

CLIMATE CHANGE ADAPTATION IN DEVELOPING COUNTRIES: WHAT THE G8 HAS TO DELIVER

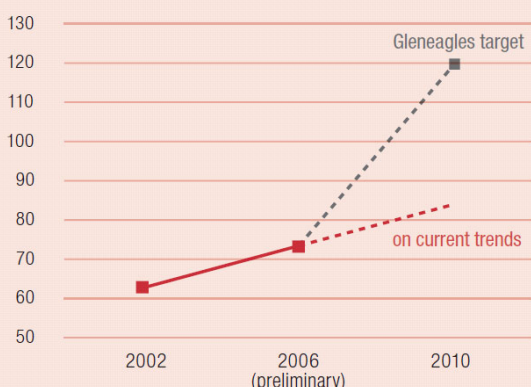
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KEY DEMANDS:

- G8 countries must deliver on their development aid commitments
- G8 have to implement 2020 mitigation targets in line with the 2°C limit
- G8 countries have a key responsibility to support developing countries for adaption
- G8 countries have to respect key principles for adaptation funding as enshrined in the UNFCCC
- The proposed new Climate Investment Funds are not the sole answer for a future international financial architecture for climate and development.
- The future for serious adaptation financing lies in new, binding and predictable mechanisms which deliver resources in addition to ODA commitments

The G8 has a huge historical responsibility for causing climate change. Altogether, they contributed 42.5% of global CO₂ emissions from energy use between 1992 and 2004 and more than 60% since 1850.ⁱ Their cumulative per capita emissions since 1850 result in almost five times the world average. Whilst the G8 leaders are meeting the Arctic has surpassed all predictions for the speed and scale of arctic summer ice loss. Today (early summer 2008), most sea ice scientists agree that we are either at or past the tipping point of the arctic summer sea ice and talk of an ice free summer arctic by 2013.ⁱⁱ This massive iconic change in the earth's system increasingly signals that the future consequences for humanity and especially the world's poor are potentially devastating. The G8 must deliver swift and urgent action now to agree and implement ambitious short and long term mitigation reductions targets, fulfil their existing ODA commitments and pay for the costs of climate change by supporting adaptation where possible for those most affected countries.

Development projects, programmes and technical cooperation
(2005 US\$ billion)



Source: Gurria and Manning 2007.

Figure 1: Trend of ODA and Gleneagles target
Source: taken from UNDP 2007: Human Development Report 2007/2008

The G8 must deliver on their existing development aid commitments

Food crisis and soaring oil prices produce additional financial burdens for the poorest developing countries and can eliminate development progress achieved over recent years. At the same time, poverty eradication and sustainable development depend upon tackling climate change and ensuring environmental sustainability; otherwise, any gains will be transitory and inequitable.ⁱⁱⁱ The poorest are disproportionately dependent on utilising environmental goods and services for livelihood security^{iv}. However climate change is increasingly impacting many crosscutting sectors crucial for sustainable development and poverty elimination e.g. water, health, food security etc., and further consequences are unavoidable. Vulnerable and poor countries will be hardest hit, whilst rich countries that have done so much to cause climate change are least affected and have more resources to adapt to climate impacts. In 1970, developed countries have committed to spend 0.7% of their GNI in the future on Official Development Assistance (ODA). None of G8

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countries has achieved this goal so far. In 2005 at the Gleneagles Summit, the G8 have committed to double their ODA by 2010. However, present analyses shows that it's unlikely that this promise will be fulfilled (figure 1). By not delivering on their ODA commitments, G8 countries undermine developing countries' possibilities to successfully fight poverty, which is in itself an important part of any successful climate change mitigation and adaptation strategy.

Successful climate change mitigation and adaptation requires additional investment in sectors that are key for progress on the Millennium Development Goals (MDGs) and sustainable development. Specifically for adaptation the scale of annual costs in developing countries is estimated to be tens of billions.^v These figures send a strong signal that the costs of adaptation are high and grow exponentially with failure to curb emissions rates. The additional challenges from climate change coincide at a time where developed countries commitments to increase their Official Development Assistance (ODA) are still far from being met and yet greenhouse gas emissions continue to rise.

The G8 must implement 2020 reduction targets in line with the 2°C limit

Global warming is increasingly likely to reach levels that will be disastrous for millions of people if the G8 and other developed countries do not immediately start to reduce their greenhouse gas emissions. The less emission mitigation is achieved the more severe will be the consequences of climate change in particular for those countries particularly vulnerable to climate change, like Small Island Developing States, the Least Developed Countries and countries in Africa prone to drought, floodings and storms. Even a 2°C stabilisation will lead to severe impacts such as drought, flooding, fires, food insecurity and more intense natural disasters.^{vi} This will be too much to bear for those most vulnerable countries. Worryingly emissions from emerging economies are increasing year by year, and this has to be addressed by increased action. However, developed countries still have the first responsibility to substantially lower their carbon footprint. However per capita emissions are still much higher than the global average and in particular than a long-term sustainable level (less than 2 tonnes per capita).

The long-term mitigation target of halving global emissions by 2050 currently being discussed in the G8 would be a significant but totally inadequate commitment to avoid dangerous climate change. According to IPCC scenarios global

reductions of 50 to 85% by 2050 (compared to 2000) are needed if global temperature increase was to be limited to 2 to 2.4°C above pre-industrial levels.^{vii} Many climate scientists are increasingly warning that increases should be limited to well below 2°C, in order to avoid large-scale implications of melting of the Greenland ice shield and other tipping points and averting potentially catastrophic climate change.^{viii}

Table 1: Implications of different base years for global reduction efforts of greenhouse gas emissions (CO₂ equivalents)

Halving emissions by 2050 compared to	Emission reductions by 2050 compared to 2000	Emission reductions by 2050 compared to 1990
2000	50%	43%
2005	45%	36%
2008	39%	31%

Source: calculations based on IPCC 2007: Climate Change 2007: Mitigation. Summary for Policymakers.
The Japanese approach to take 2005 as base year for halving emissions would result in reductions of only 45% compared to 2000 and 36% compared to 1990.

The current Japanese proposal to take 2005 as a base year for halving

emissions by 2050 would result in a much higher level of emissions than what is needed to stay well below 2°C temperature increase above pre-industrial levels, with even more severe adverse consequences for developing countries (table 1). Such a long-term goal would not be acceptable, because it would neglect the concerns of those most affected who are not invited to the G8. This is a key reason why the only treaty and institution whereby fixing a long-term target would be considered legitimate is where those countries most affected by this choice are sitting at the table, which is the UNFCCC.

Without an agreed long-term target with clear mid-term reduction commitments (by 2020) signed up to by developed countries within the UNFCCC, any other global goal would create the fear of a race to the end and a "climate apartheid" scenario, whereby developed countries force others to limit their development progress and reduce emissions whilst maintaining their unsustainable high level of emissions. In order to keep global warming to below 2°C, G8 countries should commit at a minimum to 2020 targets which collectively lead to an industrialised countries' targets at the upper end of the IPCC range (minus 25-40% compared to 1990), given the uncertain risks of climate change.

G8 countries are responsible to support developing countries adapt to climate change

The key principle for international climate policy is that of the “common but differentiated responsibilities and respective capabilities” (CBDR). 192 countries have agreed to this by ratifying the United Nations Framework Convention on Climate Change. All the G8 countries are members of the UNFCCC. Countries should realise the multiple benefits that decarbonisation in the energy and other sectors can bring about, especially to reduce dependency on increasingly soaring oil and energy expenditures. Adaptation (where possible requires the generation and transfer of huge financial resources for developing countries, yet many already suffer from chronic poverty and struggle to meet the MDGs. What would it mean to operationalise the CBDR principle? The G8 countries would end up with a responsibility of contributing between 64.3% and 82.4% of the adaptation costs, according to two recent analyses (see table 2). Assuming for example annual costs of USD 50bn annually, this would end up in USD 32.1 bn respectively USD 41.2 bn annually.^{ix} In the GDR calculations, some developing countries would also have to contribute, like China (7.0%) or South Africa (1.1%).

Table 2: G8 duty to meet adaptation financing commitments based on responsibility and capability, according to different analyses

Country	Greenhouse Development Rights Framework (GDR)	Oxfam Adaptation Financing Index
Canada	2.9%	4.3%
France	3.6%	4.5%
Germany	5.5%	7.1%
Italy	3.3%	4.6%
Japan	8.1%	12.9%
Russia	2.3%	-
UK	4.3%	5.3%
USA	34.3%	43.7%
G8 sum	64.3%	82.4%

Source: Ecoequity 2007. The Greenhouse Development Rights Framework. Oxfam 2007

So far, G8 countries have contributed very limited funding to adaptation efforts in developing countries, which by far does not match even the most urgent adaptation needs, as identified in the National Adaptation Programmes of Action (NAPAs). The NAPA process has helped many countries to better understand the development challenge arising from climate change and was recently reaffirmed by a number of countries at the UNFCCC sessions in Bonn. However, implementation of the NAPAs is still unsure – total costs for the 49 NAPAs are estimated to be between USD 1 and 2 bn primarily due to the limited resources contributed by developed countries to the Least Developed Countries Fund (LDCF, see table 3). Much of the pledged money has not yet been delivered. Some G8 countries have not even made pledges, in

Table 3: Contributions of G8 countries to UNFCCC Funds (Least Developed Countries Fund, Special Climate Change Fund) related to adaptation (in million USD)

	Pledged	Unpaid (%)
Canada	19.412	0
France	15.862	11.394 (72%)
Germany	72.185	48.615 (67%)
Italy	11.000	5.000 (45%)
Japan	0.250	0
Russia	0	0
UK	39.430	19.836 (50%)
USA	0	0
Total Fund	263.136	98.026 (37%)

Source: based on GEF 2008: Status report on the climate change funds, as of March 4, 2008. GEF/LDCF.SCCF.4/Inf.2

particular the US. Also Japan has delivered virtually nothing into the Funds, although its economic capability is much higher than that of other countries. No comprehensive assessment exists on how much the countries have invested into adaptation measures in their bilateral or multilateral development assistance, but efforts have increased in recent years. In total, the insufficient resources and unfulfilled commitments will make developing countries question their wider participation in climate change talks on any future international agreement.

In addition to their financial contributions, G8 countries have made a limited number of rather vague commitments on their support to climate change adaptation in developing countries. For example in the 2005 Gleneagles summit, they promised to strengthen the development and improvement of Global Earth Observation Systems, in particular by strengthening climate institutions in Africa. They also

invited the World Bank to develop and implement “best practice” guidelines for screening their investments in climate sensitive sectors, in consultation with host governments and local communities.^x In Heiligendamm 2007, G8 countries declared their willingness to continue cooperation on adaptation with developing countries, to help identify the costs and benefits of adaptation.^{xi} They also reiterated the willingness to support climate research and risk assessments. The importance of the UN funds was mentioned, but without any joint commitments to increase the available funds. In this year’s G8 process a report should review the progress since 2007.

G8 countries have to respect key principles for adaptation funding

The new and developing architecture of funding and financing for climate change adaptation poses many challenges both morally, politically and economically. However it is necessary to consider a range of fundamental principles based on an equity approach for steering the discussion and design of the policy and institutional architecture. These build on the UNFCCC as well as the Bali Action Plan:

- **Financing adaptation** by developed countries should be seen as an obligation originating in harmful actions being taken in the past, namely fostering global warming by greenhouse gas emissions. Thus, it is of **compensatory nature**, and any adaptation financing has to flow in grants and not any kind of loans;
- **Timely, predictable and long-term delivery**, which overcomes the failure of relying on voluntary contributions;
- **New and additional resources**, means that resources delivered by developed countries for adaptation have to be additional to existing and mostly unfulfilled commitments to spend 0.7% of their Gross Domestic Product into Official Development Assistance (ODA);
- the **principles of equity and of common but differentiated responsibilities and capabilities** should be the underlying principles for allocating these funding obligations, in line with the “polluter pays” principle;
- Governance structures have to reflect the **“one country, one vote”** principle and must result in a voting majority of those countries most affected by climate change, the developing countries;
- Adaptation funds should respond to **needs identified at the national and regional level**;
- Expenditures for adaptation should have a focus on **increasing the adaptive capacity of those people who are most vulnerable to climate change**. Developing country governments are expected to prioritise vulnerability reduction of the most vulnerable as much as possible. This is part of their obligation to secure the human rights of its people whose fulfillment is threatened by climate change for example in the fields of food security, the right to health, access to sufficient fresh water etc.;
- Transaction costs should be kept to a **minimum and coordination between funding mechanisms maximised**.
- **Transparency of criteria, disbursement and monitoring** is needed.

Moving forward or backward with new World Bank Climate Investment Funds?

The G8 summit in Hokkaido is likely to launch two new climate-related funds under the World Bank, the Climate Technology Fund and the Strategic Climate Fund. The latter one, through the Pilot Programme for Climate Resilience (PPCR), is supposed to support a number of developing countries in the integration of climate resilience into their development activities. The size of this fund is expected to be around USD 300 – 500 million. There has been considerable irritation for the UNFCCC process emerging from this initiative, and many countries have expressed their concerns that this initiative is to distract attention and resources from the UNFCCC process which is in a decisive stage. Japan, the US and UK are the key drivers behind these new funds, but other G8 members might also contribute.

While the key objective of this Fund is of good reason – advancing the understanding and experience with approaches to integrate adaptation into national planning processes – a number of issues raise serious concerns. These include that inter alia loans should be provided for adaptation, which is inappropriate given the compensatory nature of adaptation, especially until those countries most culpable have met their responsibilities within the UNFCCC. Adaptation financing has to be in full cost grants additional to existing ODA commitments. Strangely only a couple of months after an agreement was reached on the governance structure of the Adaptation Fund under the Kyoto Protocol (in lengthy and very contentious discussions) the World Bank decided to come up with another Fund. The World bank fund is less fair, democratic and appropriate than the UNFCCC Adaptation Fund’s structure, where sixteen members representing country groups. LDCs and the SIDS as particularly vulnerable countries have separate seats, each having one vote independent of their power or financial contributions to the Fund to adopt or decline decisions. The international outcry and pressure on the proposed World Bank funds has resulted in some improvements. Of particular importance is the “sunset clause” which clearly states that the PPCR will supposedly not finance activities beyond the year 2012, when the entry into force of a new international climate agreement is expected. This reiterates that the UNFCCC is the primary actor for climate-related purposes.^{xiii} However, at a time where negotiations on a new post-2012 climate change agreement gain speed, it was highly insensitive that funding opportunities outside the UNFCCC process emerge, with probably a much bigger

financial volume, while the UNFCCC instruments remain largely underfunded. As a priority existing UNFCCC funding mechanisms including the Adaptation Fund, should be supported. The proposed new Climate Investment Funds are not the answer to the development of a future international financial architecture for climate and development.

The future for serious adaptation financing lies in new, binding and predictable mechanisms

The negligible amounts of funding that have been provided by G8 and other developed countries so far to finance adaptation in developing countries show that the future of an increased adaptation financing can not lie in voluntary commitments that very often have not been fulfilled. In the context of the intensifying UNFCCC negotiations on a new climate change agreement, only recently, at the UNFCCC negotiations in Bonn, have some concrete funding proposals been put on the table that have potential to transcend and transform the adaptation funding debate.. The auctioning of national or sectoral emission allowances (Norway), a global CO₂ tax (Switzerland) or legally binding contributions based on responsibility and/or capability indicators (Mexico and AOSIS) are potential proposals that move into the right direction linking polluters with payment , although further details must be carefully reviewed and developed by all parties.^{xiii} All countries engaged in the UNFCCC process, including those that are members to the G8, must now review these proposals and put forward concrete suggestions that develop mechanisms to clearly generate additional money and provide predictable resources.

Future proposals deserve more detailed exploration by governments in terms of technical and political implications. This examination has to be based on

- a) the recognition that current approaches are not viable for the future challenge of adaptation that is upon the developing countries,
- b) on the principles that were agreed to in the UNFCCC context as described above, and
- c) on the scale of financing needed.

New sources of finance – if combined with adequate policy frameworks and a fair and effective institutional set-up for channelling such new large financial flows - may be able to deliver a substantial share of adaptation action and thus contribute to long-term development prospects. A fair and transparent governance system, however, requires equal representation by developing countries, as well as a fair system for accessing the funds.

Without substantially increased efforts by G8 countries, both in terms of domestic mitigation as well as support for adaptation and clean development in developing countries, the world is heading for a climate disaster, leaving the poorest with the greatest burden.

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ⁱ Figures based on World Resources Institute: CAIT (Climate Analysis Indicator Tool), <http://cait.wri.org>

ⁱⁱ WWF (2008): *Arctic Climate Impact Science*. An update since ACIA. Oslo. <http://www.panda.org/arctic>

ⁱⁱⁱ Millennium Ecosystem Assessment (2005). *Ecosystems and Human Well-being: Synthesis*. Island Press, Washington, DC

^{iv} World Resources Institute (2005). *World Resources 2005: the wealth of the poor – managing ecosystems to fight poverty* UNEP/UNDP/WRI/World Bank Chapters 1 & 2 <http://population.wri.org/worldresources2005-pub-4073.html>. Economics for the Environment Consultancy (EFTEC) (2005). *The economic, social and ecological value of ecosystem services: a literature review: final report for the Department for the Environment, Food and Rural Affairs*. EFTEC. London.

^v See Oxfam (2007): *Adapting to climate change - What's needed in poor countries, and who should pay*. Oxfam briefing paper 104. UNDP (2007): *Human Development Report 2007/2008*; UNFCCC (2007): *Investment and financial flows to address climate change*.

^{vi} IPCC (2007): *Climate change 2007: Impacts, Adaptation and Vulnerability. Summary for Policymakers*. <http://www.ipcc.ch/pdf/assessment-report/ar4/wg2/ar4-wg2-spm.pdf>

^{vii} IPCC (2007): *Climate Change 2007. Mitigation. Summary for Policymakers*. <http://www.ipcc.ch/pdf/assessment-report/ar4/wg3/ar4-wg3-spm.pdf>

^{viii} See e.g. Hansen, J. et al. (2008): Target atmospheric CO₂ – where should humanity aim? <http://arxiv.org/abs/0804.1126>

^{ix} It is important to note that in order to effectively combat climate change further expenditures in a similar order are needed for mitigation and avoiding deforestation

^x G8 (2005): *Gleneagles Plan of Action. Climate Change, Clean Energy and Sustainable Development*. http://www.britishembassy.gov.uk/Files/kfile/PostG8_Glneagles_CCChangePlanofAction.pdf

^{xi} G8 (2007): *Growth and Responsibility in the World Economy*. http://www.g-8.de/nn_220074/Content/EN/Artikel/_g8-summit/anlagen/2007-06-07-gipfeldokument-wirtschaft-eng.html

^{xii} World Bank 2008: Strategic Climate Fund. 3 June 2008.

http://siteresources.worldbank.org/INTCC/Resources/Strategic_Climate_Fund_final.pdf#Strategic_Climate_Fund

^{xiii} Presentations on these proposals can be downloaded at

http://unfccc.int/meetings/ad_hoc_working_groups/lca/items/4427.php