or the threat of it, and will help drive innovation. This will in turn require a relaxation in intellectual property rights to ensure access to best available technologies.

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## Real solutions for climate finance

- **Financial Transaction Tax:** A new, global tax on cross-border financial transactions could generate additional government revenue of US\$400 billion, including US\$100 billion for climate finance. The tax is geared towards the global finance industry and would not affect the financial transactions of ordinary consumers.
  - **Tackling tax evasion:** Clamping down on tax avoidance in developed countries could provide significant additional government revenue. Tax avoidance in Europe is estimated at 2-2.25 per cent of European Gross Domestic Product (GDP): €236-266 billion in 2009.
  - **Redirecting fossil-fuel subsidies:** Global subsidies for the production and consumption of fossil fuels are estimated at US\$700 billion per year. Producer subsidies are mostly transfers from Northern governments to companies involved in fossil-fuel production and redirecting these would have minimal financial impacts on ordinary people in developed countries.
  - **Special Drawing Rights (SDRs):** New allocations of SDRs, a reserve asset created by the International Monetary Fund, could be issued at approximately US\$100 billion per year without leading to inflation.
  - **Carbon and energy taxation:** An EU-wide carbon tax and a graduated ‘Starter Tax’ in the United States could together bring in US\$200 billion per year. Making only a quarter of this available for climate finance could provide more than US\$50 billion per year. A levy on international aviation could bring in an additional US\$10 billion per year.
- A conservative estimate of the revenue-generating potential of these finance solutions indicates that they could provide new and additional climate finance for developing countries of at least US\$420 billion per year.**

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## 2. INTRODUCTION

The starting point of this report is the conclusion of Friends of the Earth's previous report on carbon trading – that carbon trading hasn't worked, is seriously flawed, and the barriers to reform are insurmountable in practice within the time we have available to avoid catastrophic climate change. Furthermore, the current obsession with it as the primary tool for tackling climate change is high risk, irresponsible and dangerous. Today's attention on carbon trading is driven largely by the governments of developed countries, in order to offset their emissions-reduction responsibilities. Carbon traders and financial speculators are adding to the frenzy. This focus on carbon trading and its expansion is distracting us from the adoption of more viable, more equitable, more effective solutions for tackling greenhouse gas emissions and providing adequate climate finance to developing countries.

### **This report shows:**

- **why carbon trading is not the solution to climate change**
- **that many of the real solutions are already available.**

There is no silver bullet that will cut carbon emissions quickly and provide the necessary international finance. Tackling climate change requires a package of tools and policies. There will be no easy alternative to weaning the global economy off its addiction to fossil fuels and the unsustainable industrial and agricultural activities which this addiction has facilitated. This report shows that many solutions are already available and have been developed, scrutinised and advanced for decades. All that is needed to make them a reality is the political willingness to use them.

A number of criteria were used to select the solutions featured in this report. These are:

- **Compatible with climate justice:**

Solutions must recognise the responsibility of the rich world for creating the problem of climate change and its moral and legal obligation to act first and fastest to solve it, as enshrined in the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. Solutions must also be socially progressive, for poor people in both the global North and the global South.

- **Transformational:** Solutions must contribute to bringing about the bigger changes needed to create sustainable and equitable economies with reduced consumption and more equal distribution of resource use. They must not lock in or make worse the core drivers of climate change, such as fossil-fuel use.

- **Rapid and effective:** Solutions must deliver the changes needed at the pace required for the world to have a real chance of avoiding the worst impacts of climate change.

The solutions are split into two groups: solutions for climate change mitigation, to bring down greenhouse gas emissions as quickly and effectively as possible; and solutions for climate finance, to support developing countries in taking action on climate change and adapting to its unavoidable impacts. However, some solutions included in one objective will also have beneficial impacts for the other.

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## 3. BACKGROUND ON SCIENCE AND RESPONSIBILITY

The science of climate change is well understood. Despite the best attempts by climate sceptics, many in receipt of direct financial support from the fossil-fuel industry,<sup>2</sup> to discredit it, there is an overwhelming consensus among climate scientists that climate change is happening, that it is man-made and that it is dangerous because it presents such a risk of devastating economic, social and environmental impacts.

Yet the global community has failed to stem the growth in global greenhouse gas emissions, let alone bring about the scale and pace of reductions necessary to have a reasonable chance of avoiding catastrophic climate change. The problem of climate change is a result of accumulation of greenhouse gases in the atmosphere. Richer, developed countries have produced three quarters of total emissions in the atmosphere despite representing only 15 per cent of the world's population.<sup>3</sup> Historically, fossil fuel-based industrial development has contributed significantly to the relative wealth of developed countries. This is also based on the exploitation of resources and labour from developing countries under colonial rule and the continuation of

unfair international economic relations in the post-colonial world.

The primary historical responsibility of rich countries in creating the problem of climate change, combined with the greater resources they have available to tackle it as a result of economic advantages gained from past fossil-fuel use, are enshrined in the UNFCCC principle of 'common but differentiated responsibility and capacity to act' or 'CBDR' (See Box 1 below).

Commitments and action by developed countries in fulfilment of this legal and moral responsibility to take the lead on tackling climate change have been dramatically inadequate. The emissions reductions committed by Annex I (developed countries) under the Copenhagen Accord, the political agreement rushed together by an exclusive group of countries in parallel with the COP 15 climate negotiations in 2009, add up to only a 12-18 per cent reduction in greenhouse gas emissions on 1990 levels by 2020.<sup>4</sup> Once loopholes in the current negotiating text to implement the Kyoto Protocol after 2012 are taken into account, these targets would actually allow rich countries to increase their greenhouse gas emissions over the next decade.<sup>5</sup>

Climate action in developing countries is contingent on climate finance

because of the critical humanitarian and development priorities that they also have to deal with. In 2009, 17 years since the adoption of the UNFCCC, developed countries had channelled less than US\$3 billion through the Convention's mechanisms to finance climate measures in developing countries.<sup>6</sup>

Because of the lack of progress following the signing of the UNFCCC, in 2007 the signatory countries agreed to the Bali Action Plan, which included addressing the provision of financial resources for climate action by developing countries. The UNFCCC has not yet determined the exact scale of the financing necessary as part of any agreed outcome under the Bali Action Plan, but various estimates have been put forward for the amount of finance needed by developing countries to adapt to climate change while at the same time addressing urgent development needs.

Box 2 overleaf compares these estimates of the scale of the climate finance needed with other key financial statistics to give a sense of the scale of the financial commitment that is necessary.

The financing committed so far by developed countries falls short of even the most conservative estimates of need. There are already major doubts whether even the amounts committed so far will actually be delivered. In the Copenhagen Accord, developed countries pledged new and additional short-term financing worth US\$30 billion for 2010-2012 for mitigation and adaptation, and to mobilise US\$100 billion per year by 2020.<sup>13</sup> The promises of short-term finance have been exposed as largely empty, with many developed countries restating or renaming old commitments, or redirecting finance previously committed as overseas development aid.

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### Box 1. Common But Differentiated Responsibility (CBDR)

The United Nations Framework Convention on Climate Change (UNFCCC) recognises that:

1. The largest share of historical and current global emissions of greenhouse gases originated in developed countries.
2. Per capita emissions in developing countries are still relatively low.
3. The share of global emissions originating in developing countries will

grow to meet social and development needs.

It hence concludes that the developed countries which are Parties to the Convention should take the lead in combating climate change and its adverse effects.

UNFCCC, 1992: [http://unfccc.int/essential\\_background/convention/background/items/2853.php](http://unfccc.int/essential_background/convention/background/items/2853.php)

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### 3. BACKGROUND ON SCIENCE AND RESPONSIBILITY

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#### Box 2. Comparison of estimates of developing country climate-finance needs with selected developed country public expenditure

##### Estimates of developing country climate-finance needs (amounts are per year by 2020):

**A:** European Union: €100 billion

**B:** International Energy Agency: US\$197 billion

**C:** G77+China: 1.5 per cent of Annex I GDP, equivalent to about US\$600 billion

**D:** United Nations Department for Economic and Social Affairs: US\$500-600 billion

**E:** Africa Group: 5 per cent of Annex I GDP (equivalent to roughly US\$2,000 billion)

**F:** Cochabamba Peoples Agreement: 6 per cent of Annex I GDP, equivalent to about US\$2,400 billion

##### Estimates of selected developed country public expenditure:

**G:** Global bank and hedge fund profits before the recession: US\$1,100-1,400 billion per year<sup>7</sup>

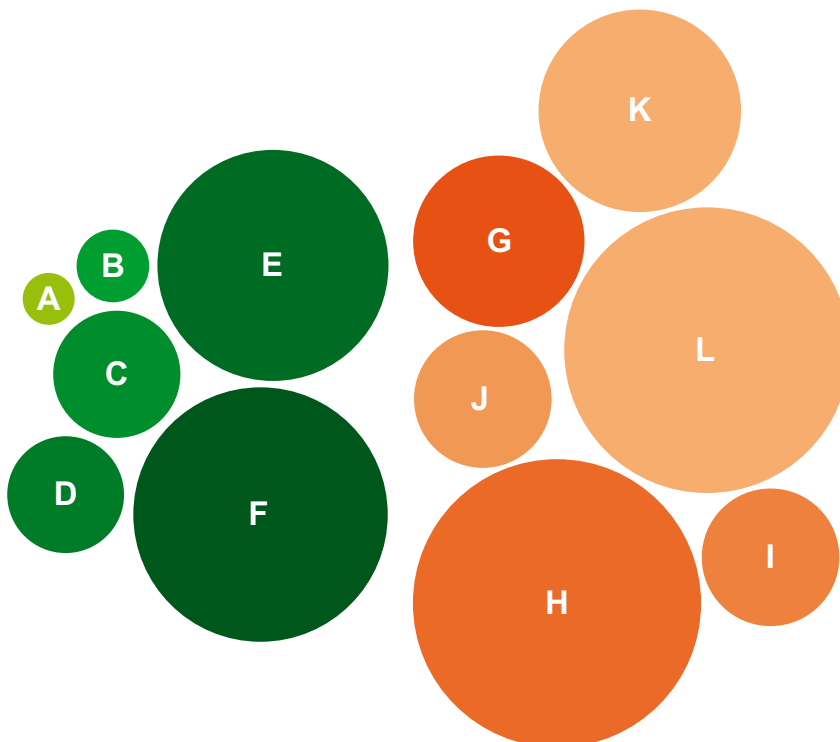
**H:** Global fiscal stimulus package proposed in 2009 in response to the recession: US\$3,100 billion<sup>8</sup>

**I:** US unconditional bank bail-out following the financial crisis: US\$700 billion<sup>9</sup>

**J:** Annual global fossil-fuel subsidies: US\$700 billion<sup>10</sup>

**K:** Worldwide military expenditure in 2009: US\$1,531 billion<sup>11</sup>

**L:** Cost of the Iraq war to date: US\$3,000 billion<sup>12</sup>



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## 4. MITIGATION

### Key principles for climate change mitigation

It is critical that the transition to a low-carbon economy, while driven by the need for environmental justice, does not in itself lead to further economic and social injustices. Policies and measures to tackle greenhouse gas emissions and support economic transition must:

- **Ensure jobs and decent work**, including by minimising job losses, maximising opportunities for job creation, and protecting pay conditions and health and safety for workers.
- **Protect low-income groups**, and guard against the creation of further economic and social injustice.
- **Respect and promote the rights of local communities and Indigenous Peoples**, including rights to self-determination and self-government; the right to free, prior and informed consent; the right to management and customary use of natural resources; land rights; and rights of redress.
- **Ensure good governance**, including participation of affected workers and communities in the development of policies and measures to tackle climate change, and transparency, accountability and democratic control over decision making.

### Problems with carbon trading as a tool for cutting greenhouse gas emissions

Debates on carbon trading dominate discussions in the UN climate negotiations, with proposals on the extension of carbon-trading mechanisms globally and into new areas like forest protection put forward by a number of countries, most notably the European Union, the United States and Japan. Proponents of carbon trading argue that trading allows emissions cuts to be made in the most cost-effective way because the flexibility provided allows emissions reductions to be made where it is cheapest to do so. They also argue that carbon trading drives private-sector investment in tackling climate change in developing countries. However, there are multiple, very significant problems with using carbon trading to tackle greenhouse gas emissions and provide climate finance. These are examined below and in Section 5 on climate finance.

- **Carbon trading is unreliable and unproven**  
Carbon trading is largely unproven as a tool for driving reductions in greenhouse gas emissions. The European Union Emissions Trading System (EU ETS), the world's largest emissions trading scheme, has failed to drive emissions reductions at the pace necessary for Europe to contribute its fair share. In the UK, the highly respected Committee on Climate Change confirmed in 2009 that it lacked confidence in the ability of the EU ETS to deliver the required low-carbon investments in the energy sectors covered by the scheme through the 2020s. It recommended that "a range of options [such as regulation and taxes] for intervention in carbon and electricity markets should be seriously considered."<sup>14</sup>

- **Carbon trading burdens developing countries with the responsibility for tackling climate change**

Although theoretically carbon trading doesn't have to involve offsetting, all existing and planned carbon trading schemes in developed countries are based on substantial offsetting of emissions reductions. This is also the case for all proposals for the expansion of carbon trading currently in the international climate negotiations in the UNFCCC. Offsetting shifts the burden of climate mitigation from developed to developing countries. Offsetting undermines the equitable sharing of the remaining global carbon budget – the volume of greenhouse gas emissions that can still be emitted globally while keeping overall emissions in the atmosphere below levels considered to present an unacceptable risk of catastrophic climate change. Forthcoming research by Friends of the Earth illustrates how little space there is left in the atmosphere to be traded.<sup>15</sup>

- **Carbon trading could make tackling climate change more expensive overall**

Carbon trading removes incentives for polluters to make adjustments which are more expensive, by allowing them to buy pollution permits or offset credits from others in the carbon market. The overall effect of this perverse incentive structure is that the hardest, most expensive economic adjustments are put off. Countries covered by carbon trading schemes continue to develop along high-carbon pathways until they have no choice but to take the most expensive mitigation actions. This has the knock-on effect of wasting time we can ill afford if a transition to low-carbon economies is to take place before climate tipping points are reached.

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## 4. MITIGATION

- **Carbon trading is a tax on consumers to pay polluters to pollute**

The structure and regulatory context of existing carbon trading schemes allows industries covered by them to dodge the additional costs that failure to reduce pollution is supposed to engender, by passing these on to consumers. Uwe Leprich from Saarbrücken University in Germany has tracked electricity prices since the establishment of the EU ETS in 2005. His research demonstrates that even though energy companies initially received the majority of their pollution permits under the scheme for free, the companies included the full price of the permits in electricity prices. This led to increases in wholesale electricity prices of 30 per cent in Germany and France, 50 per cent in Scandinavia, and over 80 per cent in the UK.<sup>16</sup>

- **Carbon trading incentivises increased pollution for profit**

Research on the Clean Development Mechanism (CDM) – the official offsetting scheme sanctioned by the Kyoto Protocol – has exposed major market scandals. Widespread gaming and abuse of the system have been carried out by polluting industries in developing countries, seeking to qualify for offset credits under the scheme. Most recently, CDM-Watch has exposed gaming and abuse of the CDM by the producers of HFC-23, a potent greenhouse gas which is a by-product of the refrigerant gas HCFC-22. The offsetting watchdog has argued that the HFC-23 destruction projects under the CDM offsetting mechanism are actually having the opposite of the intended effect: they are contributing to increasing global greenhouse gas emissions.

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### Box 3. Can carbon trading be reformed?

Numerous loopholes need to be closed in order to reduce the threat posed by existing carbon trading schemes to our chances of avoiding dangerous climate change. Addressing these would require setting caps on emissions in line with science and justice; removing all offsetting from trading schemes; prohibiting speculative trading; auctioning all pollution permits; global regulation to prevent a ‘race to the bottom’ – where countries are forced to lower their regulatory standards to match the lowest standards globally; disaggregation of industrial sectors covered by the schemes to allow for trading only within sectors; and supplementary interventions to drive innovation.

It is questionable whether the resulting mechanisms could be distinguished

from other regulation such as standard setting, except that they would be far more complex than other regulatory instruments which could achieve the same purpose, and thus more time consuming, expensive and difficult to implement.

Critically, ongoing calls for reform of the EU ETS to address some of the worst loopholes have led to very few improvements. This failure is attributable to the power and excessive influence over government decision-making of the considerable vested interests – polluting industries, financial actors and others – that have grown up around the scheme.

The likelihood of wholesale reform of carbon trading in the time we have available to achieve a peak and decline in global carbon emissions thus looks entirely unrealistic.

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## Solutions for climate change mitigation

This section explores priority policies and measures to bring about emissions reductions in the energy, agricultural, forest governance and industrial sectors of national economies. The exact package of solutions required will vary from country to country. There will be significant differences in the types of policies needed in developed and developing countries.

### Energy

#### Investment in renewable energy

Energy supply is responsible for around one quarter of global greenhouse gas emissions.<sup>17</sup> Only a fraction of the world's population benefit from current global energy use, with a significant proportion of people still without access to energy to meet even their basic needs. Globally around 1.63 billion people lack access to electricity and 2.4 billion people cook with firewood, with many suffering the health effects that result from exposure to wood smoke.

Delivering the cuts in emissions from global energy use needed requires a dramatic switch from unsustainable fossil-fuel based economies. This can be achieved through a reduction in unnecessary energy consumption, and increased use of renewable energy sources to meet basic energy needs.

Renewable energy is still far from being cost competitive with fossil fuels, not least because of the substantial state subsidies to the fossil-fuel industry. The 'Green Energy Revolution' Strategy from the United Nations Department for Economic and Social Affairs (UN-DESA) asserts that globally, investment in renewable energy needs to meet the dual

needs of tackling climate change and expanding energy access to those who need it. Of all of the policy mechanisms with the aim of increasing investment in renewable energy deployed so far, the most dramatic expansion of renewable energy capacity was witnessed under the feed-in tariff programmes enacted in countries such as Germany and Spain. Overall, around 90 per cent of the expansion of wind power in Europe since 1995 has occurred in countries that apply feed-in tariffs to power suppliers.<sup>18</sup>

Feed-in tariffs oblige electricity grids to purchase renewable energy as it becomes available and to offer the providers of renewable energy a guaranteed price, the 'tariff' or rate paid for the electricity. Prices are set at levels that ensure renewable energy producers can recover their investments and make a reasonable profit. Prices are also regularly reviewed to prevent over-rewarding, including taking into account reductions in the costs of technology and deployment.

Feed-in tariffs are institutionally light and their ease of implementation in Germany and Spain suggest it would be relatively simple to roll them out across other developed countries. However, in developing countries the ease with which feed-in tariffs could be implemented is severely restricted by the limited government revenue available to subsidise the tariffs until the price of renewable technology is low enough so that subsidies are no longer necessary. The solution to this problem proposed by UN-DESA is international support for a global feed-in tariff programme.<sup>19</sup> It estimates that additional investment of US\$100 billion per year over 15 years would bring down the costs of renewable technologies to a level that is universally affordable so that renewable energy becomes "the default choice for the world as a whole."<sup>20</sup>

#### Energy efficiency

An indication of the global potential of energy-efficiency measures has been provided by the International Energy Agency (IEA). It has put forward 25 recommendations for action on energy efficiency by governments and estimates that if these were implemented globally they could save 8,200 Mt (million tonnes) CO<sub>2</sub> per year by 2030. This is equivalent to half of the EU's annual emissions.<sup>21</sup>

Stimulating energy savings and increasing energy efficiency requires direct government target setting, monitoring, enforcement and evaluation of energy-efficiency measures, supported by public investment to overcome financial barriers to the meeting of targets.

According to the IEA, buildings account for about 40 per cent of energy used in most countries. Tackling this energy use requires new building codes, innovative construction methods, and building-certification schemes. Electrical appliances and equipment represent one of the fastest-growing energy demands in most countries. IEA recommendations include action on mandatory energy performance requirements or labels; low-power modes including standby power for electronic and networked equipment; energy savings from effective lighting technology; and energy-performance test standards and measurement protocols. Finally, with around 60 per cent of oil consumed in transport globally, this sector must be a key target for energy-savings measures. Such measures include mandatory fuel-efficiency standards for light-duty vehicles and fuel economy of heavy-duty vehicles.<sup>22</sup>

#### Carbon and energy taxes

In developed countries where affordable energy is more readily accessible and excessive energy consumption is a significant problem, taxation of carbon and energy has an important role to play. If well targeted, and with an escalator – a

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mechanism which allows the tax to start low and then be increased incrementally – taxation, in combination with other measures, can help reduce excessive energy consumption, incentivise energy efficiency and drive emissions reductions.

The UK, Denmark, Finland, Ireland, the Netherlands, Sweden, and Norway all have carbon taxes. Sweden's escalating carbon tax was introduced at a rate of €28 per tonne but is now over €100 per tonne. The country's Ministry of Finance estimates that Sweden's emissions would be 20 per cent higher without the tax.<sup>23</sup>

The UNFCCC could play a major role in helping to share learning and best practices among developed countries on the use of taxation to tackle greenhouse gas emissions, providing a space for the development of more effective taxation policies which parties to the UNFCCC could implement nationally.

Taxation has a number of advantages over carbon trading, including a more stable and predictable price impact; greater ease of control by governments; and greater simplicity and ease of implementation. Ensuring that large-scale industrial polluters who are targeted by any taxation instrument actually pay will necessitate great care in the design stage. It may require regulations to ensure that the extra costs are not passed on to consumers or measures to reimburse consumers who lose out. In addition, if carbon taxes are directed at households they must be accompanied by measures to mitigate any regressive impacts and to protect vulnerable households.

### Agriculture

The industrial agriculture and food systems are major causes of the climate crisis. In its Fourth Assessment Report the IPCC estimated emissions from agriculture at 13.5 per cent of global greenhouse gas emissions in 2004.<sup>24</sup> However, this did not include emissions from transport and land-use change relating to agriculture. Food and farming specialists GRAIN estimate emissions from the global food system amount to 44-57 per cent of total greenhouse gas emissions. In terms of specific sources, 11-15 per cent of these emissions are from agricultural activities, including the use of industrial machinery and chemical fertilisers; 15-18 per cent from land clearing and deforestation; 15-20 per cent from food processing, packaging and transportation; and the remaining 3-4 per cent from the decomposition of organic matter, including food waste.<sup>25</sup>

Policy specialists have identified key changes in the global food system crucial to achieving the reductions in greenhouse gases necessary to avert catastrophic climate change.<sup>26</sup> These include:

- Reduced dependence on fossil fuels, by decreasing the production and use of artificial fertilisers and the use of fossil-fuel powered transport and machinery.
- A dramatic expansion in agricultural methods that return organic matter to the soil, to capture carbon and reduce the release of nitrous oxide and methane into the atmosphere.
- An end to deforestation and land clearing for agriculture, by scaling down monoculture plantations and supporting diversified agricultural systems that integrate forest cover.
- An end to excessive meat and dairy consumption, coupled with increased diversity of farm animals, to provide a farming system more able to adapt to changing climate and less dependent on the availability of animal feed.
- Strengthening local markets and urban agriculture to increase consumption of fresh, seasonal food.

- An end to the use of agricultural land for the production of agrofuels, and decreased consumption of other non-food products produced from plant raw materials.

These solutions to agriculture's contribution to the climate crisis have been advocated by many small-scale farmers, such as the global peasant farmers' movement La Via Campesina, since the early 1990s: a global return to small-scale, locally-appropriate, sustainable models of agricultural production. Small-scale, sustainable models of production allow for a drastic reduction in the use of fossil fuels, while providing great potential for carbon sequestration (the removal of carbon dioxide from the atmosphere) in plants and soils.<sup>27</sup>

Research by Friends of the Earth and Compassion in World Farming which modelled the impact of changing diets, production systems, land availability and crop yields, shows that it is still possible to feed the world in 2050 without the most intensive forms of production or a massive expansion of agricultural land. It would require healthier, lower-meat diets as well as food distributed more equitably.<sup>28</sup>

Supporting the protection and extension of small-scale sustainable agriculture is contingent on the extension of food sovereignty – “the right of peoples to healthy and culturally appropriate food produced through ecologically sound sustainable methods, and their right to define their own food and agriculture systems.”<sup>29</sup> This requires reforms in global trade rules, bilateral trade, regional policies that undermine food sovereignty, and public investment and other support for small farmers. Reduced demand for the products associated with more damaging, intensive systems will also be vital.<sup>30</sup> Many studies confirm that diets with less meat are essential to tackle climate change and other resource-use limits within the food system.<sup>31</sup>

## Forests

Deforestation is currently responsible for as much as 18 per cent of all carbon emissions.<sup>32</sup> Almost half of the global emissions from deforestation come from two countries: Brazil and Indonesia.<sup>33</sup>

Relevant proposals submitted to the UNFCCC negotiations by FERN, Friends of the Earth International and Rainforest UK in 2008<sup>34</sup> point to three areas where urgent action is needed to tackle the drivers of deforestation and forest degradation:

1. Reducing demand in consumer countries for products and activities that result in deforestation.
  2. Improvements in weak and ineffective forest sector governance.
  3. Facilitating new development pathways which are not premised on forest destruction.
- Addressing these three areas to achieve lasting protection of natural forests requires a broad suite of policy approaches. These include “policy, institutional and legislative reforms, enhanced forest law enforcement and improved forest governance.”<sup>35</sup> Measures are needed in countries where forests are located and in countries which demand products that result in deforestation. In consumer countries it is essential to tackle demand for agrofuels, meat and forest products. This includes using policies that tackle demand, reward reduced consumption, and tackle trade in products which contravenes or undermines existing laws on forest production in producer countries.

In countries where deforestation is taking place the focus must be on protecting and promoting the rights of the local communities and Indigenous Peoples who are the traditional stewards of forests, and strengthening and enforcing laws to protect forests. Community forest governance schemes

**Right: action to reduce greenhouse gases from deforestation and forest degradation must protect the rights of Indigenous Peoples like the Indigenous Guarani in Argentina.**



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have the potential to play an important role,<sup>36</sup> but they must adhere to key principles to be effective, including managing forests so that their resilience to climate change is sustained and restored.

To reduce global emissions from deforestation, reliable and adequate funding for tackling forest degradation and deforestation and supporting the protection of forests must be made available to developing countries by rich, developed countries, in addition to their overseas development aid commitments. Any funding mechanism must be based on clear criteria and principles. These have been set out in detail elsewhere, including in the submission by FERN, Friends of the Earth International and Rainforest UK to the UNFCCC mentioned above, and in a more recent joint paper by Rainforest Foundation Norway and Friends of the Earth Norway.<sup>37</sup>

Discussions on the provision of such funding are underway in the UNFCCC, under the negotiations on REDD (Reducing Emissions from Deforestation and Forest Degradation). The direction of these negotiations is worrying, with developed countries pushing for the inclusion of a REDD funding mechanism in the global carbon market. As a result, funding measures to prevent deforestation in developing countries could be used to offset carbon emissions from rich developed countries, thus providing a get-out for developed countries trying to avoid their fair share of global emissions cuts. Offsetting of emissions-reductions commitments is not possible given the small remaining global carbon budget.

The proposals on the table for REDD would not guarantee long-lasting forest protection: they could actually drive further deforestation. The current definition of forests used in the UNFCCC includes plantations. Plantations store only 20 per cent of the carbon of intact natural forests and large-scale monoculture plantations are responsible for serious environmental, social and economic problems.<sup>38</sup>

### Industrial processes

With regard to industrial processes, there is a triple challenge for the global community: how to bring about a reduction in emissions in this sector; how to do so while supporting developing countries in further developing their domestic industrial capacity to reduce import dependency and meet basic domestic needs in a sustainable way; and how to support significant relocation of production and consumption across the global economy that tackling climate change necessitates.

Tackling emissions from industry – especially from energy-intensive primary materials industries like chemicals and petrochemicals, iron and steel, cement, pulp and paper, and aluminium – is highly complex. It is further complicated by the need felt by all countries to provide an attractive investment environment for businesses.

The term carbon leakage refers to the idea that climate mitigation measures will force industries to shut up their operations and move to countries with less rigorous emissions-reductions measures. The threat of such leakages has been exposed as having been grossly exaggerated. Recent research by CAN-Europe, a network of environmental campaigning organisations, concluded that, contrary to widespread claims by European industry, “the scientific case for carbon leakage under the current EU Emissions Trading System is weak if not non-existent.”<sup>39</sup>

It is the perceived threat of carbon leakage and the perceived need to avoid it that is one of the motivations behind the proposals for new sectoral mechanisms, tabled by developed countries in the UN climate negotiations on carbon trading. It is essential to find a solution to industrial global greenhouse gas emissions which deals with this perceived carbon leakage threat. The starting point must be the introduction of common standards for the use of the best available technologies across industry globally.

This would put an end to fears that standards would compromise countries’ industrial competitiveness or incentivise businesses located within their borders to move away.

The principle of Best Available Techniques (BAT) has been used effectively in driving better environmental standards in polluting industries. For example, the European Integrated Pollution Prevention and Control (IPPC) directive sets emissions limits according to the best techniques and technologies that are reasonably achievable and available at a reasonable cost. The BAT principle allows for standards in the industry to be determined by the most environmentally progressive firms, so it is highly progressive and rewards best practice.

In parallel to the introduction of common standards, the following international action is also essential:

- **A fair and equitable carbon budget** with emissions targets agreed for all countries globally according to the CBDR principle.
- **Adequate finance and technology transfers to developing countries**, as specified by Annex I commitments under the UNFCCC, to support their low-carbon development.
- **Reregulation of global trade and investment** to allow all governments greater control over the industries located within their borders.
- **Relaxation of intellectual property rights** to allow the affordable transfer of the most advanced, low-carbon technologies to developing countries.

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## 5. FINANCE

### Key principles for climate finance

This section sets out key principles for the provision of climate finance in fulfilment of the developed countries' obligations under the UNFCCC. These obligations entail providing new and additional finance to cover the full incremental costs of clean development, and support particularly vulnerable developing countries to meet the costs of adapting to adverse climate impacts.

#### Type of finance

- **Adequate, sustainable, predictable, scaleable:** The scale of climate finance should be adequate, and it should come from sources that are sustainable and predictable. It should be possible to increase funds if new needs or funding gaps are identified.
- **Polluter pays:** Finance flows should ensure the fulfilment of developed countries' commitments to pay the full incremental costs faced by developing countries for low-carbon development, and to support their adaptation to the impacts of climate change.
- **Equitable:** Developed countries should contribute according to their abilities to pay, and developing countries should receive adequate finance according to their mitigation and adaptation needs.
- **Grants not loans:** Tackling climate change must not burden developing countries with even more illegitimate debt.
- **Public before private:** Private-sector investment should be in addition to adequate public finance for climate action, not instead of it. Initial public investment is essential to ensure adequate, appropriate and timely action on climate change in developing countries and will help to create conditions for greater private-sector investment in tackling climate change in the future.
- **Not recycled aid money:** Climate finance must be new money, additional to existing commitments from developed countries to overseas development aid.

#### Use of funds

- **Fair, transparent and accountable governance:** Disbursement of climate finance to developing countries should take place through a new global climate fund under the authority of, and fully accountable to, the UNFCCC. Transparency and accountability mechanisms must be in place to ensure effective public scrutiny of the provision and disbursement of the climate funds.
- **Free from conditions set by donor governments:** Contributing governments should have no power to impose conditions over the disbursement of the finance. Responsibility for ensuring the funds are spent appropriately and according to need should sit with the UNFCCC.
- **Participation of affected communities and protection of their human rights:** Climate finance must ensure the respect and protection of local communities and Indigenous Peoples' rights, cultures, lands and natural resources. It must also support workers in carbon-dependent industries to achieve a just transition to more sustainable economic activities.
- **Promoting local control:** Activities supported by climate finance must promote the local control, use and management of energy, forests, water, and other essential environmental resources, and prioritise local technologies and knowledge.
- **Transformation to environmentally-sustainable alternatives:** Activities supported by climate finance must contribute to the transformation of economies away from fossil fuels and towards renewable energy and the local, sustainable management and control of natural resources.
- **No false solutions:** Climate finance should not be used to fund false solutions which undermine sustainable development, such as large hydroelectricity plants, nuclear energy, monoculture plantations, agrofuels and genetic engineering.

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## 5. FINANCE

### Problems with carbon trading as a source of climate finance

- **Carbon market offset finance is not a legitimate source of climate finance**

Finance received by developing countries through their participation in the carbon market cannot contribute to developed countries' obligations to provide climate finance. This is because the funding is neither provided under the UNFCCC nor is it 'new and additional' – a requirement enshrined in the UNFCCC. These funds are produced as a result of developed countries paying to offset their emissions reductions. The effort by developed countries to expand carbon trading and to conflate carbon market finance with public funding for developing countries is simply a tactic used by those countries to avoid fulfilling their obligations under the UNFCCC.

- **Carbon market finance rarely supports genuine low-carbon development**

Experience shows that carbon market finance provides little incentive to support activities that genuinely contribute to low-carbon sustainable development and transformation of developing country economies away from fossil fuels while also meeting their populations' energy needs. There has so far been very little interest from the carbon market in investment in the poorest countries and communities. More than one quarter of offset credits estimated to be issued in 2012 from CDM projects currently in the pipeline will come from large firms making minor technical adjustments at a few industrial installations to eliminate hydrofluorocarbons (HFCs) and nitrous oxide (N<sub>2</sub>O). In contrast, only 11 per cent of credits are projected to come from

CDM projects involving the production of renewable energy from wind or solar.<sup>40</sup> The underlying cause of this failure is central to the trading mechanism itself as the majority of offset project developers are involved in the carbon market to maximise the returns on their investment.

- **Carbon trading cannot guarantee a predictable flow of finance to developing countries**

Carbon trading will never provide the reliable and predictable flows of finance to developing countries that are necessary to support well-planned sustainable development. This is because these flows are by their very nature unpredictable, depending as they do on the price of carbon at any given time. According to the United Nations World Economic and Social Survey 2009, "the trading of emission certificates as financial assets and speculative instruments can generate a high volatility in the price of carbon."<sup>41</sup> Highly concerning is the increasing use in the global carbon market of very complex financial instruments similar to those that brought about the sub-prime mortgage crisis in the United States and the subsequent global economic crisis.

- **The biggest financial beneficiary of carbon trading is the Northern carbon-trading industry**

Research by the organisation Carbon Retirement on CDM projects in developing countries found that only 28 per cent of total funds received for offset credits under the CDM went directly into mitigation projects in developing countries. The remaining funds raised went into fees and profits for others involved in the trading process, including 30 per cent to banks and project investors, 17 per cent to company shareholders of the project developer,

and 25 per cent into taxes, Adaptation Fund fees, bank interest and fees to carbon-trading brokers.<sup>42</sup> Hence a greater proportion of the funds raised are being recycled back into the Northern-based carbon-trading industry than are going into projects that support mitigation in developing countries.

## Potential sources of climate finance

This section looks at five priority solutions for finding the finance needed for developed countries to fulfil their obligations to provide adequate support for developing countries' action on climate mitigation and adaptation.

These solutions are:

- the introduction of a global Financial Transaction Tax
- tackling tax evasion
- redirecting fossil-fuel subsidies
- expanding Special Drawing Rights
- increasing carbon and energy taxation.

These have been selected because they have the potential to mobilise significant funds for climate finance while being less likely to impose a significant additional burden on ordinary working people in developed countries. It is also not expected that, if implemented, the total revenue from each solution would go towards climate finance alone. There are other legitimate domestic demands on some of these potential sources of public finance, including health, education, domestic action on climate change, and plugging public deficits resulting from the financial crisis.

### Financial Transaction Tax

The Financial Transaction Tax (FTT) is a proposed new tax on specific types of cross-border financial transactions. It has significant potential to contribute large amounts to Annex I government revenues generally, including contributions to the climate finance of developing countries. According to the UK-based Robin Hood Tax campaign, the tax rate proposed for FTTs varies from 0.005 per cent on currency transactions to 0.5 per cent on share transactions. This has the potential to generate up to US\$400 billion per year in additional government revenue for the countries implementing the tax.<sup>43</sup>

FTTs have already been implemented either on a temporary or permanent basis in at least 40 countries. A proposal for a new international FTT has strong and growing global support. On 8 November 2010 an alliance of 183 organisations from 42 countries called on world leaders attending the G20 summit to impose a new FTT to help meet the costs of the economic crisis, support overseas development and help tackle climate change.<sup>44</sup> FTTs also have a number of high-profile supporters in political and public life, including French President Nicholas Sarkozy, and German Chancellor Angela Merkel, as well as academics and economists including Joseph Stiglitz and Paul Krugman, and financiers George Soros and Warren Buffet.<sup>45</sup>

The burden of the tax would not be carried by ordinary working people but by the global financial sector which played a key role in bringing on the recent financial crisis and the subsequent global economic downturn. The tax would cover cross-border exchanges of financial assets such as shares, bonds, currency and financial derivatives products. It would not apply to or affect the financial transactions of ordinary consumers, for example payments for goods, the cashing of pay checks or the payment of cross-border remittances.

The global financial sector is relatively under-taxed; the burden of taxes in most developed countries falls on wages and consumption by ordinary working people. A new international FTT would be progressive, ensuring that the sector plays a role in reducing the public deficits brought about by the bank bail-outs. A new FTT would also help address the dangerous levels of purely speculative activity in the global financial sector.

There are a number of different proposals supported by civil society organisations for distributing the money. Most groups in Europe and North America support splitting the revenue as follows: 50 per cent for the repayment of public debts in the country where the tax has been generated and in some of the other G20 countries; and the other 50 per cent divided evenly between helping developing countries achieve the Millennium Development Goals and adapting to and mitigating against the impacts of climate change.

## 5. FINANCE

### Tackling tax evasion

Tax avoidance by wealthy individuals and multinational companies costs national governments billions of dollars in lost revenue every year. Closing down the mechanisms which allow this tax avoidance could significantly increase the revenues available to governments to spend on desirable social goods such as health, education, housing, and, critically, tackling climate change and adapting to its impacts. While global figures are not available, the French senior tax officers trade union (SNUI) recently estimated that cracking down on tax avoidance across Europe would account for 2-2.25 per cent of European GDP, or €236-266 billion based on 2009 figures.<sup>46</sup> A 2008 US Senate report put losses of US tax revenue from offshore tax abuses at US\$100 billion per year,<sup>47</sup> while the British overseas development charity Christian Aid estimates that tax dodging in the developing world costs its governments US\$160 billion a year.<sup>48</sup>

The Task Force on Financial Integrity & Economic Development, part of the Global Financial Integrity project – a consortium of governments and research and advocacy organisations focused on achieving greater transparency in the global financial system for the benefit of developing countries – has identified five key demands for financial transparency which would help national governments to crack down on the worst excesses of tax evasion globally. These measures, set out below, would be best implemented on a global scale, and this scenario would mean added benefits for developing countries, by returning lost revenue to their governments to spend on development.

**1. Trade mispricing:** Require that the parties conducting a sale of goods or services in a cross-border transaction sign a statement certifying that no

trade mispricing in an attempt to avoid duties or taxes has taken place and that the transaction is priced using the Organisation for Economic Co-operation and Development (OECD) arms-length principle.

**2. Country-by-country reporting:**

Require that all multinational corporations report sales, profits, and taxes paid in all jurisdictions in their audited annual reports and tax returns.

**3. Beneficial ownership:** Require that the beneficial ownership and control of companies, trusts and foundations be readily available on public record to facilitate effective due diligence.

**4. Automatic tax information**

**exchange:** Require governments to collect from financial institutions data on income, gains, and property paid to non-resident individuals, corporations, and trusts. Mandate that data collected is automatically provided to the governments where the non-resident entity is located.

**5. Money laundering:** Require that predicate offences for a money laundering charge – offences from which proceeds have been generated – are harmonised at the most restrictive level and codified.

Source: Task Force on Financial Integrity & Economic Development: <http://www.financialtaskforce.org/>

### Redirecting fossil-fuel subsidies

Global subsidies for fossil-fuel production and consumption are estimated at around US\$700 billion per year.<sup>49</sup> Subsidies from developed countries to support production are harder to estimate, but according to the OECD the global total could be as much as US\$100 billion per year.<sup>50</sup> A significant proportion of producer subsidies involve direct transfers from developed country governments to Northern-based multinational companies involved in the global extraction, processing and distribution of fossil fuels. Neither of these estimates includes spending by developed countries to secure fossil-fuel supplies. A recent article in the journal *Foreign Policy* pointed to research suggesting that the US military alone has spent US\$7.3 trillion in the last three decades keeping aircraft carriers in the Persian Gulf in order to secure oil shipments.<sup>51</sup>

Ultimately, effective global action on climate change requires decarbonisation of the global energy supply and thus changes to the way we use energy. In turn this demands bringing an end to all artificial subsidies for fossil fuels. However, it would be both unfair and difficult to tackle consumer subsidies for fossil fuels before action is taken to reduce the cost of alternative renewable energy sources, for example via the implementation of a global feed-in tariff programme, in addition to action to reduce the need for fossil fuel-based energy use.

Subsidies to fossil-fuel producers do not play the same important social role. The economic benefits associated with the subsidies largely accrue to the senior executives and shareholders of fossil-fuel companies. As a result, fossil-fuel producer subsidies could be redirected soon without significant detrimental impacts on the affordability of or access to energy.

Estimates of fossil-fuel subsidies in developed, Annex I countries vary. According to Oil Change International, annual fossil-fuel subsidies from those countries can be credibly and conservatively estimated at US\$67 billion.<sup>52</sup> Phasing out these subsidies and their redirection to tackling climate change and supporting adaptation in developing countries could plug an important gap in the revenues needed to fulfil the climate-finance obligations of developed countries.

The Kyoto Protocol already calls on countries to remove fossil-fuel subsidies and there is widespread agreement that the staggered phasing out of producer subsidies in Annex I countries could take place relatively quickly. Commitments to begin such a process were made by the G20 at their meeting in Pittsburgh in 2009 and again in Toronto in 2010.<sup>53</sup> There is also support for reducing fossil-fuel subsidies as a tool for tackling climate change from a number of leading global figures, including UN Secretary General Ban Ki-moon, Nicholas Stern, Al Gore, and John Browne (former CEO of the multinational oil company BP).<sup>54</sup>

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### Special Drawing Rights

Another source of global finance which could contribute to the climate-finance needs of developing countries while creating a minimal burden on developed country economies is the Special Drawing Right (SDR). This is an international reserve asset specially created by the International Monetary Fund (IMF).<sup>55</sup> SDRs were created in the 1960s following a global shortage of dollars and gold.<sup>56</sup> They are allocated to IMF member countries in proportion to quotas based on a country's relative weight in the global economy, with their value based on the value of four major currencies. Governments can use SDRs to build up reserves in their central bank, or can convert the assets into hard currency for public spending. The IMF has no power to impose conditions on how the money is spent.

SDRs worth US\$250 billion were issued in 2009 to provide additional funding for countries in response to the global economic crisis. Developed countries received approximately US\$165 billion to help them take economic measures in response to the financial crisis.<sup>57</sup>

A number of proposals have been made as to how SDRs could be used to provide additional revenue for climate finance. ActionAid USA has proposed that developed countries should transfer SDRs from their 2009 allocation to a climate fund under the authority of the UNFCCC, and that the IMF should issue new, regular allocations of SDRs to support developing countries in tackling and adapting to climate change. It is argued that new allocations of SDRs of approximately US\$100 billion per year would not lead to inflation,<sup>58</sup> and use of SDRs to support climate mitigation and adaptation in this way is supported by a growing body of developing

countries in the UNFCCC negotiations, including the Africa group of countries.<sup>59</sup> This approach also has increasing support from climate campaigners and development agencies.

## 5. FINANCE

### Carbon and energy taxation

Carbon and energy taxation is explored earlier in this report as a climate change mitigation solution. It has potential both to provide incentives for reducing CO<sub>2</sub> emissions when used in conjunction with other policy measures, and as a source of increased government revenue for spending on climate finance.

In a recent Communication, the European Commission asserted that a carbon price of €30 per tonne would be needed in the EU ETS in order to cut EU emissions by 30 per cent by 2020. Applying this to EU-wide greenhouse gas emissions, according to 2008 figures from the European Environment Agency, indicates the much greater potential for an EU-wide tax on all greenhouse gas emissions, with €30 per tonne raising approximately €148.2 billion.<sup>60</sup> In the United States, campaigners estimate that revenues in the first year of the introduction

of a graduated 'Starter Tax' of US\$37 per ton of carbon emitted (equivalent to US\$10 per ton of CO<sub>2</sub>) would be approximately US\$55 billion a year.<sup>61</sup>

One area of new carbon and energy taxation which has already gained interest is the proposal for an international aviation levy. Several proposals for different forms of levy on international flights have been put forward in the UNFCCC negotiations. The Maldives, on behalf of the group of Less Developed Countries, has proposed a formula based on the existing French aviation levy of US\$6 on all international economy-class flights and US\$62 for all business-class flights.<sup>62</sup> On the basis of their proposed formula, the Maldives estimates that the levy could raise near-term revenue of US\$10 billion per year.<sup>63</sup> World Bank estimates suggest that a value added tax of 5 per cent globally would bring in about US\$20 billion.<sup>64</sup>

The global aviation industry has revenues of about US\$500 billion per year.<sup>65</sup>

With less than 5 per cent of the world's population currently engaged in international tourism, and much of the remaining 95 per cent prevented because its costs are prohibitive, such a levy would be progressive as a fiscal measure on the global scale.<sup>66</sup> To be consistent with the CBDR principle, the levy would need to be implemented by Annex I countries only, applying to flights between Annex I countries and return flights departing from Annex I countries. Other exemptions or supplementary measures may also be necessary to ensure that the levy does not have regressive impacts in Annex I countries.

**Below: coal-burning power plant, Niederaussem in west Germany**



## 6. CONCLUSIONS AND RECOMMENDATIONS

The solutions in this report demonstrate the wealth of ideas that are ready to hand for tackling global carbon emissions and financing action on climate change by developing countries. Many of these solutions are already well elaborated and the only barriers to their implementation are political will and the dominance that carbon trading currently exerts over discussions on solutions to climate change by policy makers, the United Nations negotiations and the media. It is essential to create space to elaborate and implement these and other viable, equitable and effective solutions if we are to reduce greenhouse gas emissions at the pace so urgently needed to avert catastrophic climate change.

For climate mitigation, it is essential to transform energy production and use. This could be done by investing in renewable energy sources through the implementation of a global feed-in tariff programme, and through stronger government intervention in the form of standard setting for energy efficiency and the implementation of carbon- and energy-taxation measures.

Similar levels of intervention are essential to reduce emissions from heavily polluting industry, most notably the introduction of common standards on the use of best available technology.

Dealing with the threat of carbon leakage also necessitates agreement at the UNFCCC on a safe and equitable global carbon budget, and ensuring the availability of affordable clean technologies in developing countries through the relaxation of intellectual property rights.

Tackling emissions from agriculture: this will demand rolling back unsustainable, fossil-fuel based industrial agriculture; expanding and supporting small-scale,

sustainable farming around the globe; and reducing excessive consumption of the most damaging agricultural products including meat and dairy.

Finally, reducing emissions from deforestation and forest degradation requires that we tackle the core drivers of these problems, notably demand for agrofuels, forest products and meat fed on soy; weak forest governance; failure to protect the land rights of forest-dwelling and Indigenous Peoples; and development models that rely on forest exploitation. This will require making funding available to developing countries to incentivise and support forest protection measures, including the extension of community forest governance.

Where could this funding and other climate finance for developing countries come from? A conservative estimate of the revenue-generating potential of the finance solutions set out in this report indicates that they could provide new and additional climate finance for developing countries of at least US\$420 billion per year (See Box 4 for a breakdown of this figure).<sup>67</sup> The solutions – a global Financial Transaction Tax (FTT), redirecting subsidies to fossil-fuel producers, new Special Drawing Rights at the IMF, cracking down on tax evasion by multinational companies and wealthy individuals, and new carbon and energy taxation – would not need to have any significant impact on ordinary working people in developed countries.<sup>68</sup> They would also bring about many additional benefits of their own. Furthermore, some of the solutions – like the FTT and carbon and energy taxation – would generate significant, additional amounts of revenue for developed countries' governments to spend on public services like health and education, on plugging the big public deficits left by the bank bail-outs and government responses to the economic crisis, and on domestic action to tackle climate change and a transition to low-carbon economies.

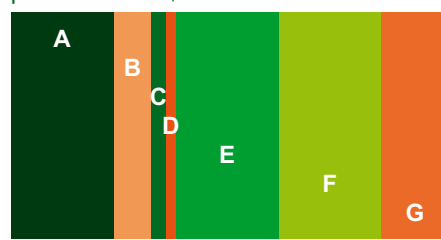
Based on the evidence outlined in this report, Friends of the Earth is calling on national governments to:

- Bring an immediate halt to the expansion of carbon trading globally.
- Urgently dedicate time and resources to elaborate and implement these and many other viable, equitable and effective solutions that are available to cut emissions and deliver climate change finance.

It is now more critical than ever that we bring an end to the dangerous obsession with carbon trading and focus on the real solutions to the climate crisis.

### Box 4. Estimated annual revenue for international climate finance from proposed new sources

- A. Global Financial Transaction Tax (FTT): US\$100 billion
- B. An EU-wide tax on greenhouse gas emissions: US\$37 billion
- C. A graduated US carbon 'Starter Tax': US\$14 billion
- D. An aviation levy covering Annex I countries: US\$10 billion
- E. Cracking down on tax evasion by wealthy individuals and multinational companies: US\$100 billion
- F. New Special Drawing Rights at the IMF: US\$100 billion
- G. Redirecting subsidies to fossil-fuel producers: US\$67 billion



# CLEARING THE AIR

This report has been prepared by Friends of the Earth England, Wales and Northern Ireland as part of its campaign for a fair, strong and binding international agreement to tackle climate change. The report is being distributed to decision makers, negotiators, the media and campaigners in advance of the 16th Conference of the Parties of the United Nations Framework Convention on Climate Change (UNFCCC) in Cancun, Mexico in November 2010.

The report outlines why carbon trading is not the solution to climate change and sets out some of the real solutions for cutting greenhouse gas emissions and delivering climate finance. It calls on national governments to urgently dedicate time and resources to develop and implement these and other more viable, equitable and effective solutions to the climate crisis.

This report draws on the longstanding experience of Friends of the Earth as an environmental justice campaigning organisation and on the rich experience and analysis of our sister organisations in Friends of the Earth International, the largest grassroots-to-global federation of environmental justice campaigning organisations in the world. We also incorporate analysis and ideas from many policy institutions, think tanks, and multilateral institutions such as the United Nations, as well as key actors in the climate justice movement.

This summary report is available online at:  
[www.foe.co.uk/resource/reports/clearing\\_air\\_summ.pdf](http://www.foe.co.uk/resource/reports/clearing_air_summ.pdf).

The references for this summary report are all available in a separate online document at: [www.foe.co.uk/clearing\\_references](http://www.foe.co.uk/clearing_references).

The full report on which this summary is based is available at:  
[www.foe.co.uk/resource/reports/clearing\\_air.pdf](http://www.foe.co.uk/resource/reports/clearing_air.pdf).

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- the UK's most influential national environmental campaigning organisation
- the most extensive environmental network in the world, with around 2 million supporters across five continents, and more than 70 national organisations worldwide
- a unique network of campaigning local groups, working in more than 220 communities throughout England, Wales and Northern Ireland
- dependent on individuals for over 90 per cent of its income.



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**Making life better for people by inspiring solutions to environmental problems**

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