

# Who should pay to tackle climate change in developing countries?

An ActionAid rough guide

May 2009

#### Introduction

Tackling climate change effectively is going to require serious sums of money. Developing countries, many of whom are on the front-line in the battle against global warming, will require large amounts of external public finance to adapt to climate change, combat deforestation and move to low-carbon pathways out of poverty. Rich countries, who have largely caused the climate crisis through their historical greenhouse gas emissions, will have to find a way to pay for the true costs of their pollution.

Rich countries have amassed an enormous 'climate debt' through their past actions which will now prevent poor countries using fossil-fuel intensive pathways out of poverty if the climate crisis is to be contained. Repayment of that debt requires the 'polluter pays' principle to be at the heart of a comprehensive climate deal which will entail a significant transfer of finance from North to South.

# Can you give an example of what spending money on mitigation and adaptation looks like?

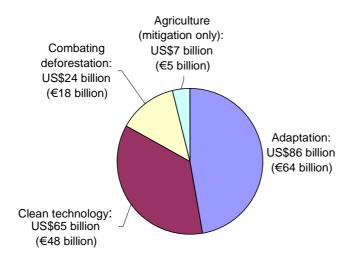
Money spent on mitigation could be used to reduce a country's reliance on fossil fuels by investing in renewable energy for electricity generation. Money spent on adaptation could include building or improving flood defences, improving water storage facilities, or helping particularly vulnerable groups such as smallholder farmers to diversify their crops.

# How much money is needed?

No global estimate can ever be one-hundred per cent precise. But enough research has been done to suggest that the annual cost is going to be well over US\$100 billion, over and above existing commitments on development finance, such as the long-standing commitment for rich countries to give 0.7 of their Gross National Income as aid. Calculations by the UN Development Programme (UNDP) on adaptation and by researchers at the European Commission on mitigation conservatively suggest that developing countries will need at least US\$182 billion (€135 billion) a year by 2020 in addition to existing aid commitments.

Table 1: Money required

| Issue                                | Amount required per year by 2020 |                          |  |  |
|--------------------------------------|----------------------------------|--------------------------|--|--|
| Adaptation <sup>1</sup>              | US\$86 billion                   | €64 billion <sup>2</sup> |  |  |
| Clean technology <sup>3</sup>        | US\$65 billion                   | €48 billion              |  |  |
| Combating deforestation <sup>4</sup> | US\$24 billion                   | €18 billion              |  |  |
| Agricultural mitigation <sup>5</sup> | US\$7 billion                    | €5 billion               |  |  |
| TOTAL                                | US\$182 billion                  | €135 billion             |  |  |



# How much money is currently available?

Global climate change funds accountable to the UNFCCC have US\$255 million pledged to them.

<sup>&</sup>lt;sup>1</sup> UNDP Human Development Report 2007/2008, page 194: "In total they amount to new additional adaptation finance of around US\$86 billion a year by 2015 (table 4.3).": http://hdr.undp.org/en/media/HDR 20072008 EN Complete.pdf

Exchange rate of US\$ to € assumes €1=US\$1.34528 and US\$1=€0.74337. Numbers are rounded up to the nearest

US\$1 billion and €1 billion respectively. This exchange rate applies to all numbers in this paper.

<sup>3</sup> European Commission staff working document accompanying Communication 'Towards a comprehensive climate change agreement in Copenhagen' part 1, 'costs associated with the resulting actions in the energy system and the industrial sectors', page 74: http://ec.europa.eu/environment/climat/pdf/future\_action/part1.pdf

<sup>&</sup>lt;sup>4</sup> European Commission staff working document accompanying Communication 'Towards a comprehensive climate change agreement in Copenhagen' part 1, 'reductions in emissions from deforestation and forest degradation in development countries', page 9: http://ec.europa.eu/environment/climat/pdf/future action/part1.pdf

<sup>&</sup>lt;sup>5</sup> European Commission staff working document accompanying Communication 'Towards a comprehensive climate change agreement in Copenhagen' part 1, 'mitigation action to reduce non-CO2 greenhouse gases in agriculture: nitrus oxide and methane', page 86: http://ec.europa.eu/environment/climat/pdf/future\_action/part1.pdf

Table 2: Funds available

| Fund                           | Amounts pledged <sup>6</sup> |              |
|--------------------------------|------------------------------|--------------|
| Special Climate Change Fund    | US\$12 million               | €9 million   |
| Least Developed Countries Fund | US\$182 million              | €135 million |
| Kyoto Protocol Adaptation Fund | US\$61 million               | €45 million  |
| TOTAL                          | US\$255 million              | €189 million |

So the gap between what is needed and what is currently available is a yawning chasm.

## Who should pay?

The Adaptation Financing Index<sup>7</sup> combines responsibility for greenhouse gas emissions with ability to pay. Responsibility is calculated by counting each countries' excessive carbon emissions since 1992, the year in which the UN Framework Convention on Climate Change (UNFCCC) was established whereby all countries acknowledged the danger posed by global warming. Ability to pay is calculated by a country's Human Development Index score. Only countries scoring above 0.9 (on a scale of 0 to 1) are deemed capable of contributing. Responsibility and capability are given equal weighting in the Index.

Twenty-eight countries are deemed both responsible and capable in the Index. Ten of the EU's twenty-seven countries have Human Development Index scores of less than 0.9 and are therefore excused from contributing.

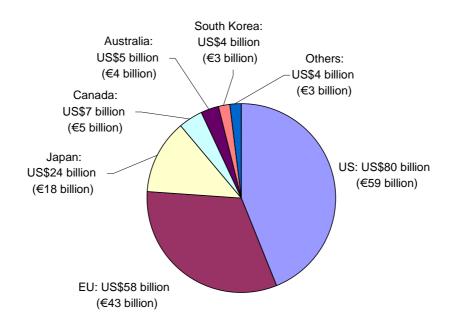
The Adaptation Financing Index was designed to calculate countries' contributions to financing climate change adaptation, particularly since adaptation programmes and projects are unlikely to attract large-scale flows of private finance. Yet given the urgency of action to tackle climate change some degree of public finance for mitigation will also be required. The same formula for calculating countries' fair share of the adaptation bill holds for mitigation too.

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<sup>&</sup>lt;sup>6</sup> As of May 2009. See: <a href="http://www.climatefundsupdate.org/">http://www.climatefundsupdate.org/</a>; The Adaptation Fund is funded differently from the others: it receives money via a 2% levy on Clean Development Mechanism projects. The €45 million figure is the World Bank estimate for the total value of Certified Emission Reductions if they were converted into money. See World Bank paper for the Adaptation Fund: <a href="http://adaptation-fund.org/images/AFBB2-9-Monetization.pdf">http://adaptation-fund.org/images/AFBB2-9-Monetization.pdf</a>
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Table 3: Using the methodology contained in the Index the following amounts are assigned.

| Country             | ry % of Mitigation amount per Adaptation amount |            | amount        | TOTAL amount per |      |                         |     |
|---------------------|---|------------|---------------|------------------|------|-------------------------|-----|
|                     | global  | year by 20 | 20 (billions) | per year by 2020 |      | year by 2020 (billions) |     |
|                     | total   |            |               | (billions)       |      |                         |     |
|                     |   | US\$       | €             | US\$             | €    | US\$                    | €   |
| US                  | 44%   | 42.2       | 31.4          | 37.8             | 28.1 | 80                      | 59  |
| EU17                | 32%   | 30.7       | 22.8          | 27.5             | 20.4 | 58                      | 43  |
| Japan               | 13%   | 12.4       | 9.2           | 11.1             | 8.3  | 24                      | 18  |
| Canada              | 4%  | 3.8        | 2.8           | 3.4              | 2.5  | 7                       | 5   |
| Australia           | 3%  | 2.9        | 2.2           | 2.6              | 1.9  | 5                       | 4   |
| South Korea         | 2%  | 1.9        | 1.4           | 1.7              | 1.3  | 4                       | 3   |
| Others <sup>8</sup> | 2%  | 1.9        | 1.4           | 1.7              | 1.3  | 4                       | 3   |
| TOTAL               | 100%  | 96         | 71            | 86               | 64   | 182                     | 135 |



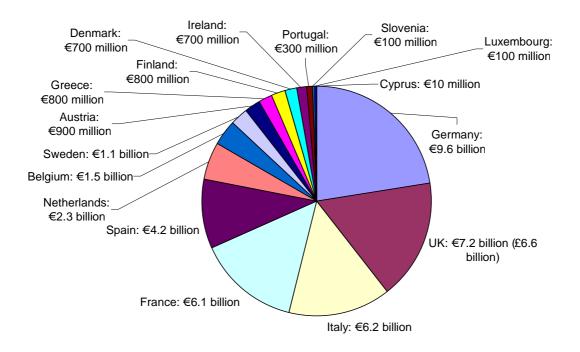
http://www.oxfam.org/sites/www.oxfam.org/files/adapting%20to%20climate%20change.pdf

<sup>&</sup>lt;sup>8</sup> The other countries are: Switzerland, Norway, Israel, Singapore, New Zealand and Iceland. See: Oxfam (2007), Adapting to Climate Change, page 28:

Table 4: Within the EU 17 the fair share for each country is as follows.

| Country     | % of   | Mitigation              | amount per | per Adaptation amount |          | TOTAL amount per        |            |
|-------------|--------|-------------------------|------------|-----------------------|----------|-------------------------|------------|
|             | global | year by 2020 (billions) |            | per year by 2020      |          | year by 2020 (billions) |            |
|             | total  |                         |            | (billions)            |          |                         |            |
|             |        | US\$                    | €          | US\$                  | €        | US\$                    | €          |
| Germany     | 7.1%   | 6.7                     | 5          | 6.2                   | 4.6      | 12.9                    | 9.6        |
| UK          | 5.3%   | 5.1                     | 3.8 (£3.4) | 4.6                   | 3.4 (£3) | 9.7                     | 7.2 (£6.4) |
| Italy       | 4.6%   | 4.4                     | 3.3        | 3.9                   | 2.9      | 8.3                     | 6.2        |
| France      | 4.5%   | 4.3                     | 3.2        | 3.9                   | 2.9      | 8.2                     | 6.1        |
| Spain       | 3.1%   | 3                       | 2.2        | 2.7                   | 2        | 5.7                     | 4.2        |
| Netherlands | 1.7%   | 1.6                     | 1.2        | 1.5                   | 1.1      | 3.1                     | 2.3        |
| Belgium     | 1.1%   | 1                       | 0.780      | 0.940                 | 0.700    | 2                       | 1.5        |
| Sweden      | 0.8%   | 0.770                   | 0.570      | 0.690                 | 0.510    | 1.5                     | 1.1        |
| Austria     | 0.7%   | 0.670                   | 0.500      | 0.590                 | 0.440    | 1.2                     | 0.900      |
| Greece      | 0.6%   | 0.580                   | 0.430      | 0.510                 | 0.380    | 1.1                     | 0.800      |
| Finland     | 0.6%   | 0.580                   | 0.430      | 0.510                 | 0.380    | 1.1                     | 0.800      |
| Denmark     | 0.5%   | 0.480                   | 0.360      | 0.430                 | 0.320    | 0.940                   | 0.700      |
| Ireland     | 0.5%   | 0.480                   | 0.360      | 0.430                 | 0.320    | 0.940                   | 0.700      |
| Portugal    | 0.2%   | 0.190                   | 0.140      | 0.170                 | 0.130    | 0.400                   | 0.300      |
| Slovenia    | 0.1%   | 0.090                   | 0.070      | 0.080                 | 0.060    | 0.130                   | 0.100      |
| Luxembourg  | 0.1%   | 0.090                   | 0.070      | 0.080                 | 0.060    | 0.130                   | 0.100      |
| Cyprus      | 0.01%  | 0.009                   | 0.007      | 0.008                 | 0.006    | 0.013                   | 0.010      |

Note: numbers may not add up precisely due to rounding.



### How should the funds be raised?

Research for the Stamp Out Poverty coalition<sup>9</sup> suggests that around US\$82 billion (€61 billion) per year could be raised by a combination of four international mechanisms:

#### Norwegian 'Assigned Amounts Units' levy

The international auctioning of national carbon emission permits suggested by Norway as a means to finance adaptation would be likely to raise at least US\$14 billion (€10.5 billion) per year and could raise more if more permits were auctioned.

#### International Air Travel Adaptation Levy

A passenger tax on international air travel as suggested by the Maldives would be likely to raise at least US\$13 billion (€9.5 billion) per year for adaptation and could raise more if the levy were set at a higher level.

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<sup>&</sup>lt;sup>9</sup> Stamp Out Poverty (2009), Assessing the alternatives: <a href="http://www.stampoutpoverty.org/?lid=10939">http://www.stampoutpoverty.org/?lid=10939</a>

International Maritime Emission Reduction Scheme - international version

An industry tax on international shipping would be likely to raise at least US\$15 billion

(€11 billion) per year and could raise more if the levy were set at a higher level.

**Currency Transaction Tax** 

A very small tax on international currency transactions, originally suggested by the

economist James Tobin, is likely to raise US\$40 billion (€30 billion) per year.

It is in the interests of countries deemed to be contributors to support these international

mechanisms as part of their contribution to financing climate action in developing countries.

Given that the amounts likely to be raised by these mechanisms falls short of what is required,

rich countries will have to find the remainder of the money from as yet unidentified sources.

Which institution should spend the money?

Any global deal on post-2012 targets for mitigation and adaptation will be agreed under the UN

Framework Convention on Climate Change (UNFCCC). It is therefore logical that the climate

finance needed to achieve greenhouse gas emission reductions in developing countries and to

enable them to adapt is channelled to them through an institution accountable to the UNFCCC.

(For more detail please see: 'The case against the World Bank's role in tackling climate change

- an ActionAid rough guide').

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