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Research Report

The gap between commitments and implementation: Assessing the compliance by Annex I Parties with their commitments under the UNFCCC and its Kyoto Protocol

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**THE GAP BETWEEN COMMITMENTS AND
IMPLEMENTATION: ASSESSING THE
COMPLIANCE BY ANNEX I PARTIES WITH
THEIR COMMITMENTS UNDER THE
UNFCCC AND ITS KYOTO PROTOCOL**

Vicente Paolo Yu III



RESEARCH PAPERS

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HAVE ANNEX I PARTIES MET THEIR COMMITMENTS UNDER THE UNFCCC AND ITS KYOTO PROTOCOL?

Vicente Paolo Yu III*

SOUTH CENTRE

OCTOBER 2009

*Mr. Vicente Paolo Yu III is the programme coordinator of the Global Governance for Development Programme (GGDP) of the South Centre. Research assistance, especially in the Data Annex, was provided by Ms. Katherine Acosta, Ms. Roshni Dave, Ms. Therese Guiao, and Mr. Shahab Paya of the GGDP.

THE SOUTH CENTRE

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The South Centre enjoys support and cooperation from the governments of the countries of the South and is in regular working contact with the Non-Aligned Movement and the Group of 77. The Centre's studies and position papers are prepared by drawing on the technical and intellectual capacities existing within South governments and institutions and among individuals of the South. Through working group sessions and wide consultations, which involve experts from different parts of the South, and sometimes from the North, common problems of the South are studied and experience and knowledge are shared.

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EXECUTIVE SUMMARY

Annex I Parties to the United Nations Framework Convention on Climate Change (UNFCCC) have the following key obligations:

- to mitigate their GHG emissions in accordance with UNFCCC Art. 4.2(a) and (b) and Art. 3 of the Kyoto Protocol;
- to provide UNFCCC implementation-related financing to developing countries pursuant to UNFCCC Art. 4.3, and to assist in meeting developing countries' costs of adaptation pursuant to UNFCCC Art. 4.4;
- to transfer technology and technology know-how on environmentally sound technologies to developing countries pursuant to UNFCCC Art. 4.5;
- to take full account of actions relating to finance and technology, among others, that are needed to meet the specific concerns of developing countries in relation to adaptation and the implementation of response measures pursuant to UNFCCC Arts. 4.8 and 4.9; and
- to report on their compliance with their UNFCCC obligations pursuant to UNFCCC Art. 12.

Mitigation

Annex I Parties have specific quantified mitigation commitments under Art. 4.2(a) and (b) of the UNFCCC to reduce, individually or jointly, their greenhouse gas emissions to their 1990 levels and, under Art. 3 of the Kyoto Protocol, to go below such 1990 levels by an aggregate average of 5.2 percent.

Key Findings

- As of the middle of the decade 2000-2010, nineteen (19) of the forty (40) Annex I Parties to the UNFCCC have GHG emission levels above their 1990 baseline emissions, and twenty-one (21) of the thirty-nine (39) Annex I Parties that are Parties to the Kyoto Protocol have not yet met their mitigation targets.
- From 1990 to 2006, total GHG emissions from developed countries listed in Annex I of the UNFCCC declined by 4.7 per cent. This decrease, however, is largely due to the collapse of many industrial activities in Annex I Parties that are economies in transition.
- Excluding the decrease in Annex I EIT Parties' emissions, the emissions from developed countries - i.e. Annex I non-EIT Parties - actually rose by 9.9 per cent compared to 1990 levels between 1990 and 2006

On mitigation, as of 2006, most developed countries listed in Annex I of the UNFCCC that are not economies in transition (EITs) have not, by and large, complied with their commitment under the UNFCCC to return "individually or jointly to their 1990 levels" their anthropogenic greenhouse gas emissions. Neither have most Annex I Parties that are Parties to the Kyoto Protocol met, as of 2006, their Kyoto Protocol Annex B targets.

As of the middle of the decade 2000-2010, nineteen (19) of the forty (40) Annex I Parties to the UNFCCC have greenhouse gas (GHG) emission levels that are still above their 1990 baseline emissions, while twenty-one (21) of the Annex I Parties that are Parties to the Kyoto Protocol (KP) have not yet met their KP mitigation targets. It is, in fact, largely the Annex I EIT Parties that were able to do so mainly because of the economic difficulties that they faced in the 1990s that resulted in the collapse of many industrial activities. From 1990 to 2006, total greenhouse gas emissions from Annex I Parties declined by 4.7 per cent, from 18.9

GTCO_{2eq} to 18.02 GTCO_{2eq}. However, between 2000 and 2006, total emissions of Annex I Parties “increased by 2.3 per cent (excluding Land Use, Land Use Change and Forestry or LULUCF) and by 1.0 per cent (including LULUCF).”

It must be noted, however, that if the decrease in emissions experienced by Annex I EIT Parties between 1990 and 2000 is not taken into account, the emissions from Annex I non-EIT developed country Parties actually rose by 9.9 per cent compared to 1990 levels between 1990 and 2006.

It may thus be said that Annex I non-EIT Parties by and large, except for a few, have not managed to return to their 1990 levels.

Financing

Under Art. 4.3 of the UNFCCC, Annex II Parties are specifically committed to provide new and additional financial resources to developing countries to cover: (a) the “agreed full costs” for the preparation by developing countries of their national communications under Art. 12.1; and (b) the “agreed full incremental costs” for the implementation of the UNFCCC by developing countries. Additionally, under Art. 4.4, Annex II Parties are specifically committed to assist developing countries in meeting the costs of adaptation to the adverse effects of climate change. Finally, under Art. 4.5, Annex II Parties are specifically committed to provide the financing needed to undertake the transfer of relevant environmentally-sound technologies and to assist developing countries develop their own technologies.

Key Findings

- It is difficult to ascertain with exactitude on the basis of the developed parties’ national communications whether such parties had fully complied with the obligation to provide “new and additional” financial resources to cover the “agreed full incremental costs” for the implementation by developing countries of the UNFCCC, primarily due to the difficulty in obtaining comparable data from the parties concerned. The amounts pledged or to be committed from Annex II Parties for climate financing remain far too low to meet the scale of the financing needs of developing countries in relation to climate adaptation and mitigation.
- It is important to note that virtually all of the financing that Annex II Parties reported in their fourth national communications (save for Italy for some of its financing) as compliance with their UNFCCC Art. 4.3, 4.4 and 4.5 financing obligations form part of these Parties’ overall official development assistance (ODA) programmes rather than being “new and additional.” In essence, developed countries’ financial flows that go towards meeting their internationally agreed goal of providing at least 0.7% of their annual Gross National Income (GNI) as ODA are double-counted as also going towards meeting their treaty obligations under UNFCCC Art. 4.3, 4.4 and 4.5.
- Based on the fourth national communications from Annex II Parties, the yearly contribution to climate change adaptation funding fluctuates year on year and has not seen a yearly increase in most countries.
- Developed countries show a great reluctance in channeling climate financing sourced from their governmental funds through the UNFCCC, preferring to use either their own bilateral channels or other multilateral channels such as the World Bank as their vehicles for public sector climate financing flows.
- Counting the low-end estimate of US\$10.03 billion channeled or made available through the GEF as an operating entity of the UNFCCC’s Art.11 financial mechanism, as well as those through bilateral and other non-UNFCCC multilateral mechanisms (US\$18.95 billion), the current total available or pledged public financing for climate change-related actions from Annex I Parties comes up to US\$28.98 billion. Of this total amount, 34.61% is through the UNFCCC (via the GEF

as an operating entity) and 65.39% is through non-UNFCCC channels. This is inconsistent with the provisions of the UNFCCC, which envisions that climate change-related financing should primarily flow through the financial mechanism established in Art. 11.

With respect to the obligation to meet the agreed full costs for developing countries' national communications under Art.4.3, developed countries have generally taken the approach of providing funding to the Global Environment Facilitation (GEF), which the GEF then provides to developing countries in order to support the preparation of their national communications. However, compliance with the financing obligation for "agreed full costs" for the preparation of developing country national communications is lacking since the GEF imposes a maximum limit of US\$420,000 to be provided to each developing country, without reference as to whether such maximum amount meets the full cost of preparing national communications.

With respect to the obligation to provide "new and additional" financial resources to cover the "agreed full incremental costs" for the implementation by developing countries of the UNFCCC, it is difficult to ascertain with exactitude on the basis of the developed Parties' national communications whether such obligation has been fully complied with. This is primarily because of the difficulty in obtaining comparable data from the Parties concerned. For example, while the Compilation and Synthesis of the Fourth National Communications presents the Parties' various contributions in a single currency, such presentation necessitated the conversion into United States dollars of the range of currencies used by the parties. No uniform currency was used by the parties in their reports, some even utilizing two or three currencies within a single communication. There was also no uniform period of time within which the developed country parties indicated their contributions. Most Parties listed in UNFCCC Annex II reported on their contributions to multilateral institutions and programmes, as well as bilateral and regional financial contributions. However, while most of those who did so named the various recipients of their contributions, they had failed to signify which portions of such funding were directly related to climate change and which were not.

As reported in the Compilation and Synthesis of Fourth National Communications, a majority of the developed country parties have reported an increase in their contributions to multilateral institutions, as well as the GEF, for the period reported in the fourth national communications (generally, 2001-2003, with the exception of some who were able to report on 2004 as well) as compared to contributions reported in the third national communications.

Developed countries' mitigation-related bilateral financing increased from US\$13.05 billion during the period 1997-2000 to US\$285.04 billion for the period 2001-2004, while their financing for adaptation fell from US\$7.01 billion in 1997-2000 to US\$362.1 million in 2001-2004. The increase in mitigation-related financing is due in large part to a massive increase in reported bilateral financing for mitigation by the United States from US\$2.42 billion for 1997-2000 to US\$276.684 billion for 2001-2004. But this reported increase in US bilateral climate-related mitigation financing may be deemed artificial, as it counted as mitigation financing not only direct environment-related financial flows, but also its trade and development-related ODA such as project financing, export credits, risk and loan guarantees, investment insurance and credit enhancements that "facilitate the transfer of climate-friendly technology," as well as some US private sector commercial investments and lending.

It is important to note, however, that virtually all of the financing that Annex II Parties reported in their fourth national communications (save for Italy for some of its financing) as compliance with their UNFCCC Art. 4.3, 4.4 and 4.5 financing obligations form part of these Parties' overall official development assistance (ODA) programmes rather than being "new and additional."

In essence, developed countries' financial flows that go towards meeting their internationally agreed goal of providing at least 0.7% of their annual Gross National Income (GNI) as ODA are double-counted as also going towards meeting their treaty obligations under UNFCCC Art. 4.3, 4.4 and 4.5 to provide climate financing to developing countries. In this context, therefore, such financial flows are neither new, additional, nor, indeed, mandatory in nature.

Furthermore, the amounts pledged or to be committed from Annex II Parties for climate financing remain far too low to meet the scale of the financing needs of developing countries in relation to climate adaptation and mitigation. The UNFCCC estimates that US\$262.15 to US\$615.65 billion annually by 2030 will be needed, while the G-77 and China in their August 2008 climate finance proposal has suggested that initially (as a minimum) at least US\$278.82 billion to US\$557.64 billion (based on the 2007 GDP of Annex I Parties) will be necessary. Currently, climate-related funds under the GEF amounts to US\$10.03 billion to US\$10.25 billion, while US\$18.95 billion (including US\$6.68 billion in bilateral initiatives and US\$12.27 billion through multilateral initiatives) in climate-related financing may be forthcoming from Annex II Parties' individual climate financing initiatives, with approximately US\$4.8082 billion annually being made available as a result of these initiatives over varying time periods. That is, climate financing that is available or may be made available by Annex II Parties in the foreseeable future are a little over one-tenth of the minimum estimated requirements for climate financing coming from the UNFCCC or the G77 and China.

Similar to the difficulties in obtaining comparable data in relation to Art. 4.3 compliance, Art. 4.4-related data is difficult to assess in relation to the extent to which Art. 4.4 is being complied with due to the general lack of comparable data from Annex II Parties. On the other hand, based purely on the fourth national communications from Annex II Parties, it may be concluded that the yearly contribution to climate change adaptation funding fluctuates year on year and has not seen a yearly increase in most countries. Adding to that the issue that not every country has provided data for their yearly contributions, the basis for comparison becomes weaker.

Developed countries also show a great reluctance in channeling climate financing sourced from their governmental funds through the UNFCCC, preferring to use either their own bilateral channels or other multilateral channels such as the World Bank as their vehicles for public sector climate financing flows. They also show a preference for relying on unpredictable and market-driven private sector financing. The public financing from developed countries for climate change-related actions that go through non-UNFCCC channels, and such financing that do go through the UNFCCC's financial mechanism (via the Global Environment Facility as an operating entity), reflect and respond to the donors' political and economic priorities and interests rather than to the sustainable development priorities of developing countries.

Counting the low-end estimate of US\$10.03 billion channeled or made available through the GEF as an operating entity of the UNFCCC's Art. 11 financial mechanism, as well as those through bilateral and other non-UNFCCC multilateral mechanisms (US\$18.95 billion), the current total available or pledged public financing for climate change-related actions from Annex I Parties comes up to US\$28.98 billion. Of this total amount, 34.61% is through the UNFCCC (via the GEF as an operating entity) and 65.39% is through non-UNFCCC channels. This is inconsistent with the provisions of UNFCCC Art. 11, which envisions that climate change-related financing should primarily flow through the financial mechanism established in Art. 11. This preference to channel public-sector financing for climate-change-related actions through non-UNFCCC channels by Annex II Parties, however, may institutionally weaken the UNFCCC, as well as its financial mechanism. Developed countries would not be able to be held accountable to the UNFCCC Conference of the Parties (COP)

for the fulfillment of their financing commitments under the UNFCCC, and the climate financing priorities of developing countries will not be met.

Technology Transfer

Under Art. 4.5 of the UNFCCC, Annex II Parties are specifically committed to promote, facilitate and finance the transfer of, or access to, environmentally-sound technologies and know-how to developing countries to enable them to implement the UNFCCC. This commitment includes supporting the development and enhancement of endogenous capacities and technologies of developing countries.

Key Findings

- The EGTT, in its 2007 report, implied that to date, the UNFCCC's technology transfer-related provisions have not yet been implemented by developed country parties.
- Assessing the extent of developed countries' compliance with obligations relating to technology transfer under the UNFCCC can be quite difficult to measure due to (a) the difficulty in having comparable data sets, (b) the ambiguity that often results, particularly in the transfer of soft technology, (c) the fact that contributions for capacity-building are also counted among bilateral or multilateral contributions, (d) it is difficult to place monetary value on soft technology transfers, and (e) the original promises made by developed countries are extremely vague.
- Majority of technology transfer occurs in the energy sector, particularly in energy efficiency and the utilization of renewable energy sources.
- Most developed countries place a much higher emphasis on the transfer of soft technology and capacity building in the programmes they establish.
- The majority of technology transfer occurs through bilateral partnerships with countries.

The extent of compliance by developed countries with this treaty commitment has also been a subject of much discussion among the Parties. In its 2007 report, the UNFCCC Expert Group on Technology Transfer (EGTT) concluded that discussions relating to technology transfer in the UNFCCC "should evolve to a more practical, results-oriented level by promoting actions in specific sectors and regions". The EGTT in effect implied that to date, the UNFCCC's technology transfer-related provisions really have not yet been implemented by developed country Parties.

In surveying the extent to which developed countries subject to the obligation to transfer technology under Art. 4.5, assessing the extent of compliance with obligations relating to technology transfer under the UNFCCC can be quite difficult to measure due to the difficulty in having comparable data sets and the ambiguity that often results, specifically from the transfer of soft technologies. Contributions related to capacity building are also often counted among financial contributions either bilaterally or multilaterally, and so it is quite possible for those funds to be double-counted. It is also made more complicated by the fact that it is hard to place monetary value on soft technology transfers, such as information sharing or technical demonstrations. Original promises by developed countries are also extremely vague, simply noting that developed countries should help developing countries with climate change adaptation, making it much more difficult to gauge whether or not Annex I countries have lived up to their pledges.

There are several noticeable trends concerning technology transfer that can be discerned from the national communications of developed countries. The majority of technology transfer occurs in the energy sector, mainly in energy efficiency and the utilization of renewable energy sources. Most developed countries also place a much higher emphasis on the transfer

of soft technology and capacity building in the programmes that they establish rather than on the transfer of hard technologies such as wind technologies, etc. The majority of technology transfer occurs through bilateral partnerships with countries, and often includes both soft and hard technology transfer as well as financial and technical support for initiatives that have been launched in developing countries.

Adaptation and Impacts of Response Measures

Under Art. 4.8, developed country Parties are obligated to give “full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology” to meet the specific concerns of developing countries with respect to adaptation and to the impact of the implementation of response measures. Art. 4.9 obligates developed country Parties to take “full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology.”

| Key Findings |
|---|
| <ul style="list-style-type: none"> • Implementation gaps for Art. 4.8 and 4.9 continue to exist, especially in terms of financing flows from developed to developing countries. • Annex II Parties’ submission of information with respect to their implementation of Art. 4.8 is inadequate. |

To date, implementation gaps by developed countries continue to exist with respect to their implementation of their commitments under Art. 4.8 and 4.9. For example, the LDC Fund remains severely underfunded, with only US\$172 million as of mid-2008. Total adaptation financing made available through bilateral and multilateral channels such as the GEF falls far short of the estimated adaptation financing requirement. Compared with what is required in the order of upwards from US\$500 billion per year in developing countries for adaptation costs, the current total amounts available in multilateral and bilateral channels for adaptation-related financing (including double-counted ODA) that are in the order of approximately US\$400 million as of 2008 is grossly inadequate.

Information from Annex II Parties on the implementation of activities under Decision 5/CP.7, and on addressing the impact of response measures, have both been also inadequate. Clear information that would enable a clear judgment on progress made has not been provided.

The assessment of the SBI at its June 2009 session with respect to the implementation of Art. 4.8 in relation to the implementation of decisions 5/CP.7 and 1/CP.10 clearly indicates that further work needs to be done with respect to such implementation, clearly implying that implementation gaps continue to exist with respect to the implementation of Art. 4.8 (as well as Art. 4.9).

Reporting

Under Art. 12.1, 12.2 and 12.3 of the UNFCCC, Annex I Parties are obliged to report the details of their compliance with their specific obligations under the UNFCCC (including on mitigation, financing and technology transfer) to the UNFCCC Conference of the Parties.

| Key Findings |
|--|
| <ul style="list-style-type: none"> • The information to be incorporated in the national communications should cover national circumstances, greenhouse gas inventory information, policies and measures, projections and the total effect of policies and measures, vulnerability assessment, climate change impacts, adaptation measures, financial resources, transfer of technology, research and systematic observation, education, training and public |

awareness.

- Virtually all Annex I Parties submitted all four national communications that they have been required to submit to date.

Annex I Parties are required under Art. 12 of the UNFCCC to submit regular and detailed national reports to the Conference of Parties (COP). The timing, guidelines, and format of these submissions are determined by relevant decisions of the COP. The information to be incorporated in the national communications should cover national circumstances, greenhouse gas inventory information, policies and measures, projections and the total effect of policies and measures, vulnerability assessment, climate change impacts, adaptation measures, financial resources, transfer of technology, research and systematic observation, education, training and public awareness.

In this context, to date virtually all Annex I Parties submitted all four national communications that they have been required to submit to date. The due date for the submission of the next (5th) national communication from Annex I Parties is 1 January 2010, covering the report period 2005 to 2007.

Conclusion

The UNFCCC is a finely balanced policy regime that incorporates a set of obligations and commitments taking into account the common but differentiated responsibilities and respective capabilities of developed and developing countries in relation to climate change. However, developed countries have, by and large, failed to effectively and fully implement their specific commitments under the UNFCCC to take the lead in mitigation and to provide financing and technology to developing countries

Have Annex I Parties met their Commitments under the UNFCCC and its Kyoto Protocol*

I. Introduction

There is currently only one multilateral, near universal, legally-binding treaty regime in place to govern the global community's actions to address climate change. This is the UN Framework Convention on Climate Change (including its Kyoto Protocol). The policy architecture contained in the UNFCCC is a finely balanced and development-oriented one that recognizes the development needs of developing countries, and the responsibilities and obligations that developed and developing countries have to implement in order to address such needs in the context of climate change.

The negotiations in the Intergovernmental Negotiating Committee (INC)² that eventually resulted in the UNFCCC took place in five (5) sessions between February 1991 and May 1992, in which more than 150 States participated. The topics that were discussed included the need for a binding commitment to and the setting of measurable objectives and timelines for greenhouse gas reductions by developed countries, establishing a financial mechanism for climate action, ensuring technology transfer from developed to developing countries, and defining different levels of responsibilities among developed and developing countries to meet the climate change challenge. These negotiations on these topics, and other issues, eventually resulted in a legally binding multilateral treaty instrument, the UNFCCC, which was adopted and opened for signature in May 1992. It entered into force on 21 March 1994.³

II. Compliance by Parties Listed in Annex I of the UNFCCC with their Obligations

II.1 Obligations of Annex I Parties

Annex I Parties to the UNFCCC (these are commonly understood as referring to developed countries) have a set of obligations that they have in common with non-Annex I Parties (i.e. developing countries) as well as a set of specific differentiated obligations that they are subject to.

| Parties listed in Annex I of the UNFCCC | | | |
|--|----------|-------------|-------------------|
| Australia | Estonia* | Lithuania* | Sweden |
| Austria | Finland | Luxembourg | Switzerland |
| Belarus* | France | Netherlands | Turkey |
| Belgium | Germany | New Zealand | Ukraine* |
| Bulgaria* | Greece | Norway | United Kingdom of |

* This report was prepared by the Global Governance for Development Programme of the South Centre, with the research team headed by Mr. Vicente Paolo B. Yu III, Programme Coordinator, and including Ms. Katherine Acosta, Ms. Roshni Dave, Ms. Therese Guiao, and Mr. Shahab Paya.

² The mandate for the INC was established by the UN General Assembly pursuant to its Resolution No. A/RES/45/212 of 21 December 1990.

³ Aware that the UNFCCC's provisions may not in themselves be sufficient to tackle climate change, UNFCCC Parties in the mid-1990s set out to establish firmer and more detailed commitments for developed countries in terms of binding greenhouse gas (GHG) emissions reduction, resulting in 1997 in the adoption of the Kyoto Protocol at the 3rd Conference of the UNFCCC Parties in Kyoto, Japan. It sets out basic rules for binding GHG emissions reductions for developed countries and has provisions intended to assist developing countries in voluntarily reducing their own GHG emissions. The Kyoto Protocol entered into force on 16 February 2005.

| | | | |
|---|---|---|--|
| Canada Czechoslovakia* Denmark European Economic Community | Hungary* Iceland Ireland Italy Japan Latvia* | Poland* Portugal Romania* Russian Federation* Spain | Great Britain and Northern Ireland United States of America |
| * Countries that are undergoing the process of transition to a market economy | | | |

These obligations are reflected in the framework of commitments and obligations that are contained in Arts. 4.1 and 4.2, 5, 6, 10, and 12 that in essence provide for:

- a set of common commitments to provide and communicate climate change-related information;⁴ adopt and implement mitigation and adaptation measures;⁵ cooperate in technology transfer, adaptation, “climate-proofing” economic, social and environmental policies and actions, research and observation, information exchange, education, training and public awareness;⁶ consider and take into account the needs and concerns of developing country Parties;⁷ and communicate information regarding the Party’s implementation of the UNFCCC;⁸ and
- a set of differentiated commitments (in addition to the common commitments above) applicable specifically for developed country Parties relating to mitigation;⁹ communication of information regarding such mitigation;¹⁰ financing for developing countries’ national communications and the implementation by developing countries of their UNFCCC commitments;¹¹ meeting the costs of adaptation of developing countries;¹² and technology transfer to developing countries (including supporting the development in developing countries of endogenous technologies and technological capacity);¹³

A summary of these commitments is provided below:

| Summary of Common Provisions (For both Developed and Developing Parties) |
|--|
| Art. 2 – common obligation to meet the objective of the UNFCCC |
| Art. 4.1 – common obligations to: <ul style="list-style-type: none"> (a) develop, update, public national greenhouse gas inventories using comparable methodologies (b) formulate, implement, publish and update national and regional programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change (c) promote and cooperate in greenhouse gas mitigation-related technology transfer in all relevant sectors (d) promote and cooperate in the management, conservation and enhancement of greenhouse gas sinks and reservoirs (e) cooperate with respect to adaptation |

⁴ Art. 4.1(a)

⁵ Art. 4.1(b)

⁶ Art. 4.1(c) to (i), 5 and 6

⁷ Art. 4.8 to 4.10

⁸ Art. 4.1(j) and 12.1

⁹ Art. 4.2(a) and (b)

¹⁰ Art. 4.2(b)

¹¹ Art. 4.3

¹² Art. 4.4

¹³ Art. 4.5

| Summary of Common Provisions (For both Developed and Developing Parties) |
|--|
| (f) take climate change considerations into account in social, economic and environmental policies and actions to minimize adverse impacts of climate-related measures on the economy, public health and environmental quality |
| (g) promote and cooperate in climate-related research and observation |
| (h) promotion and cooperation in climate-related information exchange |
| (i) promotion and cooperation in climate-related education, training and public awareness |
| (j) communicate to the COP information related to the Party's implementation of the UNFCCC |
| Art. 5 – obligation to cooperate in research and systematic observation |
| Art. 6 – obligation to cooperate in education, training and public awareness |
| Art. 10.2(a) – consideration by SBI of all Parties' national communications "to assess the overall aggregated effect of the steps taken by the Parties in the light of the latest scientific assessment concerning climate change" |
| Art. 12.1 – obligation to communicate to the COP, through national communications, a national greenhouse gas inventory, a general description of steps taken or to be taken to implement the UNFCCC, and other relevant information |

| Summary of Differentiated Provisions (Only for Developed Parties) |
|--|
| Art. 4.2(a) and (b) – obligation to: <ul style="list-style-type: none"> • adopt national policies and take corresponding measures to mitigate climate change by limiting anthropogenic emissions of greenhouse gases and enhancing greenhouse gas sinks and reservoirs; • take the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the UNFCCC; • periodically communicate to the COP "detailed information" on their mitigation policies and measures and their greenhouse gas national inventories, "with the aim of returning individually or jointly to their 1990 levels" such greenhouse gas emissions |
| Art. 4.3 – obligation to provide new and additional financial resources to developing countries to: <ul style="list-style-type: none"> • meet the agreed full costs for the preparation and submission of developing countries' national communications; • meet the agreed full incremental costs (including for technology transfer) of developing countries to implement their obligations under Art. 4.1¹⁴ |
| Art. 4.4 – obligation to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation to such adverse effects ¹⁵ |
| Art. 4.5 – obligation to: <ul style="list-style-type: none"> • take all practicable steps to promote, facilitate and finance the transfer of, or access to, environmental sound technologies and know-how to developing country Parties to enable implementation of the UNFCCC; |

¹⁴ Such financing for agreed full incremental costs is supposed to be channelled through the UNFCCC's financial mechanism set up under Art. 11.1. To date, however, there is as yet no agreement on what constitutes "agreed full incremental costs." Furthermore, there are many implementation problems – both in terms of actual financial flows as well as in the administrative arrangements relating to such financial flows – that the UNFCCC financial mechanism is running into under the current administrative arrangement in which the Global Environmental Facility (GEF) serves as an operating entity of the UNFCCC financial mechanism. See e.g. South Centre, Financing the Global Climate Change Response: Suggestions for a Climate Change Fund (CCF), SC/GGDP/AN/ENV/3, May 2008, at http://www.southcentre.org/index.php?option=com_content&task=view&id=648&Itemid=67.

¹⁵ These developing country Parties that are "particularly vulnerable" to the adverse effects of climate change would be those developing countries that have one or more of the vulnerability characteristics listed in Art. 4.8.

| Summary of Differentiated Provisions (Only for Developed Parties) |
|--|
| <ul style="list-style-type: none"> • support the development and enhancement of endogenous capacities and technologies of developing country Parties |
| Art. 4.8 – obligation to give full consideration to what actions are needed (including financing, insurance and technology transfer) to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures |
| Art. 4.9 – obligation to take full account of the specific needs and special situations of least-developed countries in relation to funding and technology transfer |
| Art. 4.10 – obligation to take into consideration the situation of Parties, particularly developing country Parties, with economies that are vulnerable to the adverse effects of the implementation of response measures (notably fossil fuel income-dependent economies) |
| Art. 10.2(b) – consideration by the SBI of the national communications of Annex I Parties in the context of the review by the COP under Art. 4.2(d) of the adequacy of the mitigation target for developed countries under Art. 4.2(a) and (b) in the light of the implementation by such Parties of their obligation to take the lead in mitigation in order to modify longer-term trends in GHG emissions |
| Art. 12.2 – obligation to include in their national communications a detailed description of policies and measures to mitigate greenhouse gas emissions or enhance removals to implement their mitigation obligation under Art. 4.2(a) and (b), and a specific estimate of the effects of such policies and measures on anthropogenic emissions by sources or removals by sinks |
| Art. 12.3 – obligation to include details of measures taken in accordance with Art. 4.3, 4.4 and 4.5 (provision of agreed full incremental financing, financing to meet costs of adaptation, and technology transfer) |
| Art. 12.5 – differentiated timetable with respect to the submission of national communications (more frequent for developed country Parties) |

The fulcrum around which the framework of commitments and obligations described above revolves is Art. 4.7 of the UNFCCC, as follows:

The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties.

What Art. 4.7 means is that, it is the level and extent of implementation by developed country Parties of their differentiated commitments under Art. 4.3, 4.4 and 4.5, that determines the extent to which developing countries will implement their common obligations under Art. 4.1 and Art. 12.1.

In the absence of the full and effective implementation by developed countries of their commitments under Art. 4.3, 4.4, and 4.5, the corresponding implementation by developing countries of their commitments under the UNFCCC cannot be expected to be full nor effective since such would then have to depend on what developing countries can do by themselves. In such a situation, the framework of cooperation on climate change between developed and developing countries as envisioned under the UNFCCC becomes marginalized, and global cooperative action on climate change becomes disjointed and ineffective.

II.2. Implementation by Developed Countries of their Differentiated Commitments

II.2.1. Art. 4.2(a) and (b) - Taking the Lead in Mitigation to Modify Longer-Term Trends in Emissions and Returning to 1990 Levels

The quantified greenhouse gas emission mitigation commitments of Annex I Parties are spelled out in Art. 4.2(a) and (b) of the UNFCCC. These provisions essentially oblige the listed Annex I Parties to:

- adopt national policies and take corresponding measures to mitigate climate change by limiting anthropogenic emissions of greenhouse gases and enhancing greenhouse gas sinks and reservoirs;
- take the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the UNFCCC;¹⁶ and
- periodically communicate to the COP “detailed information” on their mitigation policies and measures and their greenhouse gas national inventories, “with the aim of **returning individually or jointly to their 1990 levels**” such greenhouse gas emissions (emphasis added).

Realizing that the specific target of returning individually or jointly to their 1990 levels indicated in Art. 4.2(b) was still inadequate, UNFCCC Parties decided to negotiate the Kyoto Protocol that would provide additional detail on how the mitigation commitment contained in Art. 4.2(a) and (b) of the UNFCCC would be met.

In Art. 3 of the Kyoto Protocol, UNFCCC Annex I Parties agreed to undertake “quantified emission limitation and reduction commitments” as contained in Annex B of the Kyoto Protocol (see below):

¹⁶ The obligation of developed countries under Art. 4.2(a) is not simply the limitation of greenhouse gas emissions and enhancing removals but rather doing so in ways that will: (i) show that they are leading in “modifying longer-term trends” – i.e. that they are changing the underlying production and consumption patterns in their societies that result in longer-terms trends of anthropogenic emissions or removals; and (ii) lead to the achievement of the objective of the UNFCCC – i.e. the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference in the climate system, to be achieved within a timeframe sufficient to allow for ecosystems to adapt naturally to climate change, ensure food security and production, and enable economic development to proceed sustainably.

Annex B

| Party | Quantified emission limitation or reduction commitment (percentage of base year or period) |
|---|---|
| Australia | 108 |
| Austria | 92 |
| Belgium | 92 |
| Bulgaria* | 92 |
| Canada | 94 |
| Croatia* | 95 |
| Czech Republic* | 92 |
| Denmark | 92 |
| Estonia* | 92 |
| European Community | 92 |
| Finland | 92 |
| France | 92 |
| Germany | 92 |
| Greece | 92 |
| Hungary* | 94 |
| Iceland | 110 |
| Ireland | 92 |
| Italy | 92 |
| Japan | 94 |
| Latvia* | 92 |
| Liechtenstein | 92 |
| Lithuania* | 92 |
| Luxembourg | 92 |
| Monaco | 92 |
| Netherlands | 92 |
| New Zealand | 100 |
| Norway | 101 |
| Poland* | 94 |
| Portugal | 92 |
| Romania* | 92 |
| Russian Federation* | 100 |
| Slovakia* | 92 |
| Slovenia* | 92 |
| Spain | 92 |
| Sweden | 92 |
| Switzerland | 92 |
| Ukraine* | 100 |
| United Kingdom of Great Britain and Northern Ireland | 92 |
| United States of America | 93 |

* Countries that are undergoing the process of transition to a market economy.

NOTE: Belarus and Turkey subsequently became Parties to the Kyoto Protocol after its entry into force.

The commitments for Annex I Parties listed in Annex B of the Kyoto Protocol essentially calls for an aggregate reduction by Annex I Parties of at least five percent below 1990 levels.

(a) Complying with Mitigation Obligations under Art. 4.2(a) and (b) of the UNFCCC and Art. 3 of the Kyoto Protocol

As of the middle of the decade 2000-2010, nineteen (19) (mostly Annex I Parties that are not economies in transition (EITs)) of the forty (40) Annex I Parties to the UNFCCC have GHG emission levels that are still above their 1990 emissions. These are:

Table 1.1
Annex I Parties with Emission Levels Still Above 1990 Levels:
2003-2007

| | | |
|--------------|-------------------|------------------------------|
| 1. Australia | 7. Ireland | 14. Norway |
| 2. Austria | 8. Italy | 15. Portugal |
| 3. Belgium | 9. Japan | 16. Slovenia |
| 4. Canada | 10. Liechtenstein | 17. Spain |
| 5. Finland | 11. Monaco | 18. Turkey ¹⁷ |
| 6. Greece | 12. Netherlands | 19. United States of America |
| | 13. New Zealand | |

Of the 39 Annex I Parties that are Parties to the Kyoto Protocol¹⁸, twenty-one (21) have not yet, as of the period 2003-2007, met their Kyoto Protocol mitigation commitments nor have “made demonstrable progress” in achieving such commitments.¹⁹ These are:

Table 1.2
Annex I Parties that are Parties to the Kyoto Protocol with Emission Levels Still Above
their Kyoto Protocol Annex B Targets:
2003-2007

| | | |
|-----------------------|-------------------|-----------------|
| 1. Australia | 8. Greece | 15. New Zealand |
| 2. Austria | 9. Ireland | 16. Norway |
| 3. Belgium | 10. Italy | 17. Portugal |
| 4. Canada | 11. Japan | 18. Slovenia |
| 5. Denmark | 12. Liechtenstein | 19. Spain |
| 6. European Community | 13. Monaco | 20. Sweden |
| 7. Finland | 14. Netherlands | 21. Switzerland |

¹⁷ Turkey’s GHG emissions rose from 170.1 million tons to 296.6 million tons CO₂ eq between 1990 and 2004. See Turkey’s first national communication at <http://unfccc.int/resource/docs/natc/turnc1.pdf>

¹⁸ Only the United States is an Annex I Party that is not a Party to the Kyoto Protocol.

¹⁹ It should be noted, though, that the first commitment period of the Kyoto Protocol under which the Annex I Parties are supposed to comply with their targets under Annex B of the Kyoto Protocol covers only the period 2008 to 2012. However, Art. 3.2 of the Kyoto Protocol expressly provides that “[e]ach Party included in Annex I shall, by 2005, have made demonstrable progress in achieving its commitments under this Protocol.”

Table 1.3
Annex I Parties:
Track Record in Meeting Mitigation Targets Under the UNFCCC
and the Kyoto Protocol

| Annex I Party | KP Mitigation Target | 1990 or Base Year Emissions (in Million Tons of total GHGs) | Compliance with Targets | |
|-------------------------------|--|---|---|---|
| | | | GHG Emissions as Reported in 4 th National Communication (with Year of Emissions Data) | Percentage +/- from the 1990 or Base Year Emissions |
| 1. Australia | 8% <i>above</i> 1990 | 546.327 | 597.156 (2007) | 9.30% |
| 2. Austria | 8% below 1990 | 79.036 | 87.958 (2007) | 11.29% |
| 3. Belarus | 8% below 1990 | 127.361 | 74.306 (2004) | -41.64% |
| 4. Belgium | 8% below 1990 | 145.7 | 150.7 (2005) | 3.43% |
| 5. Bulgaria | 8% below base year 1989 | 138.377 | 69.167 (2003) | -50.02% |
| 6. Canada | 6% below 1990 | 599.000 | 758.000 (2004) | 26.54% |
| 7. Croatia | 5% below 1990 | 19.077 | 14.494 (2003) | -24.02% |
| 8. Czech Republic | 8% below 1990 | 194.21 | 148.20 (2006) | -23.69% |
| 9. Denmark | 8% below 1990 | 70.4 | 69.6 (2004) | -1.14% |
| 10. Estonia | 8% below 1990 | 43.5 | 21.4 (2003) | -50.80% |
| 11. European Community | 8% below 1990 | 5212 | 4925 (2003) | -5.51% |
| 12. Finland | 8% below 1990 | 43.5 | 86 (2003) | 97.70% |
| 13. France | 8% below 1990 | 568 | 557 (2003) | -1.94% |
| 14. Germany | 8% below 1990 | 1226.671 | 1015.691 (2004) | -17.20% |
| 15. Greece | 8% below 1990 | 109.470 | 137.643 (2003) | 25.74% |
| 16. Hungary | 6% below base year (average of 1985 to 1987) | 122.232 | 83.248 (2003) | -31.89% |
| 17. Iceland | 10% above 1990 | 3.282 | 3.083 (2003) | -6.00% |
| 18. Ireland | 8% below 1990 | 55.614 | 68.46 (2004) | 23.10% |
| 19. Italy | 8% below 1990 | 434.781 | 493.371 (2003) | 13.48% |
| 20. Japan | 6% below 1990 | 1,187 | 1,339 (2003) | 12.81% |
| 21. Latvia | 8% below 1990 | 18.654 | 7.427 (2003) | -60.19% |
| 22. Liechtenstein | 8% below 1990 | 25 | 26.3 (2003) | 5.20% |
| 23. Lithuania | 8% below 1990 | 50.928 | 17.223 (2003) | -66.18% |
| 24. Monaco | 8% below 1990 | 0.0964 | 0.1332 (2003) | 38.17% |
| 25. Netherlands | 8% below 1990 | 211.7 | 214.8 (2003) | 1.46% |
| 26. New Zealand | Remain at 1990 | 61.521 | 76.517 (2005) | 24.38% |
| 27. Norway | 1% <i>above</i> 1990 | 50.1 | 54.8 (2003) | 9.38% |
| 28. Poland | 6% below base year 1988 | 568.829 | 388.473 (2004) | -31.71% |
| 29. Portugal | 8% below 1990 | 60.125 | 84.661 (2004) | 40.81% |
| 30. Romania | 8% below base year 1989 | 262.282 | 154.627 (2004) | -41.05% |
| 31. Russian Federation | Remain at 1990 | 3049.7 | 1876.46 (2003) | -38.47% |
| 32. Slovakia | 8% below 1990 | 72.1 | 51.6 (2003) | -28.43% |

| Annex I Party | KP Mitigation Target | 1990 or Base Year Emissions (in Million Tons of total GHGs) | Compliance with Targets | |
|--------------------------|--|---|---|---|
| | | | GHG Emissions as Reported in 4 th National Communication (with Year of Emissions Data) | Percentage +/- from the 1990 or Base Year Emissions |
| 33. Slovenia | 8% below 1990 | 18.566 | 19.803 (2003) | 6.66% |
| 34. Spain | 8% below 1990 | 283.857 | 402.287 (2003) | 41.72% |
| 35. Sweden | 8% below 1990 | 72.210 | 70.554 (2003) | -2.29% |
| 36. Switzerland | 8% below 1990 | 52.446 | 52.252 (2003) | -0.37% |
| 37. Turkey | No Kyoto Protocol target but subject to UNFCCC Art. 4.2(a) and (b) target of 1990 levels | 170.1 | 296.6 (2004) | 74.37% |
| 38. Ukraine | Remain at 1990 | 925.4 | 413.4 (2004) | -55.33% |
| 39. United Kingdom | 8% below 1990 | 776.1 | 665.3 (2004) | -14.28% |
| 40. United States | 7% below 1990 | 6109 | 7074.4 (2004) | 15.80% |

NOTE 1: Annex I Parties listed in **bold** are those that, as of the date for their GHG emissions data indicated in their 4th national communications have not yet met their Kyoto Protocol Annex B mitigation targets.

NOTE 2: All Annex I Parties are specifically committed under Art. 4.2(a) and (b) to, individually and jointly, return their GHG emissions to their 1990 levels.

NOTE 3: The United States is an Annex I Party that is not a Party to the Kyoto Protocol but is listed in Annex B of the Kyoto Protocol. Turkey is an Annex I Party but, while having ratified the Kyoto Protocol, does not have any mitigation targets listed in Annex B of the Kyoto Protocol. Belarus was included in Annex B to the Kyoto Protocol with a quantified emission reduction commitment of 8 percent below 1990 levels through an amendment to Annex B (decision 10/CMP.2). As at 18 September 2008, this amendment had not yet entered into force.

NOTE 4: The differing base years for Bulgaria, Hungary, Poland and Romania were approved by the COP/MOP decision 9/CP.2, para. 5

NOTE 5: Sources for the GHG emissions data in columns 3 and 4 above are from the 4th national communications and the Kyoto Protocol progress reports submitted by Annex I Parties in 2007. These can be downloaded from http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/3625.php. The calculations in the last column are South Centre calculations.

From 1990 to 2006, total greenhouse gas emissions from developed countries listed in Annex I of the UNFCCC (Annex I Parties) declined by 4.7 per cent, from 18.9 GT²⁰ CO₂eq to 18.02 GTCO₂eq.²¹ However, between 2000 and 2006, total emissions of Annex I Parties “increased by 2.3 per cent (excluding LULUCF) and by 1.0 per cent (including LULUCF).”²²

²⁰ 1 gigaton (GT) equals 1 billion metric tons.

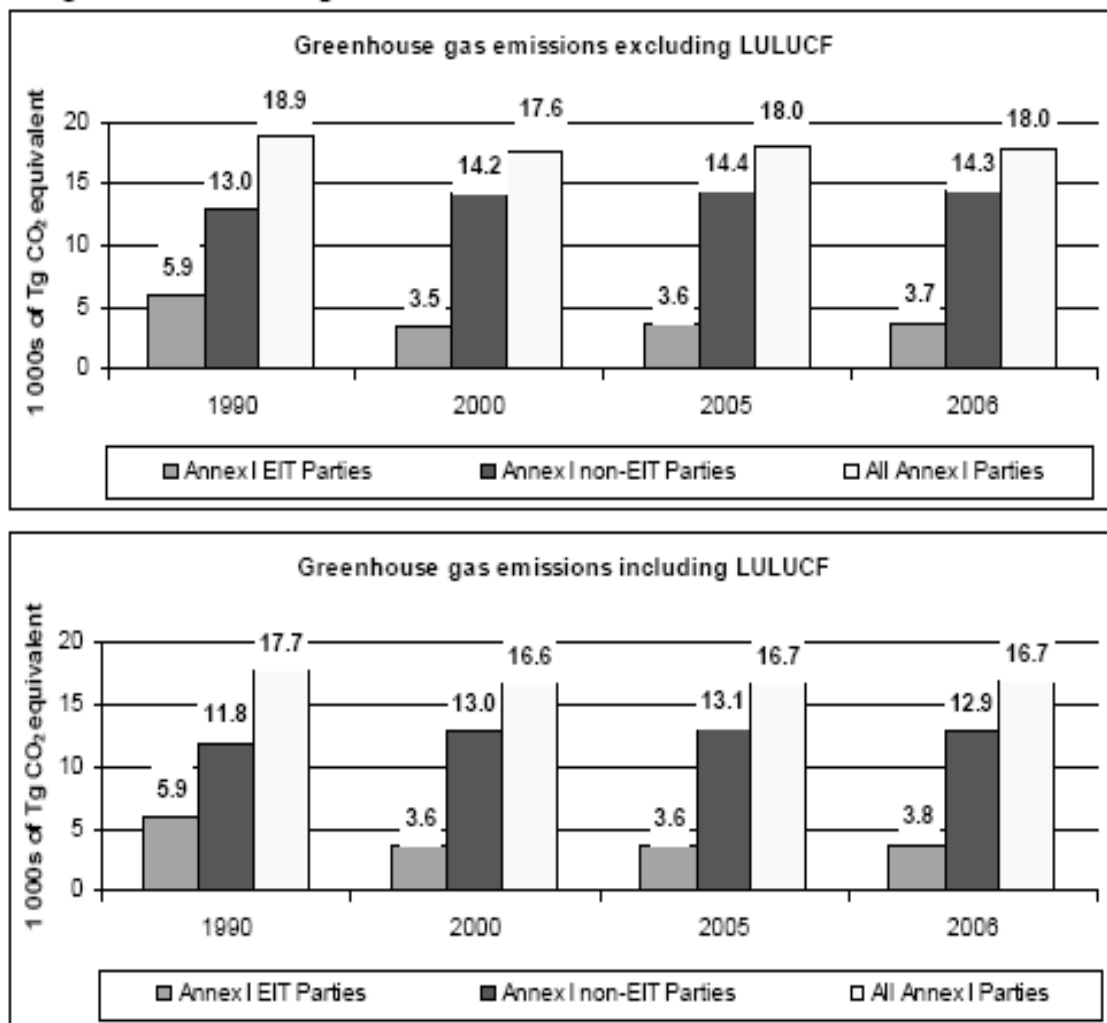
²¹ If emissions and removals arising from land use and land use changes, including forestry (LULUCF), are taken into account, the percentage decrease would be even higher at 5.5 percent (from 17.694 GTCO₂eq to 17.724 GTCO₂eq). UNFCCC, National greenhouse gas inventory data for the period 1990-2006, FCCC/SBI/2008/12, 17 November 2008, para. 13.

²² Id.

Much of the total aggregate decrease in Annex I emissions during the period from 1990 to 2006 can be attributed to the sharp decrease in emissions from Annex I Parties with economies in transition (Annex I EIT Parties) following the collapse of the economies of the former Soviet Union and the eastern European countries after the dissolution of the Soviet Union in 1991.²³ **Without the EIT Annex I Parties, the emissions of Annex I non-EIT Parties excluding LULUCF increased from 13 GTCO₂eq in 1990 to 14.29 GTCO₂eq in 2006, an increase of 9.9 per cent; the increase in greenhouse gas emissions including LULUCF was 9.1 per cent.** Between 2000 and 2006, greenhouse gas emissions from these Parties excluding LULUCF increased by 1.0 per cent and emissions including LULUCF decreased by 0.2 per cent.²⁴ (See Figures 1 and 2)

Figure 1

Figure 2. Greenhouse gas emissions from Annex I Parties, 1990, 2000, 2005 and 2006



Abbreviations: EIT Parties = Parties with economies in transition, LULUCF = land use, land-use change and forestry.

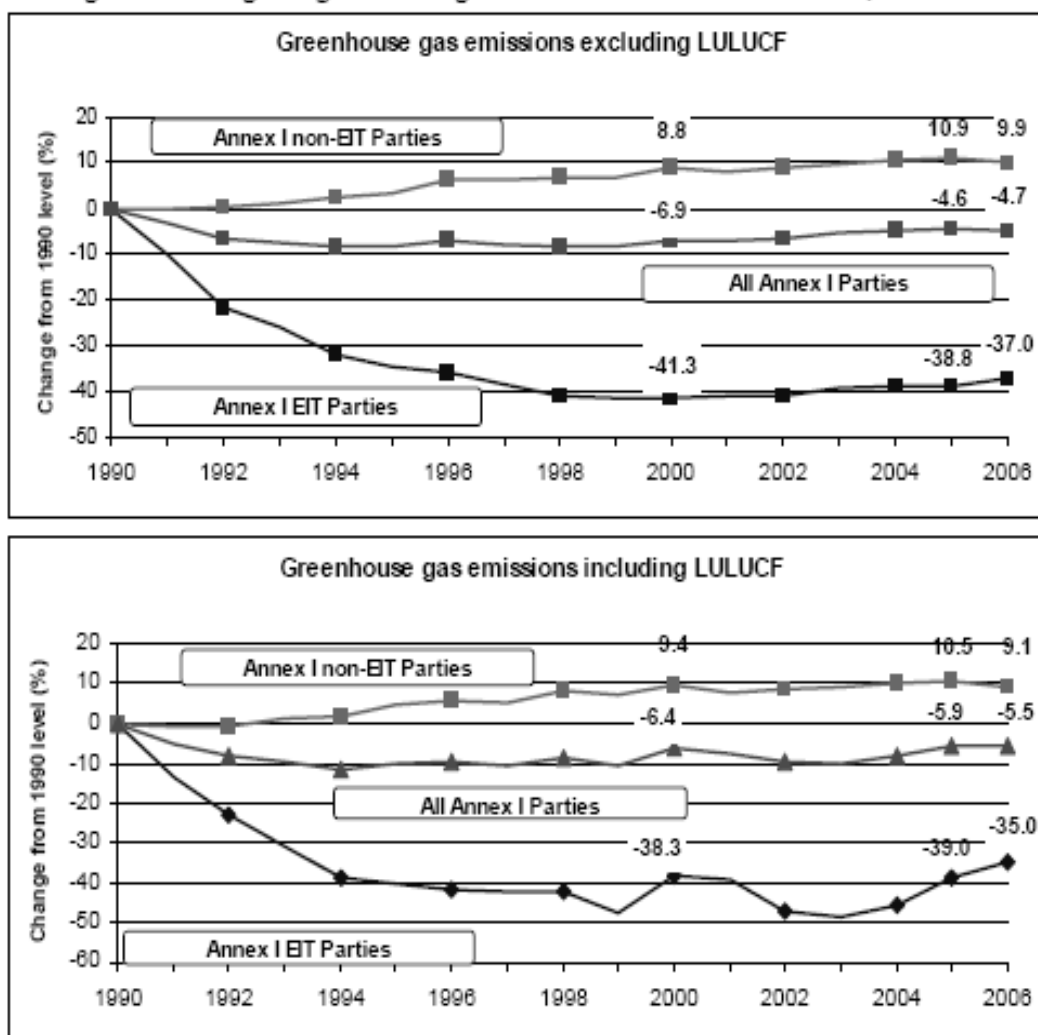
Source: UNFCCC, National greenhouse gas inventory data for the period 1990-2006, FCCC/SBI/2008/12, 17 November 2008, Figure 2

²³ EIT emissions decreased by 37 percent excluding LULUCF or 35 percent including LULUCF. However, EIT emissions are again on the rise as their economies stabilized. During the period 2000 to 2006, EIT emissions increased by 7.4 percent excluding LULUCF and 5.2 percent including LULUCF. Id., para. 14.

²⁴ Id., para. 15

Figure 2

Figure 3. Changes in greenhouse gas emissions from Annex I Parties, 1990–2006

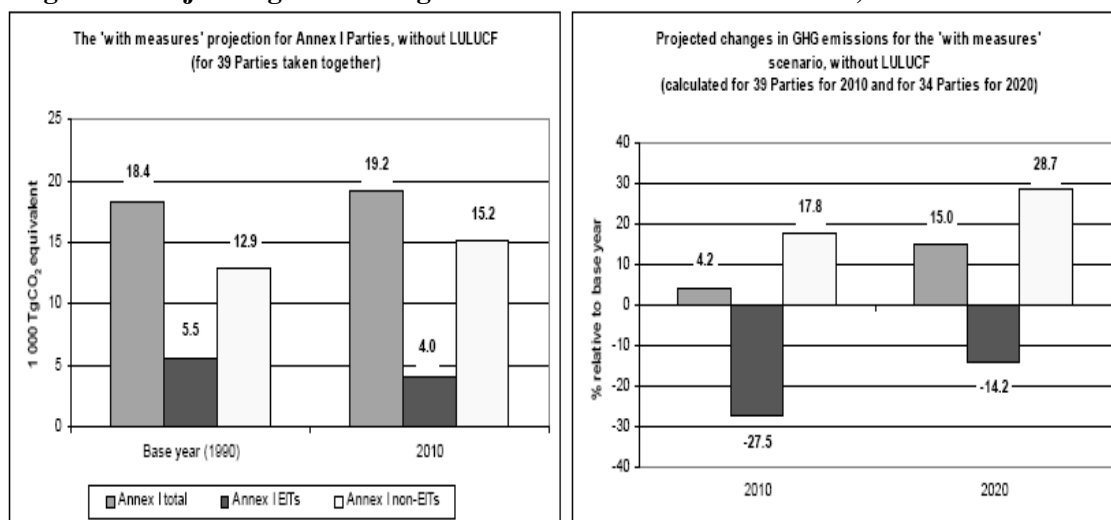


Abbreviations: EIT Parties = Parties with economies in transition, LULUCF = land use, land-use change and forestry.

Source: UNFCCC, National greenhouse gas inventory data for the period 1990-2006, FCCC/SBI/2008/12, 17 November 2008, Figure 3

As pointed out above, if the decrease in emissions experienced by Annex I EIT Parties between 1990 and 2000 is not taken into account, **the emissions from the developed countries (i.e. Annex I non-EIT Parties) actually rose by 9.9 per cent compared to 1990 levels between 1990 and 2006.** Such emissions are also projected by Annex I Parties themselves to increase even further by 2020 by around 17 to 22 per cent above 1990 levels.²⁵ (see Figures 3 and 4)

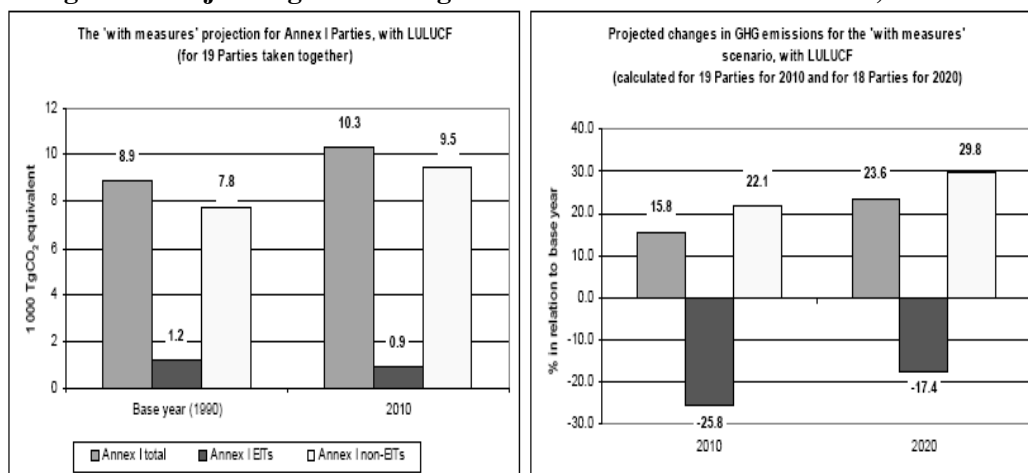
²⁵ See UNFCCC, Compilation and synthesis of fourth national communications: Addendum – Policies, measures, past and projected future greenhouse gas emission trends of Parties included in Annex I to the Convention, FCCC/SBI/2007/INF.6/Add.1, 23 November 2007, paras. 146-153

Figure 3: Projected greenhouse gas emissions from Annex I Parties, without LULUCF

Abbreviations: LULUCF = land use, land-use change and forestry, GHG = greenhouse gas.

Note: (1) The base year under the Convention is 1990 for all Parties except for Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986), as defined by decisions 9/CP.2 and 11/CP.4; (2) The base year data used by Parties in their projections are not always consistent with the base year data reported in the GHG inventories. Therefore, the base year level in the projections may differ from the base year level estimated with the inventory data.

Source: UNFCCC, Compilation and synthesis of fourth national communications: Addendum – Policies, measures, past and projected future greenhouse gas emission trends of Parties included in Annex I to the Convention, FCCC/SBI/2007/INF.6/Add.1, 23 November 2007, Figure 8

Figure 4: Projected greenhouse gas emissions from Annex I Parties, with LULUCF

Abbreviations: LULUCF = land use, land-use change and forestry, EITs = economies in transition.

Note: (1) The base year under the Convention is 1990 for all Parties except for Bulgaria (1988), Hungary (average of 1985 to 1987), Poland (1988), Romania (1989) and Slovenia (1986), as defined by decisions 9/CP.2 and 11/CP.4; (2) The base year data used by Parties in their projections are not always consistent with the base year data reported in the annual GHG inventories. Therefore, the base year level in the projections may differ from the base year level estimated with the inventory data; (3) Because of the difference in the number of Parties included, this figure is not comparable with figure 8

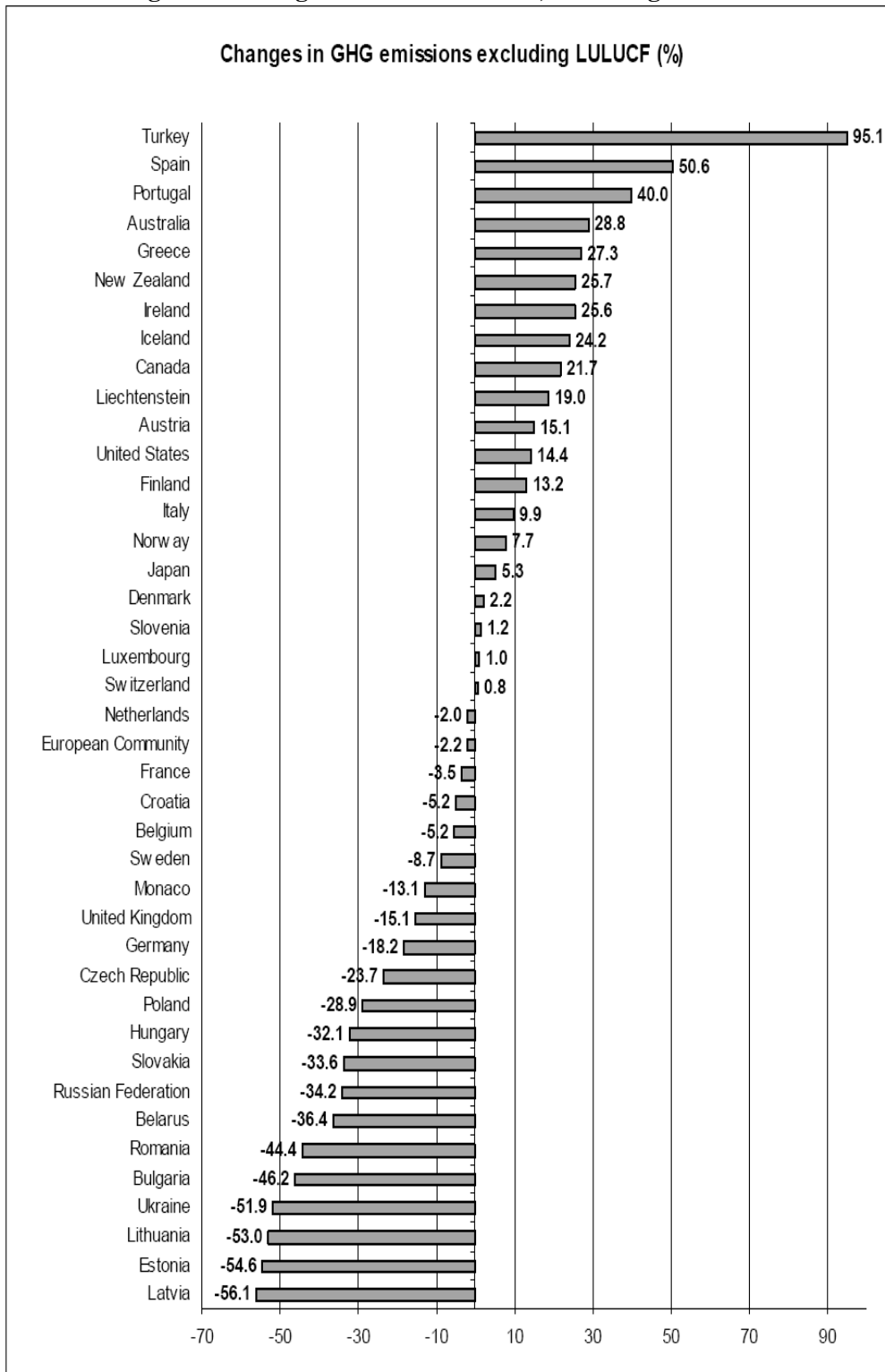
Source: UNFCCC, Compilation and synthesis of fourth national communications: Addendum – Policies, measures, past and projected future greenhouse gas emission trends of Parties included in Annex I to the Convention, FCCC/SBI/2007/INF.6/Add.1, 23 November 2007, Figure 9

Furthermore, the commitment under Art. 4.2(a) is not simply about limiting anthropogenic emissions of greenhouses (as well as protecting and enhancing sinks and reservoirs). The adoption and implementation of mitigation policies and measures by developed countries under Art. 4.2(a) is in order for them to demonstrate that they are “taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention ...” This means, essentially, that reductions in developed countries’ emissions must be such as would result in modifications of longer-term emissions trends – i.e. result in long-term downward trends in emissions arising from changes in the production and consumption patterns that underlie such trends. In this context, it is quite clear that developed countries by and large – especially most of the Annex I non-EIT Parties – have not yet complied fully and effectively with their commitment under Art. 4.2(a).

As of 2006, most developed countries listed in Annex I of the UNFCCC that are not EITs have not, by and large, complied with their commitment under Art. 4.2(b) to return “individually or jointly to their 1990 levels” their anthropogenic greenhouse gas emissions. Neither have most Annex I Parties that are Parties to the Kyoto Protocol met, as of 2006, their Kyoto Protocol Annex B targets. It is, in fact, largely the EIT Annex I Parties that were able to do so mainly because of the economic difficulties that they faced in the 1990s which resulted in the collapse of many industrial activities. Hence, Annex I non-EIT Parties by and large, except for a few, have not managed to return to their 1990 levels.²⁶ (see Figures 5 and 6)

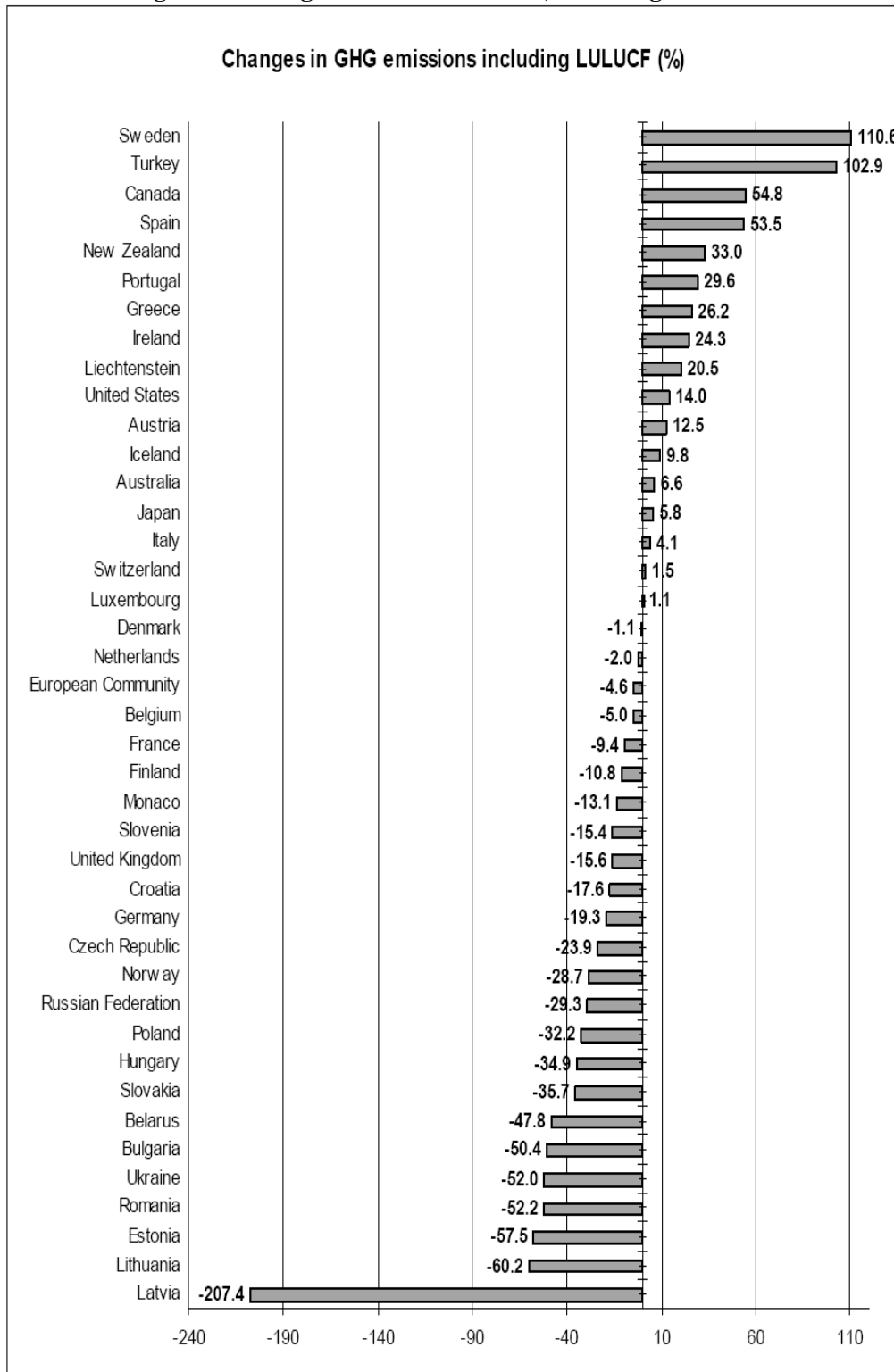
²⁶ The non-EIT Annex I Parties that have managed to return to or go below their 1990 levels as of 2006 are: Netherlands, EU, France, Belgium, Sweden, Monaco, United Kingdom, and Germany, if LULUCF is excluded; or Denmark, Netherlands, EU, Belgium, France, Finland, Monaco, United Kingdom, Germany, and Norway, if LULUCF is included. See UNFCCC, National greenhouse gas inventory data for the period 1990 to 2006, FCCC/SBI/2008/12, 17 November 2008, Figure 4

Figure 5: Changes in GHG emissions, excluding LULUCF



Source: UNFCCC, National greenhouse gas inventory data for the period 1990 to 2006, FCCC/SBI/2008/12, 17 November 2008, Figure 4

Figure 6: Changes in GHG emissions, including LULUCF



Source: UNFCCC, National greenhouse gas inventory data for the period 1990 to 2006, FCCC/SBI/2008/12, 17 November 2008, Figure 4. See also the global mitigation map generated by the UNFCCC secretariat at <http://maps.unfccc.int/di/map/>.

II.2.2. Art. 4.3 and 4.4 – Providing Climate Financing to Developing Countries

Developed countries that are listed under Annex II of the UNFCCC are obliged under Art. 4.3 to provide new and additional financial resources to developing countries that would:

- meet the agreed full costs for the preparation and submission of developing countries' national communications; and
- meet the agreed full incremental costs (including for technology transfer) of developing countries to implement their obligations under Art. 4.1.

Additionally, such developed countries as are listed in Annex II of the UNFCCC also have, under Art. 4.4, the obligation to “assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.”

Financing flows under the UNFCCC from developed (Annex II) Parties to developing countries pursuant to Arts. 4.3, 4.4, and 4.5, are supposed to go through the UNFCCC's financial mechanism established under Art. 11.1 to 11.4, with such financing to be “on a grant or concessional basis.”²⁷ The financial mechanism is currently being operated by the GEF, subject to review by the COP every four years. The GEF, as an operating entity of the financial mechanism, is supposed to comply with the guidance issued by the COP for its operation.²⁸ Optionally, under Art. 11.5, developed countries may also provide and developing countries avail themselves of financial resources through bilateral, regional, or multilateral channels. Annex II developed Parties are required to include in their national communications the details of measures that they take to comply with their financing obligations under Art. 4.3, 4.4 and 4.5.²⁹ Such measures are taken into account in the context of the COP's review of the financial mechanism that takes place every four years.³⁰

(a) Data Relating to Compliance with Art. 4.3³¹

With respect to the obligation to meet the agreed full costs for developing countries' national communications, developed countries have generally taken the approach of providing funding to the GEF which the GEF then provides to developing countries in order to support the preparation of their national communications. In this regard, the GEF has adopted operational procedures for the expedited financing of national communication from developing country Parties to assist eligible countries in formulating and submitting proposals based on COP 8 guidelines.³² Under these operational procedures, up to US\$405,000 is made available to

²⁷ Art. 11.2

²⁸ Under Art. 11.1, the financial mechanism “shall function under the guidance of and be accountable to the [COP], which shall decide on its policies, programme priorities and eligibility criteria related to” the UNFCCC.

²⁹ Art. 12.3.

³⁰ See Annex of COP decision 3/CP.4 adopted in late 1998 which contains the guidelines and objectives for the review of the financial mechanism. Additional guidelines and objectives for such review were provided by the COP in December 2007 in COP decision 6/CP.13. Three reviews of the financial mechanism have taken place since the review guidelines were adopted in late 1998.

³¹ For discussion of Annex II Parties' reports in terms of their provision of financial resources pursuant to the UNFCCC, see e.g. UNFCCC, Compilation and synthesis of fourth national communications: Executive summary, FCCC/SBI/2007/INF.6, 19 November 2007, paras. 27 et seq.; and UNFCCC, Compilation and synthesis of fourth national communications: Addendum - Financial resources, technology transfer, vulnerability, adaptation and other issues relating to the implementation of the Convention by Parties included in Annex I to the Convention, FCCC/SBI/2007/INF.6/Add.2, 19 November 2007, para. 27 et seq.

³² See http://www.gefweb.org/Documents/enabling_activity_projects/documents/GEF-C22-Inf16.pdf for the text of these procedures.

each developing country Party for the preparation of its national communication. The GEF also provides an additional US\$15,000 per country for stocktaking exercise and stakeholder consultations in preparation of the project proposals. That such amounts should be determined by the GEF alone is contrary to the obligation of developed countries to provide “agreed full cost” funding for the preparation of national communications. This has been one of the most contentious issues under continued negotiations on the matter of developing country national communications under the Convention.³³

With respect to the obligation to provide “new and additional” financial resources to cover the “agreed full incremental costs” for the implementation by developing countries of their UNFCCC commitments under Art. 4.1, it is difficult to ascertain with exactitude on the basis of the developed Parties’ national communications whether such obligation has been fully complied with. This is primarily because of the difficulty in obtaining comparable data from the Parties concerned.

For example, while the Compilation and Synthesis of the Fourth National Communications³⁴ presents the various contributions in a single currency, such presentation necessitated the conversion into United States dollars of the range of currencies used by the parties. No uniform currency was used by the parties in their reports, some even utilizing two or three currencies within a single communication, such as Belgium and Canada. There was also no uniform period of time within which the developed country parties indicated their contributions. As regards contributions to the GEF, for instance, fourteen parties reported contributions for each year between 2001 and 2003, while a few chose to provide contributions over a certain period rather than annually. To further illustrate, the Compilations and Synthesis Report states that the United Kingdom chose to report only on the years 2003 and 2004, while Finland did not report data for 2001.

Most Parties listed in UNFCCC Annex II reported on their contributions to multilateral institutions and programmes, as well as bilateral and regional financial contributions. Most of those who did so named the various recipients of their contributions, but failed to signify which portions of such funding were directly related to climate change and which were not. A few, however, included graphs or charts detailing the relevance of their contributions to climate change efforts.

A majority of the developed country parties have reported an increase in their contributions to multilateral institutions, as well as the GEF, for the period reported in the fourth national communications (generally, 2001-2003, with the exception of some who were able to report on 2004 as well) as compared to those reported in the third national communications. Bilateral and regional development assistance with regard to mitigation also increased, with the energy and transport sectors receiving the largest share of assistance, while total bilateral contributions for adaptation-related activities remained broadly stable, going mostly to capacity-building activities.

³³ See e.g. the views of developing countries generally critical of GEF performance on this issue of providing support for the preparation of developing country NCC’s under Art. 4.3, such as Saudi Arabia and Uruguay, in FCCC/SBI/2007/MISC.13; Brazil, Jamaica and Paraguay, in FCCC/SBI/2007/MISC.13/Add.1

³⁴ UNFCCC, Compilation and synthesis of fourth national communications, FCCC/SBI/2007/INF.6, 19 November 2007

Table 2.1
Climate Change-Related Financing from Annex II Parties: 1997-2000
(in millions of US \$)

| COUNTRY | TOTAL | YEARS | GEF | UNFCCC | OTHER MULTILATERAL | BILATERAL | |
|-----------------------|------------------|---|-----------------|-------------|-----------------------|------------------|-----------------|
| | | | | | | MITIGATION | ADAPTATION |
| Australia | 792.57 | 1997-2000 | 15.2 | 0.59 | 693.1 | 77.34 | 6.34 |
| Austria | 6,453.01 | 1997-2000 | 10.2 | 0.0 | 6,428.7 | 14.11 | 0.0 |
| Belgium | 59.7 | For GEF: 1995-1999 to 1999-2002 | 59.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Canada | 1,766.8 | For GEF: 1994-1998 to 1998-2002 For UNFCCC and Multilateral: 1996-1997 to 1998-1999 | 158.5 | 0.1 | 852.4 | 664 | 91.8 |
| European Community | 3,778.8 | 1997-2000 | 0.0 | 0.6 | 690.5 | 3,087.7 | 0.0 |
| Finland | 666.09 | 1997-2000 | 18.3 | 0.0 | 574.1 | 51.8 | 21.89 |
| France | 2,300.8 | For GEF: 1995-1998 to 2000 | 287 | 0.0 | 1,948.3 | 65.5 | 0.0 |
| Germany | 1,171.3 | 1997-2000 | 144.3 | 0.0 | 0.0 | 930.7 | 96.3 |
| Greece | 93.08 | 1997-2000 | 4.88 | 0.0 | 88.2 | 0.0 | 0.0 |
| Italy | 1,018.37 | 1997-2000 | 20.9 | 1.9 | 966.3 | 14.06 | 15.27 |
| Japan | 7,549.27 | 1997-2000 | 354.4 | 0.47 | 1,176.9 | 4,472 | 1,545.5 |
| Netherlands | 345 | 1997-2000 | 33.5 | 0.6 | 248.2 | 62.7 | 0.0 |
| New Zealand | 72.28 | 1997-2000 | 2.8 | 0.01 | 47.26 | 14.54 | 7.67 |
| Norway | 864.33 | 1997-2000 | 30 | 0.13 | 715.7 | 117.4 | 1.1 |
| Spain | 450.41 | 1997-2000 | 27.4 | 0.0 | 388.8 | 29.91 | 4.3 |
| Sweden | 1,831 | For GEF: 1998 to 2001 | 53.1 | 0.5 | 1380.4 | 198.3 | 198.7 |
| Switzerland | 707.21 | 1997-2000 | 26.3 | 0.0 | 664.8 | 16.11 | 0.0 |
| United Kingdom | 1,289.68 | For GEF: 1997-1998 to 2000 | 48.4 | 2.0 | 422.88 | 816.4 | 0.0 |
| United States | 12,557.54 | 1997-2000 | 285.8 | 15.2 | 4,812.5 | 2,420.19 | 5,023.85 |
| Total | 43,767.24 | | 1,580.68 | 22.1 | 22,099.04 | 13,052.76 | 7,012.72 |

Source: South Centre calculations using data from UNFCCC, Compilation and Synthesis Report on Third National Communications - Addendum (2003), at <http://unfccc.int/resource/docs/2003/sbi/07a01.pdf>

Table 2.2
Climate Change-Related Financing from Annex II Parties: 2001-2004
(in millions of US \$)

| COUNTRY | TOTAL | YEARS | GEF | UNFCCC | OTHER MULTILATERAL | BILATERAL | |
|-----------------------|------------|-----------------------|---------|--------|-----------------------|------------|------------|
| | | | | | | MITIGATION | ADAPTATION |
| Australia | 774.1 | 2001-2004 | 31.5 | 1.2 | 657.1 | 53.5 | 30.8 |
| Austria | 506.6 | 2001-2004 | 27.1 | 0.4 | 456.3 | 21.1 | 1.7 |
| Belgium | 90.1 | For GEF: 2003-2006 | 41.8 | 0.6 | 17 | 10.3 | 20.4 |
| Canada | 1,550.9 | For GEF: 2003-2006 | 26 | 8.1 | 1,393.9 | 84.5 | 38.4 |
| Denmark | 942.2 | 2001-2004 | 34.9 | 0.3 | 718.6 | 170.4 | 18 |
| European Community | 2,271.1 | 2001-2004 | 0.0 | 0.0 | 275.8 | 1,995.3 | 0.0 |
| Finland | 457.9 | 2001-2004 | 21.5 | 0.5 | 435.9 | 0.0 | 0.0 |
| France | 3,316.2 | For GEF: 2003-2005 | 49 | 0.0 | 2,857.1 | 410.1 | 0.0 |
| Germany | 8,540.9 | 2001-2004 | 287.9 | 0.2 | 7,020.7 | 1,232.1 | 0.0 |
| Greece | 68.9 | 2001-2004 | 4.2 | 0.34 | 61.36 | 0.6 | 2.4 |
| Iceland | 11.2 | 2001-2004 | 0.0 | 0.0 | 11.2 | 0.0 | 0.0 |
| Italy | 4.6 | 2001-2004 | 0.0 | 0.0 | 0.0 | 4.6 | 0.0 |
| Ireland | 8.6 | 2001-2004 | 2.9 | 0.0 | 32 | 0.0 | 5.7 |
| Japan | 5,020.11 | 2001-2004 | 421.2 | 0.006 | 867.2 | 3,731.7 | 0.0 |
| Netherlands | 528.1 | 2001-2004 | 79.7 | 0.0 | 312.4 | 103.1 | 32.9 |
| Norway | 851.1 | 2001-2004 | 21.7 | 0.6 | 602.9 | 225.9 | 0.0 |
| New Zealand | 62.9 | 2001-2004 | 6.2 | 0.0 | 46.9 | 8 | 1.8 |
| Portugal | 687.5 | 2001-2004 | 5.1 | 0.34 | 682.06 | 0.0 | 0.0 |
| Spain | 2,986.3 | 2001-2004 | 16.2 | 1.8 | 2,932.2 | 33.7 | 2.4 |
| Sweden | 464.2 | 2001-2004 | 26.1 | 0.0 | 0.0 | 258.2 | 179.9 |
| Switzerland | 923.4 | 2001-2004 | 63.8 | 1.5 | 840.9 | 15.4 | 1.8 |
| United Kingdom | 227.9 | For GEF: 2003-2004 | 54 | 0.4 | 163.9 | 0.0 | 9.6 |
| United States | 282,538.4 | 2001-2004 | 493.6 | 0.0 | 5,344.3 | 276,684.2 | 16.3 |
| Total | 312,833.21 | | 1,714.4 | 16.286 | 25,729.72 | 285,042.7 | 362.1 |

Source: South Centre calculations using data from UNFCCC, Compilation and Synthesis Report on Fourth National Communications – Annex (2007), FCCC/SBI/2007/INF.6/Add.2, at <http://unfccc.int/resource/docs/2007/sbi/eng/inf06a02.pdf>

It is readily apparent that financing with regard to adaptation is notably lower than contributions relating to mitigation. In any event, as the data tables above indicate, developed countries' mitigation-related bilateral financing increased from US\$13.05 billion during the period 1997-2000 to US\$285.04 billion for the period 2001-2004, while their financing for adaptation fell from US\$7 billion in 1997-2000 to US\$362.1 million in 2001-2004. This is due in large part to a massive increase in reported bilateral financing for mitigation by the United States from US\$2.42 billion for 1997-2000 to US\$276.684 billion for 2001-2004. However, such increase in reported US bilateral climate-related mitigation

financing is artificial and involves multiple cases of padding, double-counting, and aggregate-counting due to the fact that the US counted as mitigation financing not only direct environment-related ODA flows³⁵ but also its trade and development-related ODA such as project financing, export credits, risk and loan guarantees, investment insurance and credit enhancements that “facilitate the transfer of climate-friendly technology,” as well as some US private sector commercial investments and lending.

Indeed, the US is not an isolated case, although it seems to be the most egregious in terms of artificially enhancing the reported extent of its climate financing flows. It is important to note that *virtually all of the financing that Annex II Parties reported in their 4th national communications (save for Italy for some of its financing) as compliance with their UNFCCC Art. 4.3, 4.4 and 4.5 financing obligations form part of these Parties’ overall official development assistance (ODA) programmes rather than being “new and additional”*³⁶ (see Table 3)

In essence, developed countries’ financial flows that go towards meeting their internationally agreed goal of providing at least 0.7% of their annual Gross National Income (GNI) as ODA are double-counted as also going towards meeting their treaty obligations under UNFCCC Art. 4.3, 4.4 and 4.5 to provide climate financing to developing countries. In this context, therefore, such financial flows are neither new, additional, nor, indeed, mandatory in nature.

However, doing so – i.e. counting ODA financing as UNFCCC-compliant climate financing – is not consistent with UNFCCC Art. 4.3 because such climate financing must be new and additional. As the G77 and China has stressed, climate financing must be “new and additional ... which is over and above ODA.” Furthermore, ODA by its very nature is voluntary. The climate financing commitment under UNFCCC Art. 4.3 is mandatory.

³⁵ Such as those for USAID’s climate change programme (US\$2.6 billion since 1991), US contributions to the GEF, US contributions to multilateral environmental agreements such as the Montreal Protocol and the UNFCCC, bilateral environment-related projects, etc. See the US’s 4th national communication for a listing.

³⁶ With regard to “new and additional” financial contributions, no universal interpretation to the term appears to exist, as seven Annex II parties considered their contributions to the GEF as part of this category, while two linked their new and additional contributions to pledges made in Bonn Agreements. Two other parties chose to report certain contributions as “new and additional” as well, without identifying the reasons behind such a classification. Some countries merely chose to specify the total amount of bilateral and regional development assistance contributed without indicating all the recipients and which ones in particular are given funds for mitigation and/or adaptation.

Table 3

| Annex II Party | Bilateral Climate Financing for Mitigation and Adaptation as Part of ODA? | |
|--------------------|---|---|
| | YES (Implementing Agency) | NO (Implementing Agency) |
| Australia | Australian Agency for International Development (AusAID) | |
| Austria | Austrian Development Cooperation; Ministry of Agriculture, Forestry, Environment and Water; Federal States, Municipalities and NGOs | |
| Belgium | Directorate General for Development Cooperation under Federal Public Service Foreign Affairs, Foreign Trade and Development Cooperation | |
| Canada | Canadian International Development Agency (CIDA) | |
| Denmark | Danish International Development Assistance (Danida) | |
| European Community | European Development Fund; European Investment Bank (primary lending institution) | |
| Finland | Finland development cooperation system under Finland Ministry of Foreign Affairs | |
| France | L'Aide Publique Française au Développement; Le Fonds Français pour L'environnement Mondial; Direction Générale de la Coopération Internationale et du Développement | |
| Germany | Federal Ministry for Economic Cooperation and Development (BMZ) | |
| Greece | Greek ODA system | |
| Iceland | Icelandic International Development Agency; International Development Agency | |
| Italy | Interministerial Committee on Economic Planning (CIPE – Comitato Interministeriale per la Programmazione Economica); Directorate-General on Development Co-operation | Since 2002, in order to meet “new and additional financing” commitments under Art. 4.3, 4.4, and 4.5 and pursuant to COP decisions in FCCC/CP/2001/L.14, FCCC/CP/2001/L.15 and the Bonn Declaration of 2001, the Italian Ministry for the Environment, Land and Sea (IMEIS), has been authorized by the law June 1, 2002, n° 120, to finance activities for 68 million euro/year in developing countries to substantively contribute to the implementation of the [UNFCCC] and the Kyoto Protocol.” |
| Ireland | Irish Aid | |
| Japan | Government of Japan's ODA program | |
| Netherlands | Netherlands Development Cooperation Programme | |
| Norway | Nordic Environment Finance Corporation; Activities Implemented Jointly; Other bilateral funding of projects | |
| New Zealand | New Zealand Agency for International Development (NZAID) | |
| Portugal | Portuguese Development Support Institute | |
| Spain | Agencia Espanola de Cooperacion Internacional (AECI); Fondo de Ayuda al Desarrollo (FAD) | |
| Sweden | Swedish International Development Cooperation Agency (SIDA) | |
| Switzerland | Swiss Agency for Development and Cooperation (SDC) | |
| United Kingdom | Department for International Development (DFID) | |
| United States | U.S. Agency for International Development (USAID); U.S. Environmental Protection Agency; U.S. Department of Energy; U.S. Department of State; U.S. Department of Agriculture; National Oceanic and Atmospheric Administration; National Aeronautics and Space Administration; U.S. Department of Commerce | |

Source: Annex II Parties' 4th national communications' sections on financial transfers.

In effect, by double-counting ODA as climate financing, developed countries are essentially reflecting and responding to their own priorities relating to development assistance and climate financing rather than to the priorities and needs of developing countries. This in essence undermines the balance contained in the UNFCCC with respect to the climate financing needs of developing countries and the climate financing obligations of developed countries.

Mixing ODA flows for development projects and financial flows for climate adaptation and mitigation makes it difficult to obtain a clear picture of the extent to which Annex I Parties are complying effectively with their UNFCCC obligation to provide new and additional climate financing to support developing country implementation of their UNFCCC obligations.

(b) Data Relating to Compliance with Art. 4.4

The picture painted by Annex II Parties' national communications and the various data from different funds pertaining to adaptation is a mixed one. Annex II Parties' responses to domestic adaptation differ strongly from country to country, as too does their response in meeting their obligation under Art. 4.4. Similarly their presentation of their reports shows strong variation, with some ensuring that information is well presented (e.g. Australia), whereas others seem to hide behind reams of verbose and difficult to digest "information" (e.g. Italy).

When it comes to domestic adaptation measures the vast majority of countries have taken very few steps themselves. Some countries such as Norway claim that there is no urgent need to take any measures as yet since they will not be too badly affected by climate change. However, the norm seems to be that many countries have researched or are researching adaptation measures. Some fill some space within the report by first defining adaptation then stressing its importance, and then finally using the report to list suggestions rather than any actual actions taken. Despite this trend there are some others (Australia, Germany, Canada, etc) who do list actions taken, however only a handful of countries actual list how much is being spent.

Similar to the difficulties in obtaining comparable data in relation to Art. 4.3 compliance, Art. 4.4-related data is also difficult to assess in relation to the extent to which Art. 4.4 is being complied with due to the general lack of comparable data from Annex II Parties. ***But, based purely on the fourth national communications from Annex II Parties, the yearly contribution to climate change adaptation funding fluctuates year on year and has not seen a yearly increase in most countries.*** Adding to that the issue that not every country has provided data for their yearly contributions, the basis for comparison becomes weaker. Independent reports and figures (such as those from the various funds) provide, as is to be expected, easier-to-process data usually converting all the donations to dollars. This makes it easier to compare the contributions of the different countries and they also show which countries have lived up to their promises and which still have to fulfill them and under what timetable (e.g. Germany and Italy).

(c) Other Considerations Relating to Compliance with the Financing Obligation under Art. 4.3 and 4.4

With respect to the agreed full incremental costs of developing countries to implement their common commitments under Art. 4.1, the UNFCCC secretariat's estimated annual cost requirements to fund adaptation, mitigation and technology transfer for developing countries

in an update of its 2007 report on investment and financial flows to address climate change³⁷ as follows:

Table 4.1: Estimated Annual Financial Requirements for Adaptation, Mitigation and Technology Transfer for Developing Countries

| Adaptation | Mitigation | Technology Transfer |
|--|---|--|
| <p>US\$ 27.75-58.25 billion annually in 2030 for developing countries (calculated from the proportion needed in developing countries as indicated in Table 5, FCCC/TP/2008/7, p. 19).</p> <p>The UNFCCC estimate globally for annual adaptation costs is US\$49-171 billion.</p> | <p>US\$52.40 billion annually in 2030 for developing countries (calculated from the proportion needed in developing countries as indicated in Table 4, FCCC/TP/2008/7, p. 18) without including the amount required for investments in technology research, development and deployment of climate technology in developing countries. The UNFCCC Secretariat paper seems to assume that all the costs for the technology transfer-related research, development and deployment for climate technology will go solely to developed countries.</p> | <p>US\$6-41 billion annually up to 2030 for <u>deployment of technologies</u> to developing countries (US\$25-163 billion globally). (see Table 17, FCCC/TP/2008/7, p. 57)</p> <p>US\$176-464 billion annually up to 2030 for diffusion and commercial transfer in developing countries (US\$380 billion to US\$1 trillion globally). (see Table 17, FCCC/TP/2008/7, p. 57)</p> <p>For <u>research and development</u>, global cost estimates amount to US\$10-100 billion annually up to 2030, and for <u>technology demonstration</u>, US\$27-36 billion annually up to 2030 globally. (see Table 17, FCCC/TP/2008/7, p. 57)</p> <p>The UNFCCC Secretariat paper did not put any estimates of the costs that need to be financed in developing countries with respect to climate technology research and development, implying that R&D is done <u>only</u> in developed countries. However, for developing countries, support for endogenous R&D is an important and integral component in any technology transfer under the UNFCCC.³⁸</p> |
| <p>The total UNFCCC estimated annual financial requirements for adaptation, mitigation and technology transfer for developing countries -- which <u>may still be on the low-end</u> in any case due to omissions with respect to technology R&D and demonstration -- would be: US\$262.15 billion – US\$615.65 billion annually by 2030</p> | | |

³⁷ See UNFCCC, Investment and financial flows to address climate change: an update, FCCC/TP/2008/7, 26 November 2008, at <http://unfccc.int/resource/docs/2008/tp/07.pdf>.

³⁸ See e.g. the G77 and China's August 2008 proposal for a technology transfer mechanism which clearly states that financing should also be provided for technology research and development in developing countries.

Table 4.2: What is Currently Available or Estimated to be Made Available to Developing Countries under the GEF As an Operating Entity for the UNFCCC's Financial Mechanism

| | |
|------------------------------|---|
| Adaptation | <p>US\$ 50 million – GEF Trust Fund: Strategic Priority for Adaptation</p> <p>US\$ 90.3 million – Special Climate Change Fund (GEF administered)</p> <p>US\$ 172.0 million – Least Developed Countries Fund (GEF administered)</p> <p>US\$ 80–300 million per year for the period 2008-2012 from the 2% share of the proceeds of annual sales of certified emissions reductions from CDM projects – Adaptation Fund; current funding estimated at US\$91.3 million</p> |
| Mitigation | <p>US\$ 1,030 million from the GEF 4th Replenishment for the period 2006-2010, of which US\$352 million is already committed</p> <p>US\$ 154 million – GEF 4 special programme on LULUCF</p> <p>US\$ 8,400 million – Market value of expected emissions reductions from CDM projects during 2007</p> <p>US\$ 41 million – Market value of expected emissions reductions from JI projects during 2007</p> |
| Technology Transfer | <p>The GEF estimates that 80-100 per cent of GEF climate change mitigation funding fits the technology transfer definitions used by the Convention (see FCCC/SBI/2007/21, Table 2 and para. 62)</p> <p>US\$ 16.2 million were available from the SCCF for the programme for transfer of technology</p> |
| Total through the GEF | US\$10.03 billion to 10.25 billion |

* Unless otherwise indicated, the source for all figures in this table is the UNFCCC secretariat report, FCCC/TP/2008/7, Table 28 (figures are rounded off).

Even solemnly made political commitments by some Annex I Parties in relation to the provision of climate change funding to developing countries have not been met. For example, on 23 July 2001, at the closing plenary of COP6bis in Bonn, Germany, Belgium on behalf of 20 Annex II Parties³⁹ presented a Joint “Political Declaration on Financial Support for Developing Countries” in which they stated as follows:

We reaffirm our strong political commitment to climate change funding for developing countries. We are prepared to contribute US\$ 410 million, which is 450 million Euro, per year by 2005 with this level to be reviewed in 2008. Funding to be counted on can include: contributions to GEF climate change related activities; bilateral and multilateral funding, additional to current levels; funding for the special climate change fund, the Kyoto Protocol Adaptation Fund and the LDC fund; and funding deriving from the share of proceeds of the clean development mechanism, following entry into force of the Kyoto Protocol.⁴⁰

³⁹ These were the EU-15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom; plus Canada, Iceland, New Zealand, Norway, and Switzerland.

⁴⁰ See UNFCCC, Statements made in connection with the approval of the Bonn Agreements on the implementation of the Buenos Aires Plan of Action (decision 5/CP.6), FCCC/CP/2001/MISC.4, 23 October 2001, pp. 6-7.

A study assessing the level of implementation by the 15 EU Member States that are party to the joint declaration concluded that these Annex II Parties fall “well short of the level of USD 369 million to which they committed themselves” in terms of specific multilateral climate change related funding and that information of other climate change financing flows from these Parties is “insufficient to enable even an informed observer to make a reliable judgment about the volume of aid additional to 2001 levels that is effectively being provided at the present time.”⁴¹

In fact, the amounts pledged or to be committed from Annex I Parties for climate financing remain far too low to meet the scale of the financing needs of developing countries in relation to climate adaptation and mitigation. The UNFCCC estimates that US\$262.15 – 615.65 billion annually by 2030, while the G-77 and China in their August 2008 climate finance proposal has suggested that initially (as a minimum) at least US\$278.82 billion to US\$557.64 billion (based on the 2007 GDP of Annex I Parties), will be needed. Currently, climate-related funds under the GEF amounts to US\$10.03 billion to US\$10.25 billion, while US\$18.95 billion (including US\$6.68 billion in bilateral initiatives and US\$12.27 billion through multilateral initiatives) in climate-related financing may be forthcoming from Annex I Parties’ individual climate financing initiatives, with approximately US\$4.8082 billion annually being made available as a result of these initiatives over varying time periods. That is, climate financing that is available or may be made available by Annex I Parties in the foreseeable future are a little over one-tenth of the minimum estimated requirements for climate financing coming from the UNFCCC or the G77 and China.

**Table 5: Public Climate Financing
through Non-UNFCCC Channels from Annex I Parties**

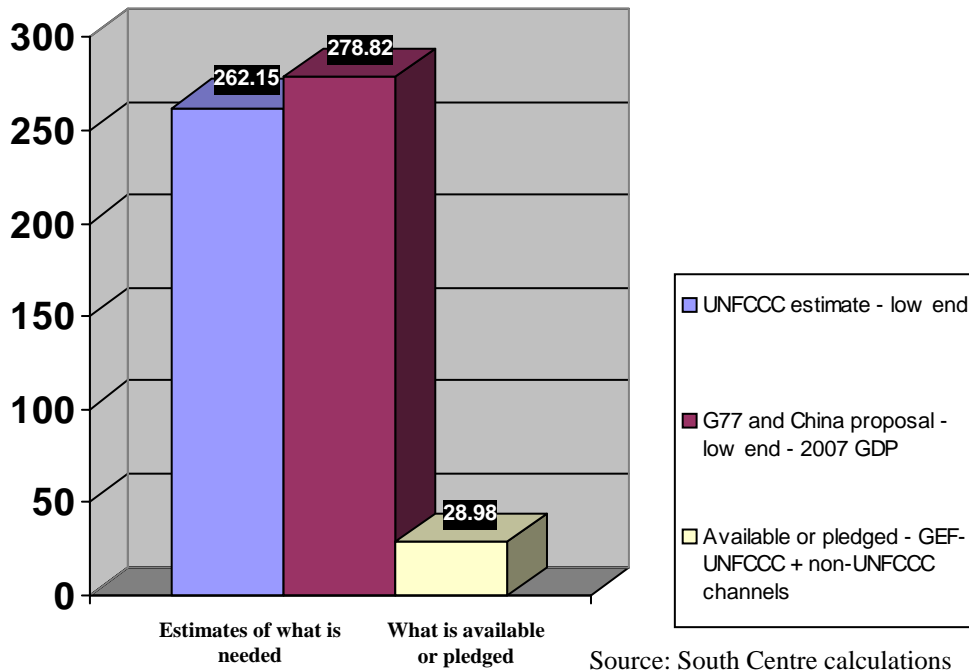
| Non-UNFCCC Channel | Estimated Amount |
|---------------------------|---|
| Bilateral | US\$6.68 billion |
| Multilateral | US\$12.27 billion |
| Total | US\$18.95 billion (with approximately US\$4.81 billion annually being made available as a result of these initiatives over varying time periods) |

Source: FCCC/TP/2008/7, Table 29 (figures are rounded off)

As can be seen in Figure 7 below, the total of currently available or pledged public sector financing from Annex I Parties, whether through the GEF (as an operating entity for the UNFCCC’s financial mechanism) or through bilateral or other non-UNFCCC multilateral channels, fall far short of current estimates for annual climate financing requirements (whether based on the UNFCCC paper or the G-77 and China financial mechanism proposal). Much more scaling up of public sector financing from Annex I Parties therefore needs to be undertaken in order to meet climate financing requirements.

⁴¹ See Marc Pallemarts and Jonathan Armstrong, Financial Support to Developing Countries for Climate Change Mitigation and Adaptation: Is the EU Meeting its Commitments? (Institute for European Environmental Policy Paper, 28 January 2009), at http://ccsl.iccip.net/sds_paper_funding.pdf

Figure 7: Climate Financing Mismatch between Needs and Availability (US\$ billions)



The problem is also not simply limited to the severe funding shortfall evident in both UNFCCC (through the GEF) and non-UNFCCC channels. A major part of the problem relating to current public climate financing from developed countries is that regardless of the delivery channel, these are voluntary and are not directly accountable to the UNFCCC COP. As such, currently available public financing for climate action from developed countries (whether channeled through the GEF or not) does not, and cannot, be compliant with the criteria of predictability and adequacy of financing that is required under Art. 4.3 of the Convention. The nature of voluntary financing is directly inconsistent with the mandatory nature of the financing commitments for developed country Parties under the UNFCCC.

Furthermore, it is not clear to what extent such voluntary financing (again whether through the GEF or other non-UNFCCC channels) complies with the COP's guidelines on such financing's consistency with COP policies, programme priorities and eligibility criteria, and on non-introduction of new forms of conditionalities.⁴² For example, in relation to the GEF, the COP has had to issue additional guidance at virtually every session to the GEF, thereby indicating that qualitative deficiencies in the GEF's performance as an operating entity for the UNFCCC's financial mechanism continue to persist. Critiques of the GEF's performance as an operating entity generally relate to, inter alia, the simplicity and efficiency of its funding procedures and the equitable distribution of GEF funding to developing country Parties, especially least-developed countries (LDC's) and small island developing states (SIDS).⁴³

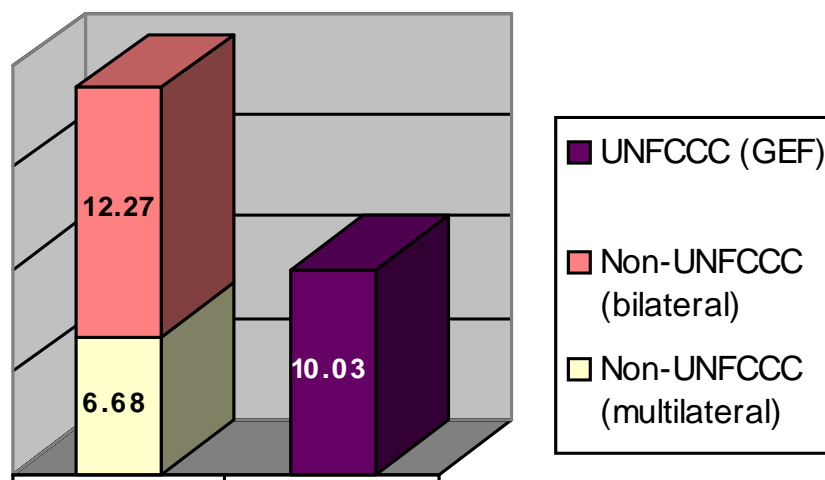
⁴² Decision 11/CP.1, paragraph 2(a) states as follows: “**Consistency should be sought and maintained between activities (including those related to funding) relevant to climate change undertaken outside the framework of the financial mechanism and the policies, programme priorities and eligibility criteria for activities as relevant, established by the Conference of the Parties.** Towards this end and in the context of Article 11.5 of the Convention, the secretariat should collect information from multilateral and regional financial institutions on activities undertaken in implementation of Article 4.1 and Article 12 of the Convention; **this should not introduce new forms of conditionalities.**” (emphasis added)

⁴³ These critiques are implicitly reflected in, for example, COP Decision 3/CP.12's paragraphs 1(a) and (b) and 2(a), (b) and (d) with respect to the COP's request and invitation to the GEF to further simplify and improve the efficiency of its procedures and processes as well as the last preambular paragraph of the same Decision “noting

Developed countries also show a great reluctance to channel climate financing sourced from their governmental funds through the UNFCCC, preferring to use either their own bilateral channels or other multilateral channels such as the World Bank as their vehicles for public sector climate financing flows. They also show a preference for relying on unpredictable and market-driven private sector financing. The public financing from developed countries for climate change-related actions that go through non-UNFCCC channels, and such financing that do go through the UNFCCC's financial mechanism (via the GEF as an operating entity), reflect and respond to the donors' political and economic priorities and interests rather than to the sustainable development priorities of developing countries.

Counting the low-end estimate of US\$10.03 billion channeled or made available through the GEF as an operating entity of the UNFCCC's Art. 11 financial mechanism as well as those through bilateral and other non-UNFCCC multilateral mechanisms (US\$18.95 billion), the current total available or pledged public financing for climate change-related actions from Annex I Parties comes up to US\$28.98 billion. Of this total amount, 34.61% is through the UNFCCC (via the GEF as an operating entity) and 65.39% is through non-UNFCCC channels (see Figure 8). This is inconsistent with the provisions of UNFCCC Art. 11, which envisions that climate change-related financing should primarily flow through the financial mechanism established in Art. 11.

Figure 8: Public Sector Climate Financing from Some Annex I Parties – Clear Preference for Non-UNFCCC Channels (in US\$ billions)



Source: South Centre calculations

the concerns expressed by developing country Parties over the implications of the requirements for co-financing, in particular in adaptation project activities”, and paragraph 3 urging the GEF “to provide further funding, in a more timely manner, to the developing country Parties, in particular the least developed countries and small island developing States...” The difficulties that developing country Parties have with the GEF were already being experienced since the beginning, as can be seen in the fifth preambular paragraph of COP Decision 11/CP.2 (which was adopted in July 1996, the second year after the UNFCCC entered into force), which expressed concern over the difficulties encountered by developing country Parties in receiving the necessary financial assistance from the Global Environment Facility owing to, *inter alia*, the application of the Global Environment Facility operational policies on eligibility criteria, disbursement, project cycle and approval, the application of its concept of incremental costs, and guidelines which impose considerable administrative and financial costs on developing country Parties.”

Many Annex II Parties justify their reluctance to channel such financing through the UNFCCC by arguing that the UNFCCC is not set up institutionally to handle massive financial flows, and that other multilateral institutions such as the World Bank are better equipped and have more expertise in handling such flows. However, considering that the UNFCCC is the sole virtually universal multilateral policy and institutional regime providing the legitimate framework for global action on climate change, climate financing should be channeled through the UNFCCC's financial mechanism and its capacity to handle such flows should be further enhanced.

There are four main consequences to this preference by Annex II Parties to channel their public sector financing for climate change-related actions through non-UNFCCC channels:

- (i) The UNFCCC is institutionally weakened - The preference for non-UNFCCC channels for climate-related public financing is a step towards weakening the UNFCCC itself and thereby undermining the effectiveness of the UNFCCC's legal regime and institutional architecture as the international community's main vehicle for global action on climate change. Such weakening also effectively lessens the normative value of the UNFCCC itself as a binding legal regime;
- (ii) The UNFCCC's financial mechanism is weakened – The financial mechanism established under Art. 11 of the UNFCCC serves as the sole multilaterally recognized channel through which developed countries can comply with their obligations under Art. 4.3, 4.4, and 4.5 to provide new and additional financing. By leaving the UNFCCC virtually un-financed, and by moving public climate financing to other channels, the institutional ability of the UNFCCC to serve as the main conduit for public sector-sourced climate financing is severely weakened. Furthermore, once non-UNFCCC funding channels are built up and adequately funded, developed countries might become even more reluctant to further enhance the UNFCCC's financial mechanism as the main channel for climate financing. This would make it unfeasible for the UNFCCC's COP, and developing country Parties to the UNFCCC, to ensure that such financing is consistent with the provisions and objectives of the UNFCCC;
- (iii) Developed countries cannot be held accountable to the UNFCCC COP for fulfillment of their financing commitments under the UNFCCC – Finally, because most Annex I public sector-sourced climate financing is not through the UNFCCC under the authority of the COP, developing countries would find it difficult if not impossible to raise issues relating to measurement, reporting, and verification, as well as accountability, for the flow and the use of such financing in the COP.

The difficulties that developing countries have experienced with the GEF as an operating entity for the UNFCCC's financial mechanism in terms of accessing climate financing are likely to be compounded even more with respect to climate financing that go through non-UNFCCC channels that are not accountable to the COP. These non-UNFCCC channels (such as the World Bank or other multilateral institutions whose governance structures and memberships are different from the UNFCCC COP – not to mention the fact that the governance of the World Bank and most of the other regional development banks are heavily dominated by developed countries) would likely have governance and accountability mechanisms in which developing country recipients play little or no effective role and in which the funding priorities are likely to be driven by the donors' interests rather than the recipients' needs or the climate financing priorities identified by the UNFCCC COP.

The example of the GEF can be highlighted because even though it was designated to be an operating entity for the UNFCCC's financial mechanism and that with respect to climate change-related funds, its actions are supposed to be subject to the guidance of the UNFCCC COP, developing countries have often raised concerns with respect to the difficulties encountered in terms of having the GEF's operational decisions be fully consistent with COP guidance.⁴⁴ The fact that the GEF's governance body is different from and not accountable to the UNFCCC COP makes it even more difficult for developing countries through the COP to call the GEF to account.

Using non-UNFCCC channels as the main conduits for public climate financing to support developing countries' implementation of climate change-related actions means that the fund providers – e.g. developed countries – need not and would not be bound by UNFCCC COP guidelines, nor be accountable to the UNFCCC COP. Furthermore, there is greater room for donor control over the scale, direction, objectives, recipients, and objectives of climate financing by using non-UNFCCC channels. This therefore also institutionally weakens the UNFCCC. Accountability to the UNFCCC COP with respect to climate financing is explicitly stated in Art. 11 of the UNFCCC, and having such financing go through the UNFCCC's financial mechanism will ensure that all the UNFCCC Parties, both developed and developing alike, through the COP, will be able to participate fully and transparently (and hold each other accountable) in the process of guiding and using such financial resources consistent with the provisions of the UNFCCC. This would also enable the Parties, both developed and developing, to work together to leverage such financing to generate other resources outside of the UNFCCC context that can be used to also support the meeting of the UNFCCC's objective.

(iv) Climate financing priorities of developing countries will not be met – Finally, current public financing from developed countries for climate action – whether through the GEF or through non-UNFCCC channels – will essentially reflect and respond to their own strategic political and economic interests and priorities rather than the sustainable development priorities of developing countries. This is clearly inconsistent with the needs-focused approach implicit in the UNFCCC's financing provisions (Arts. 4.3, 4.4 and 4.5) in which financing from developed countries are supposed to respond and meet developing countries' needs.

Existing modalities under which climate financing is being provided by developed countries have the effect of weakening the UNFCCC in terms of its effectiveness as a normative legal regime for global action on climate change and in terms of the effectiveness of its financial mechanism as a catalyst and vehicle for climate financing that is consistent with and supports the objectives of the UNFCCC.

II.2.3. Art. 4.5 – Transferring Technology to Developing Countries

⁴⁴ Part of the problem with the GEF in terms of ensuring the equitable allocation of funding resources to developing country Parties is that “higher levels of funding have typically been assigned to the countries with the highest overall potential for GHG mitigation” which means that many other developing country Parties whose priority is adaptation more than mitigation (because of the low levels of their emissions or low mitigation capabilities) often find it difficult to obtain GEF funding. Many African countries, for example, are sinks rather than sources of emissions. Some of the GEF's stakeholders, particularly in the Pacific region, have, in fact, suggested that “the GEF must fund activities in the area of adaptation to climate change because it is in the guidance from the UNFCCC and, because they are smaller emitters, the mitigation of GHG emissions is not a high national priority.” See GEF, OPS3: Progressing Toward Environmental Results – Third Overall Performance Study of the GEF (June 2005), pp. 36-40.

Art. 4.5 commits developed countries to:

- take all practicable steps to promote, facilitate and finance the transfer of, or access to, environmental sound technologies and know-how to developing country Parties to enable implementation of the UNFCCC; and
- support the development and enhancement of endogenous capacities and technologies of developing country Parties.

The extent of compliance by developed countries with this treaty commitment has also been a subject of much discussion among the Parties. The UNFCCC's Conference of the Parties (COP) has, in various sessions, discussed the issue of the implementation of Art. 4.5, with various decisions coming out that laid down specific actions to be undertaken by Parties, the secretariat, and the subsidiary bodies. Of particular importance is Decision 4/CP.7⁴⁵ which established a framework for "meaningful and effective actions to enhance the implementation" of UNFCCC Art. 4.5 "by increasing and improving the transfer of and access to environmentally sound technologies (ESTs) and know-how." The decision's annex identified five themes around which such "meaningful and effective actions" would be undertaken. These are on:

- Technology needs and needs assessments;
- Technology information;
- Enabling environments;
- Capacity building; and
- Mechanisms for technology transfer.

In its 2007 report, the UNFCCC Expert Group on Technology Transfer (EGTT) concluded that discussions relating to technology transfer in the UNFCCC "should evolve to a more practical, results-oriented level by promoting actions in specific sectors and regions".⁴⁶ *The EGTT in effect implied that to date, the UNFCCC's technology transfer-related provisions really have not yet been implemented by developed country Parties.*⁴⁷

In surveying the extent to which developed countries subject to the obligation to transfer technology under Art. 4.5, assessing the extent of compliance with obligations relating technology transfer under the UNFCCC can be quite difficult to measure due to the difficulty in having comparable data sets and the ambiguity that often results, specifically from the transfer of soft technologies. Contributions related to capacity building are also often counted among financial contributions either bilaterally or multilaterally, and so it quite possible for those funds to be double-counted. It is also made more complicated by the fact that it is hard to place monetary value on soft technology transfer, such as information sharing or technical demonstrations. Original promises by developed countries are also extremely vague, simply noting that developed countries should help developing countries with climate change adaptation, making it much more difficult to gauge whether or not Annex I countries have lived up to their pledges.

⁴⁵ See <http://unfccc.int/resource/docs/cop7/13a01.pdf#page=22> for the text of this decision.

⁴⁶ See UNFCCC, Expert Group on Technology Transfer: Five Years of Work (2007), p. 12, at http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/egtt_en_070523.pdf

⁴⁷ For a discussion of Annex I Parties' reports on their compliance with Art. 4.5 as contained in their national communications, see e.g. UNFCCC, Compilation and synthesis of fourth national communications: Addendum - Financial resources, technology transfer, vulnerability, adaptation and other issues relating to the implementation of the Convention by Parties included in Annex I to the Convention, FCCC/SBI/2007/INF.6/Add.2, 19 November 2007, paras. 45 et seq.

There are several noticeable trends concerning technology transfer, however, that can be discerned from the national communications of developed countries. The majority of technology transfer occurs in the energy sector, mainly energy efficiency and utilization of renewable energy sources. Most countries also place a much higher emphasis on the transfer of soft technology and capacity building in the programmes that they establish rather than on the transfer of hard technologies such as wind technologies, etc. The majority of technology transfer occurs through bilateral partnerships with countries, and often includes both soft and hard technology transfer as well as financial and technical support for initiatives that have been launched in developing countries.

Table 6
Technology Transfer Activities Reported
in the 4th National Communications of Annex II Parties
(Reporting Period 2001-2004)

| Party | Number of Technology Transfer Projects or Programmes | Technology Number of Capacity-Building Projects or Programmes | Total Amounts for Technology Transfer and Capacity-Building (in currency reported) |
|-----------------------|---|--|---|
| 1. Australia | 2 | - | AUS\$11.42 million |
| 2. Austria | 5 | - | US\$18.8 million |
| 3. Belgium | 3 | 3 | EUR0.569 million |
| 4. Canada | 1 | 5 | CDN\$28.7 million |
| 5. Denmark | 1 | 2 | DKK906.7 million |
| 6. European Community | 1 | 7 | EUR98.75 million |
| 7. Finland | 2 | 1 | EUR9.6 million |
| 8. France | 19 (no clear indication as to nature of project or programme reported) | | EUR382.088 million |
| 9. Germany | - | 7 | EUR6.706 million |
| 10. Greece | Not indicated | Not indicated | US\$3 million |
| 11. Iceland | Not indicated | Not indicated | Not indicated |
| 12. Ireland | - | 3 | EUR7.304 million |
| 13. Italy | Not indicated | Not indicated | Not indicated |
| 14. Japan | 1 | 2 | JPY7.556 billion |
| 15. Liechtenstein | Not indicated | Not indicated | Not indicated |
| 16. Monaco | Not indicated | Not indicated | Not indicated |
| 17. Netherlands | - | 3 | EUR7.8 million |
| 18. New Zealand | 1 | - | NZ\$0.111 million |
| 19. Norway | - | 2 | No data |
| 20. Portugal | - | 2 | No data |
| 21. Spain | Not indicated | Not indicated | Not indicated |
| 22. Sweden | - | 3 | No data |
| 23. Switzerland | 2 | 3 | CHF13.25 million |
| 24. United Kingdom | - | 1 | GBP3.5 million |
| 25. United States | - | 4 | US\$42.25 million |

Source: South Centre calculations using data sources from the relevant fourth national communications of the Annex II Parties, all of which are available at http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/3625.php

II.2.4. Article 4.8 and 4.9 – Addressing the Adverse Effects of Climate Change and the Impacts of the Implementation of Response Measures

Art. 4.8 requires developed countries, in implementing their Art. 4 commitments, to “give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially on:

- “(a) Small island countries;
- “(b) Countries with low-lying coastal areas;
- “(c) Countries with arid and semi-arid areas, forested areas and areas liable to forest decay;
- “(d) Countries with areas prone to natural disasters;
- “(e) Countries with areas liable to drought and desertification;
- “(f) Countries with areas of high urban atmospheric pollution;
- “(g) Countries with areas with fragile ecosystems, including mountainous ecosystems;
- “(h) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products; and
- “(i) Land-locked and transit countries”

Art. 4.9 also requires developed country Parties to “take full account of the specific needs and special situations of the least developed countries in their actions with regard to funding and transfer of technology.”

These two UNFCCC provisions are further supplemented by Arts. 2.3 and 3.14 of the Kyoto Protocol.

The reference to the addressing the “adverse effects of climate change” is with respect to the commitment of developed countries, in connection with Art. 4.4, to assist developing countries in adapting to the adverse effects of climate change. In this connection, the COP in 2001 decided to mandate that various adaptation-related implementation activities would be supported by the Global Environment Facility and other bilateral and multilateral sources.⁴⁸ In 2005, the COP supplemented Decision 5/CP.7’s provisions relating to adaptation by establishing the Nairobi Work Programme on Adaptation to be carried out by the Subsidiary Body on Scientific and Technological Advice (SBSTA) – this work programme is focused on enhancing cooperation relating to scientific climate change adaptation-related information in order to improve the Parties’ understanding and assessment of impacts, vulnerability and adaptation to serve as the basis for decision-making.⁴⁹

Another reference in Art. 4.8 that is important to consider is that with respect to the “impact of the implementation of response measures” on developing country Parties. This issue was also dealt with by Decision 5/CP.7 under which the COP:⁵⁰

20. *Encourages* non-Annex I Parties to provide information, in their national communications and/or other relevant reports, on their

⁴⁸ See FCCC/CP/2001/13/Add.1, Decision 5/CP.7, paras. 7 and 8.

⁴⁹ See FCCC/CP/2005/5/Add.1, Decision 2/CP.11. For a discussion of the contents of the Nairobi Work Programme, see UNFCCC, *The Nairobi Work Programme on Impacts, Vulnerability and Adaptation to Climate Change* (2007), at http://unfccc.int/files/adaptation/sbsta_agenda_item_adaptation/application/pdf/nwp_brochure.pdf.

⁵⁰ ⁵⁰ See FCCC/CP/2011/13/Add.1, Decision 5/CP.7, paras. 20-29.

- specific needs and concerns arising from the impact of the implementation of response measures;
21. *Requests* Annex II Parties to provide detailed information, in their national communications and/or any other relevant reports, on their existing and planned support programmes to meet the specific needs and concerns of developing country Parties arising from the impact of the implementation of response measures;
 22. *Encourages* Annex I and non-Annex I Parties to cooperate in creating favourable conditions for investment in sectors where such investment can contribute to economic diversification;
 23. *Requests* Annex II Parties to assist developing countries, in particular those most vulnerable to the impact of the implementation of response measures, in meeting their capacitybuilding needs for the implementation of programmes which address these impacts;
 24. *Urges* Parties to consider appropriate technological options in addressing the impact of response measures, consistent with national priorities and indigenous resources;
 25. *Encourages* Parties to cooperate in the technological development of non-energy uses of fossil fuels, and requests Annex II Parties to support developing country Parties to this end;
 26. *Encourages* Parties to cooperate in the development, diffusion and transfer of less greenhouse gas-emitting advanced fossil-fuel technologies, and/or technologies relating to fossil fuels, that capture and store greenhouse gases, and requests Annex II Parties to facilitate the participation of the least developed countries and other non-Annex I Parties in this effort;
 27. *Urges* Annex II Parties to provide financial and technological support for strengthening the capacity of developing country Parties identified in Article 4, paragraphs 8 and 9, of the Convention for improving efficiency in upstream and downstream activities relating to fossil fuels, taking into consideration the need to improve the environmental efficiency of these activities;
 28. *Encourages* Annex II Parties to promote investment in, and to support and cooperate with, developing country Parties in the development, production, distribution and transport of indigenous, less greenhouse gas-emitting, environmentally sound, energy sources, including natural gas, according to the national circumstances of each of these Parties;
 29. *Urges* Annex II Parties to provide support for research into, and the development and use of, renewable energy, including solar and wind energy, in developing country Parties;

Decision 5/CP.7 also established the LDC Fund under the UNFCCC's financial mechanism that would support the work programme for LDCs under Art. 4.9, including their preparation of their national action plans for adaptation.⁵¹

The existence of gaps in implementing Decision 5/CP.7 in relation to the adaptation and response measures led the COP in 2004, through Decision 1/CP.10, to further decide that the Parties should enhance their implementation of Art. 4.8 and 4.9.⁵²

⁵¹ *Id.*, paras. 11-17.

⁵² See FCCC/CP/2004/10/Add.1, Decision 1/CP.10. Preambular paragraph 3 of decision 1/CP.10 explicitly acknowledged that "there is a need to further implement decision 5/CP.7 in order to address the gaps in implementation that remain."

To date, however, implementation gaps by developed countries continue to exist with respect to their implementation of their commitments under Art. 4.8 and 4.9. For example, the LDC Fund remains severely underfunded, with only US\$172 million as of mid-2008. Total adaptation financing made available through bilateral and multilateral channels such as the GEF falls far short of the estimated adaptation financing requirement. The most recent review of adaptation financing suggests the scale of adaptation financing required globally by 2030 is likely to be in excess of \$500 billion annually.⁵³ The UNFCCC Secretariat's analysis (based on six underlying papers) suggests the costs of adaptation in 2030 could be between \$49-71 billion per year globally, of which \$27-66 billion would be required in developing countries. Actual costs, however, could be more than ten times greater,⁵⁴ as it is likely that the UNFCCC secretariat as well as other institutions might have seriously underestimated the costs of adaptation. Concerns with these estimates of adaptation financing include that⁵⁵:

- Key sectors have not been included in an assessment of cost (e.g. ecosystems, energy, manufacturing, retailing, or tourism);
- Some of those sectors that are included have been only partially covered;
- The additional costs of adaptation have sometimes been calculated as 'climate mark-ups' against low levels of assumed investment;
- None of these are substantive studies based on detailed and systematic "bottom up" actual evidence of costs of climate impacts;
- The studies are not independent but borrow heavily from each other; and
- They have not been tested by peer review in the scientific or economics literature.

To be sufficient, adaptation financing must address three key items:

- Actual costs, losses and damages associated with climate change;
- Costs of avoiding/minimizing avoidable impacts; and
- Lost and diminished development opportunities in developing countries.

Compared with what is required in the order of upwards from US\$500 billion per year in developing countries for adaptation costs, the current total amounts available in multilateral and bilateral channels for adaptation-related financing (including double-counted ODA) that are in the order of approximately US\$400 billion as of 2008 is grossly inadequate.

Information from Annex II Parties on the implementation of activities under Decision 5/CP.7, and on addressing the impact of response measures, have both been also inadequate. Clear information that would enable a clear judgment on progress made has not been provided.

Decision 1/CP.10 had requested the Subsidiary Body on Implementation (SBI) to consider the national communications of Parties (including Annex II Parties who were requested to provide detailed information on their implementation of Art. 4.8) in relation to such impacts and the implementation of decision 5/CP.7. The SBI undertook such consideration at its 27th session in June 2007.

In a paper prepared by the UNFCCC secretariat for the SBI on the implementation of Decision 5/CP.7, it stated that there were "wide disparities in the reporting of the various

⁵³ *Assessing the Costs of Adaptation to Climate Change: A Review of the UNFCCC and Other Recent Estimates*, August 2009 (Imperial College London, IIED)

⁵⁴ *Id.*

⁵⁵ *Id.*

types of support measures envisioned in decision 5/CP.7”⁵⁶ and that “the national communications do not ... disaggregate the contributions in enough detail to allow analysis of which particular objectives of decision 5/CP.7 an individual country has contributed to.”⁵⁷

In any event, in relation to the implementation by Annex II Parties of Art. 4.8 with respect to the impacts of response measures, the UNFCCC secretariat synthesis of national communications summarized Annex II Parties responses as follows:

- A number of Annex II Parties reported that they are undertaking research and development related to the technologies mentioned in decision 5/CP.7, paragraph 26⁵⁸
- Several Annex II Parties described in their national communications initiatives related to cooperation with developing country Parties in the development, production, distribution and transport of indigenous, less GHG-emitting, environmentally sound, energy sources, including natural gas (decision 5/CP.7, para. 28)⁵⁹
- Almost all Annex II Parties reported in their national communications activities in the area of support for research into, and the development and use of, renewable energy, including solar and wind energy (decision 5/CP.7, para. 29)⁶⁰
- Almost all Parties included in Annex II to the Convention reported on their contributions to multilateral agencies that work toward objectives related to the provisions of decision 5/CP.7⁶¹
- Several Parties [such as Denmark, EC, Greece, Portugal, and United Kingdom] reported efforts to minimize adverse impacts of the implementation of response measures.⁶²

At its meeting in June 2009, the SBI “noted the views of Parties on the status of implementation of Article 4, paragraph 8, of the Convention and decisions 5/CP.7 and 1/CP.10. It also noted that further work is needed on this matter.”⁶³ In this regard, the SBI “invited Parties and relevant organizations to submit to the secretariat, by 28 September 2009, with the option to make further submissions by 22 March 2010, their views on possible further action on this matter.”⁶⁴

These submissions may address, inter alia:⁶⁵

With regard to the adverse effects of climate change:

- (a) Financial resources;

⁵⁶ UNFCCC, Synthesis of available information related to the impacts of response measures under decision 1/CP.10, paragraph 20, FCCC/SBI/2007/23, 26 September 2007, para. 23

⁵⁷ *Id.*, para. 19

⁵⁸ *Id.*, para. 10.

⁵⁹ *Id.*, para. 15.

⁶⁰ *Id.*, para. 17.

⁶¹ *Id.*, para. 9.

⁶² *Id.*, paras. 25-29.

⁶³ UNFCCC, Matters relating to Article 4, paragraph 8 and 9, of the Convention: Progress on the implementation of decision 1/CP.10: Draft conclusions proposed by the Chair, FCCC/SBI/2009/L.13, 10 June 2009, para. 1

⁶⁴ *Id.*, para. 3

⁶⁵ *Id.*

- (b) Vulnerability and adaptation assessments;
- (c) Adaptation planning and implementation;
- (d) Risk management and risk reduction;
- (e) Regional collaboration and cross-cutting issues;
- (f) Capacity-building, education, training and public awareness;
- (g) Data, systematic observation and monitoring;

With regard to the impact of the implementation of response measures:

- (h) Financial risk management;
- (i) Modelling;
- (j) Economic diversification.

The SBI also requested its Chair to prepare a draft decision text on further actions with a view to adopting a decision at the sixteenth session of the COP in Mexico.⁶⁶ The adoption of such a decision text is still contention and is likely to be the subject of tough negotiations in the 2010 session of the SBI.

In summary, the assessment of the SBI at its June 2009 session with respect to the implementation of Art. 4.8 in relation to the implementation of decisions 5/CP.7 and 1/CP.10 clearly indicates that further work needs to be done with respect to such implementation, clearly implying that implementation gaps continue to exist with respect to the implementation of Art. 4.8 (as well as Art. 4.9).

II.2.5. Art. 12 – Reporting on Their Compliance

In accordance with Article 12 of the Convention, Annex I Parties shall submit national communications to the Conference of Parties (COP). The timing of these submissions is determined by relevant decisions of the COP. Decision 4/CP.5 states that Annex I Parties should use the UNFCCC reporting guidelines on national communications for the preparation of their third national communications, in accordance with decision 11/CP.4, and that subsequent reports will be prepared at intervals of 3 to 5 years.⁶⁷

The UNFCCC reporting guidelines on national communications specify the information that Annex I Parties shall report in relation to the implementation of their commitments included in Articles 2, 4, 5 and 6 of the Convention. The information to be incorporated in the national communications should cover national circumstances, greenhouse gas inventory information, policies and measures, projections and the total effect of policies and measures, vulnerability assessment, climate change impacts, adaptation measures, financial resources, transfer of technology, research and systematic observation, education, training and public awareness.

In this context, virtually all Annex I Parties submitted all four national communications that they have been required to submit to date,⁶⁸ except the following:

Table 7

| Annex I Party | National Communication Not Submitted |
|----------------------|---|
| Belarus | 1 st and 2 nd |
| Croatia | 2 nd and 3 rd |
| Lithuania | 2 nd |
| Luxembourg | 2 nd , 3 rd , and 4 th |
| Ukraine | 3 rd |

⁶⁶ Id., para. 5

⁶⁷ See http://unfccc.int/files/meetings/workshops/other_meetings/application/pdf/wp5.pdf

⁶⁸ The 5th national communications from Annex I Parties are due on 1 January 2010. The most recent national communications – the 4th national communications – were due on 1 January 2006, with most Annex I Parties submitting with an average delay of 3-5 months. The United Kingdom, on 12 June 2009, was the first Annex I Party to submit its fifth national communication.

III. Conclusion

The UNFCCC is a finely balanced policy regime that incorporates a set of obligations and commitments taking into account the common but differentiated responsibilities and respective capabilities of developed and developing countries in relation to climate change. It has been in force since 1994.

However, while the urgency of the climate change crisis is now acknowledged more than ever as a serious international public policy issue, the UNFCCC's provisions have not yet been fully nor adequately implemented, especially by developed countries that have both the greater responsibility and greater capacity for doing so.

In particular, there are failures of implementation in relation to developed countries' commitments take the lead pursuant to Art. 4.2(a) and (b) in mitigating their greenhouse gas emissions that would result in modifications of longer-term trends in such emissions and to provide financing and technology transfer to developing countries under Art. 4.3, 4.4, 4.5, 4.8 and 4.9.

Data Annex

Mitigation

Annex I Parties with Emission Levels Still Above 1990 Levels: 2003-2007

| | | |
|-----------|---------------|--------------------------|
| Australia | Ireland | Norway |
| Austria | Italy | Portugal |
| Belgium | Japan | Slovenia |
| Canada | Liechtenstein | Spain |
| Finland | Monaco | Turkey |
| Greece | Netherlands | United States of America |
| | New Zealand | |

**Annex I Parties that are Parties to the Kyoto Protocol with
Emission Levels Still Above their Kyoto Protocol Annex B Targets: 2003-2007**

| | | |
|--------------------|---------------|-------------|
| Australia | Greece | New Zealand |
| Austria | Ireland | Norway |
| Belgium | Italy | Portugal |
| Canada | Japan | Slovenia |
| Denmark | Liechtenstein | Spain |
| European Community | Monaco | Sweden |
| Finland | Netherlands | Switzerland |

**Annex I Parties:
Track Record in Meeting Mitigation Targets Under the UNFCCC
and the Kyoto Protocol**

| Annex I Party | KP Mitigation Target | 1990 or Base Year Emissions (in Million Tons of total GHGs) | Compliance with Targets | |
|-------------------------------|--|---|---|---|
| | | | GHG Emissions as Reported in 4 th National Communication (with Year of Emissions Data) | Percentage +/- from the 1990 or Base Year Emissions |
| 41. Australia | 8% <i>above</i> 1990 | 546.327 | 597.156 (2007) | 9.30% |
| 42. Austria | 8% below 1990 | 79.036 | 87.958 (2007) | 11.29% |
| 43. Belarus | 8% below 1990 | 127.361 | 74.306 (2004) | -41.64% |
| 44. Belgium | 8% below 1990 | 145.7 | 150.7 (2005) | 3.43% |
| 45. Bulgaria | 8% below base year 1989 | 138.377 | 69.167 (2003) | -50.02% |
| 46. Canada | 6% below 1990 | 599.000 | 758.000 (2004) | 26.54% |
| 47. Croatia | 5% below 1990 | 19.077 | 14.494 (2003) | -24.02% |
| 48. Czech Republic | 8% below 1990 | 194.21 | 148.20 (2006) | -23.69% |
| 49. Denmark | 8% below 1990 | 70.4 | 69.6 (2004) | -1.14% |
| 50. Estonia | 8% below 1990 | 43.5 | 21.4 (2003) | -50.80% |
| 51. European Community | 8% below 1990 | 5212 | 4925 (2003) | -5.51% |
| 52. Finland | 8% below 1990 | 43.5 | 86 (2003) | 97.70% |
| 53. France | 8% below 1990 | 568 | 557 (2003) | -1.94% |
| 54. Germany | 8% below 1990 | 1226.671 | 1015.691 (2004) | -17.20% |
| 55. Greece | 8% below 1990 | 109.470 | 137.643 (2003) | 25.74% |
| 56. Hungary | 6% below base year (average of 1985 to 1987) | 122.232 | 83.248 (2003) | -31.89% |
| 57. Iceland | 10% above 1990 | 3.282 | 3.083 (2003) | -6.00% |
| 58. Ireland | 8% below 1990 | 55.614 | 68.46 (2004) | 23.10% |

| Annex I Party | KP Mitigation Target | 1990 or Base Year Emissions (in Million Tons of total GHGs) | Compliance with Targets | |
|--------------------------|--|---|---|---|
| | | | GHG Emissions as Reported in 4 th National Communication (with Year of Emissions Data) | Percentage +/- from the 1990 or Base Year Emissions |
| 59. Italy | 8% below 1990 | 434.781 | 493.371 (2003) | 13.48% |
| 60. Japan | 6% below 1990 | 1,187 | 1,339 (2003) | 12.81% |
| 61. Latvia | 8% below 1990 | 18.654 | 7.427 (2003) | -60.19% |
| 62. Liechtenstein | 8% below 1990 | 25 | 26.3 (2003) | 5.20% |
| 63. Lithuania | 8% below 1990 | 50.928 | 17.223 (2003) | -66.18% |
| 64. Monaco | 8% below 1990 | 0.0964 | 0.1332 (2003) | 38.17% |
| 65. Netherlands | 8% below 1990 | 211.7 | 214.8 (2003) | 1.46% |
| 66. New Zealand | Remain at 1990 | 61.521 | 76.517 (2005) | 24.38% |
| 67. Norway | 1% <i>above</i> 1990 | 50.1 | 54.8 (2003) | 9.38% |
| 68. Poland | 6% below base year 1988 | 568.829 | 388.473 (2004) | -31.71% |
| 69. Portugal | 8% below 1990 | 60.125 | 84.661 (2004) | 40.81% |
| 70. Romania | 8% below base year 1989 | 262.282 | 154.627 (2004) | -41.05% |
| 71. Russian Federation | Remain at 1990 | 3049.7 | 1876.46 (2003) | -38.47% |
| 72. Slovakia | 8% below 1990 | 72.1 | 51.6 (2003) | -28.43% |
| 73. Slovenia | 8% below 1990 | 18.566 | 19.803 (2003) | 6.66% |
| 74. Spain | 8% below 1990 | 283.857 | 402.287 (2003) | 41.72% |
| 75. Sweden | 8% below 1990 | 72.210 | 70.554 (2003) | -2.29% |
| 76. Switzerland | 8% below 1990 | 52.446 | 52.252 (2003) | -0.37% |
| 77. Turkey | No Kyoto Protocol target but subject to UNFCCC Art. 4.2(a) and (b) | 170.1 | 296.6 (2004) | 74.37% |

| Annex I Party | KP Mitigation Target | 1990 or Base Year Emissions (in Million Tons of total GHGs) | Compliance with Targets | |
|--------------------------|-----------------------|---|---|---|
| | | | GHG Emissions as Reported in 4 th National Communication (with Year of Emissions Data) | Percentage +/- from the 1990 or Base Year Emissions |
| | target of 1990 levels | | | |
| 78. Ukraine | Remain at 1990 | 925.4 | 413.4 (2004) | -55.33% |
| 79. United Kingdom | 8% below 1990 | 776.1 | 665.3 (2004) | -14.28% |
| 80. United States | 7% below 1990 | 6109 | 7074.4 (2004) | 15.80% |

NOTE 1: Annex I Parties listed in **bold** are those that, as of the date for their GHG emissions data indicated in their 4th national communications have not yet met their Kyoto Protocol Annex B mitigation targets.

NOTE 2: All Annex I Parties are specifically committed under Art. 4.2(a) and (b) to, individually and jointly, return their GHG emissions to their 1990 levels.

NOTE 3: The United States is an Annex I Party that is not a Party to the Kyoto Protocol but is listed in Annex B of the Kyoto Protocol. Turkey is an Annex I Party but, while having ratified the Kyoto Protocol, does not have any mitigation targets listed in Annex B of the Kyoto Protocol. Belarus was included in Annex B to the Kyoto Protocol with a quantified emission reduction commitment of 8 percent below 1990 levels through an amendment to Annex B (decision 10/CMP.2). As at 18 September 2008, this amendment had not yet entered into force.

NOTE 4: The differing base years for Bulgaria, Hungary, Poland and Romania were approved by the COP/MOP decision 9/CP.2, para. 5

NOTE 5: Sources for the GHG emissions data in columns 3 and 4 above are from the 4th national communications and the Kyoto Protocol progress reports submitted by Annex I Parties in 2007. These can be downloaded from http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/3625.php. The calculations in the last column are South Centre calculations.

Financing
Climate Change-Related Financing from Annex II Parties: 1997-2000
(in millions of US \$)

| COUNTRY | TOTAL | YEARS | GEF | UNFCCC | OTHER MULTILATERAL | BILATERAL | |
|-----------------------|------------------|---|-----------------|-------------|-----------------------|------------------|-----------------|
| | | | | | | MITIGATION | ADAPTATION |
| Australia | 792.57 | 1997-2000 | 15.2 | 0.59 | 693.1 | 77.34 | 6.34 |
| Austria | 6,453.01 | 1997-2000 | 10.2 | 0.0 | 6,428.7 | 14.11 | 0.0 |
| Belgium | 59.7 | For GEF: 1995-1999 to 1999-2002 | 59.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| Canada | 1,766.8 | For GEF: 1994-1998 to 1998-2002 For UNFCCC and Multilateral: 1996-1997 to 1998-1999 | 158.5 | 0.1 | 852.4 | 664 | 91.8 |
| European Community | 3,778.8 | 1997-2000 | 0.0 | 0.6 | 690.5 | 3,087.7 | 0.0 |
| Finland | 666.09 | 1997-2000 | 18.3 | 0.0 | 574.1 | 51.8 | 21.89 |
| France | 2,300.8 | For GEF: 1995-1998 to 2000 | 287 | 0.0 | 1,948.3 | 65.5 | 0.0 |
| Germany | 1,171.3 | 1997-2000 | 144.3 | 0.0 | 0.0 | 930.7 | 96.3 |
| Greece | 93.08 | 1997-2000 | 4.88 | 0.0 | 88.2 | 0.0 | 0.0 |
| Italy | 1,018.37 | 1997-2000 | 20.9 | 1.9 | 966.3 | 14.06 | 15.27 |
| Japan | 7,549.27 | 1997-2000 | 354.4 | 0.47 | 1,176.9 | 4,472 | 1,545.5 |
| Netherlands | 345 | 1997-2000 | 33.5 | 0.6 | 248.2 | 62.7 | 0.0 |
| New Zealand | 72.28 | 1997-2000 | 2.8 | 0.01 | 47.26 | 14.54 | 7.67 |
| Norway | 864.33 | 1997-2000 | 30 | 0.13 | 715.7 | 117.4 | 1.1 |
| Spain | 450.41 | 1997-2000 | 27.4 | 0.0 | 388.8 | 29.91 | 4.3 |
| Sweden | 1,831 | For GEF: 1998 to 2001 | 53.1 | 0.5 | 1380.4 | 198.3 | 198.7 |
| Switzerland | 707.21 | 1997-2000 | 26.3 | 0.0 | 664.8 | 16.11 | 0.0 |
| United Kingdom | 1,289.68 | For GEF: 1997-1998 to 2000 | 48.4 | 2.0 | 422.88 | 816.4 | 0.0 |
| United States | 12,557.54 | 1997-2000 | 285.8 | 15.2 | 4,812.5 | 2,420.19 | 5,023.85 |
| Total | 43,767.24 | | 1,580.68 | 22.1 | 22,099.04 | 13,052.76 | 7,012.72 |

Source: South Centre calculations using data from UNFCCC, Compilation and Synthesis Report on Third National Communications – Addendum (2003), at <http://unfccc.int/resource/docs/2003/sbi/07a01.pdf>

Climate Change-Related Financing from Annex II Parties: 2001-2004
(in millions of US \$)

| COUNTRY | TOTAL | YEARS | GEF | UNFCCC | OTHER MULTILATERAL | BILATERAL | |
|-----------------------|-------------------|-----------------------|----------------|---------------|-----------------------|------------------|--------------|
| | | | | | | MITIGATION | ADAPTATION |
| Australia | 774.1 | 2001-2004 | 31.5 | 1.2 | 657.1 | 53.5 | 30.8 |
| Austria | 506.6 | 2001-2004 | 27.1 | 0.4 | 456.3 | 21.1 | 1.7 |
| Belgium | 90.1 | For GEF: 2003-2006 | 41.8 | 0.6 | 17 | 10.3 | 20.4 |
| Canada | 1,550.9 | For GEF: 2003-2006 | 26 | 8.1 | 1,393.9 | 84.5 | 38.4 |
| Denmark | 942.2 | 2001-2004 | 34.9 | 0.3 | 718.6 | 170.4 | 18 |
| European Community | 2,271.1 | 2001-2004 | 0.0 | 0.0 | 275.8 | 1,995.3 | 0.0 |
| Finland | 457.9 | 2001-2004 | 21.5 | 0.5 | 435.9 | 0.0 | 0.0 |
| France | 3,316.2 | For GEF: 2003-2005 | 49 | 0.0 | 2,857.1 | 410.1 | 0.0 |
| Germany | 8,540.9 | 2001-2004 | 287.9 | 0.2 | 7,020.7 | 1,232.1 | 0.0 |
| Greece | 68.9 | 2001-2004 | 4.2 | 0.34 | 61.36 | 0.6 | 2.4 |
| Iceland | 11.2 | 2001-2004 | 0.0 | 0.0 | 11.2 | 0.0 | 0.0 |
| Italy | 4.6 | 2001-2004 | 0.0 | 0.0 | 0.0 | 4.6 | 0.0 |
| Ireland | 8.6 | 2001-2004 | 2.9 | 0.0 | 32 | 0.0 | 5.7 |
| Japan | 5,020.11 | 2001-2004 | 421.2 | 0.006 | 867.2 | 3,731.7 | 0.0 |
| Netherlands | 528.1 | 2001-2004 | 79.7 | 0.0 | 312.4 | 103.1 | 32.9 |
| Norway | 851.1 | 2001-2004 | 21.7 | 0.6 | 602.9 | 225.9 | 0.0 |
| New Zealand | 62.9 | 2001-2004 | 6.2 | 0.0 | 46.9 | 8 | 1.8 |
| Portugal | 687.5 | 2001-2004 | 5.1 | 0.34 | 682.06 | 0.0 | 0.0 |
| Spain | 2,986.3 | 2001-2004 | 16.2 | 1.8 | 2,932.2 | 33.7 | 2.4 |
| Sweden | 464.2 | 2001-2004 | 26.1 | 0.0 | 0.0 | 258.2 | 179.9 |
| Switzerland | 923.4 | 2001-2004 | 63.8 | 1.5 | 840.9 | 15.4 | 1.8 |
| United Kingdom | 227.9 | For GEF: 2003-2004 | 54 | 0.4 | 163.9 | 0.0 | 9.6 |
| United States | 282,538.4 | 2001-2004 | 493.6 | 0.0 | 5,344.3 | 276,684.2 | 16.3 |
| Total | 312,833.21 | | 1,714.4 | 16.286 | 25,729.72 | 285,042.7 | 362.1 |

Source: South Centre calculations using data from UNFCCC, Compilation and Synthesis Report on Fourth National Communications – Annex (2007), FCCC/SBI/2007/INF.6/Add.2, at <http://unfccc.int/resource/docs/2007/sbi/eng/inf06a02.pdf>

Party-by-Party Annex II Climate Change-Related Financing: 2000-2004
Based on Fourth National Communications

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|------------------|---|------------------------|-----------------|----------------|---|--|---|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| Australia | US \$770,151,771.36 | 2000-2001 to 2003-2004 | US \$31,393,615 | US \$1,217,939 | US \$651,861,466.36 | US \$54,839,876 | US \$30,838,875 |
| | | | | | Recipients: 1. World Bank Group 2. International Monetary Fund 3. Asian Development Bank 4. European Bank for Construction and Development 5. UNDP 6. UNEP 7. International Fund for Agricultural Development 8. Intergovernmental Panel on Climate Change 9. South Pacific Regional Environment Programme 10. South Pacific Applied Geoscience Commission | Recipients: 1. Papua New Guinea 2. Regional – South Pacific 3. Solomon Islands 4. Tonga 5. Vanuatu 6. Burma 7. China 8. India 9. Indonesia 10. Laos 11. Mekong Basin Sub-region 12. Nepal 13. Pakistan 14. Regional – South East Asia 15. Sri Lanka 16. Thailand 17. Vietnam | Recipients: 1. Regional – South Pacific 2. Maldives 3. Papua New Guinea 4. Tonga 5. Vanuatu 6. China 7. Vietnam 8. East Timor 9. Malaysia |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|---|----------------|---------------|--------------|--|---|---|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 18. Mozambique 19. Tanzania 20. Zimbabwe 21. Samoa 22. Tuvalu 23. Cambodia 24. Philippines 25. Mongolia 26. Malaysia 27. Haiti 28. East Timor 29. South Africa 30. Mexico 31. Cook Islands 32. Kenya 33. Guatemala | |
| Austria | 440.7722 M euros and US \$22.36 M | 2001-2004 | 25.23 M euros | 0.39 M euros | 415.1522 M euros Recipients: 1. World Bank 2. International Development Association 3. Consultative Group for International Agricultural Research 4. African Development Bank 5. European Bank for Reconstruction and Development | US \$20.82 M Recipients: 1. South-Eastern Europe 2. Bhutan 3. Nicaragua 4. Ethiopia 5. Cap Verde 6. Mozambique 7. Slovenia 8. Slovakia 9. Brazil | US \$1.54 M Recipients: 1. Romania 2. South and Central Asia 3. Bhutan 4. Costa Rica 5. Burkina Faso 6. Cap Verde |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|---|----------------|-----------|--------|--|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | 6. Inter-American Development Bank 7. Inter-American Investment Corporation 8. Fund for Special Operations 9. International Fund for Agricultural Development 10. Common Fund for Commodities 11. European Development Fund 12. UNDP Core Budget 13. UNEP Core Budget 14. UNEP Specific Programs 15. UNITAR 16. UNIDO 17. WMO 18. IUCN 19. UNIDO Cleaner Production Centers 20. UNIDO Investment and Technology Programme in Ethiopia and Tanzania | 10. Burkina Faso 11. Colombia 12. Romania 13. South and Central Asia 14. Pakistan 15. Albania 16. Costa Rica 17. Uganda 18. FYR of Macedonia 19. El Salvador 20. Czech Republic 21. Cuba 22. Others | |
| Belarus | <i>Transition to Market Economy. Nothing on financial assistance in</i> | | | | | | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|--|--|-----------------|-------------|--|---|----------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | <i>NC4.</i> | | | | | | |
| Belgium | US \$55,190,000 and 532,992 K euros (inclusive of bilateral, indirect, regional and multi) | For GEF: 1999-2004 For Multilateral Orgs and Programmes, and Bilateral and Regional Development Assistance: 2003-2004 | US \$55,190,000 | 485 K euros | 438,835 K euros Recipients: 1. World Bank 2. European Development Fund 3. European Investment Bank 4. Montreal Protocol Multilateral Fund 5. Special Programme for Afirca 6. UNCCD 7. UNCBD 8. UNEP 9. FAO 10. CGIAR 11. UNESCO | 29,469 K euros Does not indicate all recipients and which in particular are given funds for mitigation and/or adaptation. Recipients: 1. Central Africa 2. Guatemala 3. Senegal 4. South Africa 5. Haiti Also indicated: <i>Bilateral:</i> 21,906 K euros <i>Indirect:</i> 7,833 K euros <i>Regional:</i> 2,141 K euros <i>Multi:</i> 14,956 K | 17,367 K euros |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-----------------|--|--|--|---|--|---|----------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | euros | |
| Bulgaria | <i>Transition to Market Economy. Nothing on financial assistance in NC4.</i> | | | | | | |
| Canada | CAN \$2,338,356,680 and US \$0.52 M and 1.11 M CHF | For GEF: 1998-2002 to 2002-2006 For Multilateral Orgs and Programmes, and Bilateral and Regional Development Assistance: 2000-2001 to 2003-2004 | CAN \$281.03 M 1998-2002: CAN \$122.09 M 2002-2006: CAN \$158.94 M | CAN \$12.09 M plus 1.11 M CHF (IPCC) | CAN \$2,045.06 M plus US \$0.52 M Recipients: 1. World Bank 2. International Monetary Fund 3. African Development Bank 4. Asian Development Bank 5. European Bank for Reconstruction and Development 6. Caribbean Development Bank 7. Inter-American Development Bank 8. UNDP 9. UNEP 10. WMO | CAN \$121,797 K Recipients: 1. Latin American and Caribbean Region 2. Ukraine 3. India Does not indicate all recipients and which in particular are given funds for mitigation and/or adaptation. | CAN \$54,883 K |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-----------------------|--|----------------|-------------|-----------|--|--|---|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | 11. Inter-American Institute for Global Change Research (USD) | | |
| Croatia | <i>Transition to Market Economy. Nothing on financial assistance in NC4.</i> | | | | | | |
| Czech Republic | <i>Transition to Market Economy. Nothing on financial assistance in NC4.</i> | | | | | | |
| Denmark | DKK 7,716.6 M | 2001-2004 | DKK 243.9 M | DKK 1.4 M | DKK 5,107.9 M Recipients: 1. World Bank 2. International Finance Corporation 3. African Development Bank 4. Asian Development Bank 5. European Bank for Reconstruction and Development 6. Inter-American | DKK 1,782.7 M Recipients: 1. Benin 2. Bhutan 3. Bolivia 4. Burkina Faso 5. Egypt 6. Malaysia 7. Nepal 8. Nicaragua 9. Niger | DKK 580.7 M Recipients: 1. Bolivia 2. Cambodia 3. Egypt 4. Lao PDR 5. Malaysia 6. Nicaragua 7. South Africa 8. Vietnam 9. Botswana |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|------------------------------------|---|---|--|--|---|--|---|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | Development Bank 7. UNDP 8. UNEP 9. UNEP/Riso 10. UNEP/DHI 11. IUCN 12. IIED 13. WWF 14. IISD | 10. South Africa 11. Thailand 12. Vietnam 13. Zambia 14. Cambodia 15. Ghana 16. Honduras 17. India 18. China 19. Mozambique 20. Namibia 21. Peru 22. Uganda 23. Botswana 24. Philippines 25. Tanzania | 10. Mozambique 11. Thailand 12. Zambia 13. Burkina Faso 14. China 15. Namibia 16. Nepal |
| European Economic Community | (not including ODA under GEF column) 570.2 M euros | For Multilateral Institutions and Programmes : 2001-2003 For Bilateral and Regional Financial Contributions: 2001- | <i>No GEF indicated in NC 4.</i> Official Development Aid (2001-2003): 2,901.16 M euros | <i>No UNFCCC contribution indicated in NC 4.</i> | 259.1 M euros Recipients: 1. World Bank 2. UNDP 3. UNEP 4. UNITAR 5. WWF | 311.1 M euros Specific amounts for mitigation and adaptation not indicated. Recipients: 1. Argentina 2. Africa 3. China 4. Ecuador 5. India | Recipients: 1. Africa 2. Latin America 3. Asia 4. Pacific 5. Ukraine 6. Belarus 7. Central Asia 8. NIS 9. India 10. China 11. Ecuador |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|---|---|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | 2004 | | | | 6. Indonesia 7. Madagascar 8. Nicaragua 9. Peru 10. Armenia 11. Brazil 12. Cameroon 13. Colombia 14. Ecuador 15. Ethiopia 16. Gabon 17. Honduras 18. Guatemala 19. Russia 20. Balkans 21. Kenya 22. Uganda 23. Tanzania 24. Maldives 25. Moldova 26. Thailand 27. Malaysia 28. Sri Lanka 29. Vietnam | 12. Honduras 13. Peru 14. Russia 15. Uruguay 16. Argentina 17. Belize 18. Brazil 19. Cameroon 20. Chile 21. Colombia 22. Costa Rica 23. Ethiopia 24. Indonesia 25. Mexico 26. Caribbean 27. Pakistan 28. Sub-Saharan Africa 29. Tanzania 30. Philippines 31. Balkans 32. Bolivia 33. Croatia 34. Sri Lanka 35. Zambia 36. Afghanistan 37. Malaysia 38. Vietnam 39. Cambodia |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|--|---|--------------|-------------|--|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| Estonia | <i>Transition to Market Economy. Nothing on financial assistance in NC4.</i> | | | | | | |
| Finland | 571.4 M euros | For GEF: 2002-2004 For Multilateral Orgs and Programmes , and Bilateral and Regional Development Assistance: 2000-2003 | 18.8 M euros | 0.5 M euros | 535.7 M euros Recipients: 1. World Bank/IDA 2. African Development Fund and Bank 3. Asian Development Fund and Bank 4. Inter-American Development Bank 5. UNDP 6. UNEP 7. European Development Fund 8. European Community 9. Nordic Development Fund 10. Montreal Protocol 11. CGIAR 12. WIDER | 16.4M euros Does not indicate all recipients and which in particular are given funds for mitigation and/or adaptation. Recipients: 1. Africa 2. Malawi 3. Mozambique 4. Namibia 5. Tanzania 6. Zambia 7. Guatemala 8. Honduras 9. Nicaragua 10. Vietnam 11. Laos 12. Bolivia | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|---|--|--|-----------------------|---|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 13. Senegal 14. Afghanistan 15. Belize 16. Costa Rica 17. El Salvador 18. Guatemala 19. Panama 20. China | |
| France* | US \$17 M and 382,088 euros | For GEF: 2005-2006 For Bilateral and Regional Development Assistance: 2001-2004 | US \$17 M (“Fonds pour L’Environnement Mondial”) | <i>Not indicated.</i> | <i>Not indicated.</i> | 382,088 K euros Does not indicate which recipients in particular are given for mitigation and/or adaptation. Recipients: Afrique du Sud Chine Asie Maroc Global Vietnam Afghanistan Laos Mexique Brésil Uruguay/Argentine Salvador | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|---|--|---|---|--|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | Pologne Tunisie Philippines | |
| Germany | | For GEF: Third Replenishment For Multilateral Orgs and Programmes, and Bilateral and Regional Development Assistance: 2000-2003 | Third Replenishment of GEF (up to 2006): 283.36 M euros | “New and Additional Funds Within the Scope of UNFCCC Financing Mechanism” : (2001-2004) 196,581,822 euros Contribution to UNFCCC itself not indicated. | Inputs of German government to multilateral facilities within the framework of ODA and EU: 9,457.9 M euros Recipients: 1. World Bank 2. European Investment Bank 3. Regional Development Banks 4. UNDP 5. “etc.” “At present it is not, however, possible to put a figure on the contributions made by the international organizations which relate to the goals of the Framework Convention on Climate Change.” | 31,092,407 mlo euros Recipients: 1. Egypt 2. Albania 3. Algeria 4. Armenia 5. Latin America 6. Ethiopia 7. Bangladesh 8. Benin 9. Bolivia 10. Bosnia-Herzegovina 11. Brazil 12. Chile 13. China 14. Cote D’Ivoire 15. Ecuador 16. Gambia 17. Georgia 18. Guinea 19. Honduras 20. India 21. Indonesia | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|---|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 22. Jamaica 23. Yemen 24. Jordan 25. Cambodia 26. Cameroon 27. Congo 28. Madagascar 29. Malaysia 30. Morocco 31. Mauritania 32. Moldau 33. Mongolia 34. Mozambique 35. Namibia 36. Nepal 37. Nicaragua 38. Niger 39. Paraguay 40. Peru 41. Rwanda 42. Zambia 43. Senegal 44. Zimbabwe 45. Tanzania 46. Turkey 47. Vietnam 48. Argentina 49. Azerbaijan 50. Bulgaria | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|---|--|-----------------|--------------|--|--|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 51. Burkina Faso 52. Dominican Republic 53. Ghana 54. Kenya 55. Kap Verde 56. El Salvador | |
| Greece | 4,051,460,600 euros and US \$336.1 K | For GEF and Multilateral Orgs and Programmes : 2001-2004 For Bilateral and Regional Development Assistance: 2001-2003 | 3,988.8 M euros | US \$336.1 K | 59,676.5 K euros Recipients: 1. World Bank 2. OECD 3. European Bank for Reconstruction and Development 4. Un Industrial Development Organization 5. UNDP 6. Black Sea Trade and Development Bank | 621.3 K euros Recipients: 1. Albania 2. Iran 3. Serbia-Mont. 4. Turkey 5. Tunisia | 2,362.8 K euros Recipients: 1. Egypt 2. Azerbaijan 3. Albania 4. Armenia 5. Bosnia-Herzegovina 6. Georgia 7. Jordan 8. Kenya 9. Croatia 10. Lebanon 11. Palestine 12. FYROM 13. Serbia-Mont. 14. Syria 15. Turkey |
| Hungary | <i>Transition to Market</i> | | | | | | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | | |
|----------------|---|---------------------|--|--|---|---|------------|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | | |
| | | | | | | Mitigation | Adaptation | |
| | <i>Economy. Nothing on financial assistance in NC4.</i> | | | | | | | |
| Iceland | US \$46,328 K | 2000, 2002 and 2004 | <i>No GEF contributions indicated.</i> | <i>No contributions to UNFCCC indicated.</i> | US \$19,172 K Recipients: 1. World Bank Group 2. FAO 3. UNDP 4. UNICEF 5. UNIFEM 6. UNRWA 7. UNESCO 8. UNFPA 9. UNHCR 10. WFP 11. UNV 12. WHO 13. ILO 14. Nordic Development Fund 15. HIPC Trust Fund 16. IMF 17. Doha Development Agenda Global Trust Fund 18. Global Fund to Fight Aids, Tuberculosis and Malaria 19. IFAD | US \$27,156 K Does not indicate all recipients and which in particular are given funds for mitigation and/or adaptation. Recipients: 1. Malawi 2. Mozambique 3. Namibia 4. Uganda 5. Kosovo 6. Sri Lanka 7. Afghanistan 8. Bosnia Herzegovina 9. Iraq 10. "Others" | | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|---|----------------|------------|---|--|--|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | 20. UNU Geothermal Training Programme 21. UNU Fisheries Training Programme 22. Refugee Assistance 23. ABC Children's Aid 24. International Red Cross 25. Save the Children 26. Icelandic Red Cross 27. Icelandic Church Aid 28. Emergency Assistance 29. Administration 30. Nordic-Baltic Coordination, World Bank | | |
| Ireland | US \$98,933,684 | 2003-2005 | US \$3.9 M | US \$2.9 M Breakdown: LDCF: US\$2M SCCF: US\$0.55 M Trust Fund for Participation: US\$1.25 M | US \$78.09 M Recipients: 1. World Bank 2. UNDP 3. UNEP 4. LEG 5. LDCF Workshop 6. UNITAR 7. REEEP 8. CGIAR | US \$583,684 Recipients: 1. Africa 2. Asia | US \$13,460,000 Recipients: 1. Tanzania 2. Ethiopia (However, amount could be 9,680,000 because of typo in Ireland's NC 4.) |
| Italy | US | 2001-2004 | 56,293,802 | US \$4.72 M | US \$1,055.03 M | 101,302.8 K euros | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|--|--|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | \$1,060,020,000 and 161,296,602 euros | | euros | | and M euros Recipients: <ol style="list-style-type: none"> 1. World Bank (IBRD) 2. IDA 3. International Finance Corporation 4. African Development Bank 5. African Development Fund 6. Asian Development Bank 7. Asian Development Fund 8. European Bank for Reconstruction and Development 9. IFAD 10. Inter-American Development Bank 11. Other Regional Bank and Special Funds 12. UNDP 13. UNEP 14. FAO 15. CGIAR 16. International Union for the Conservation of Nature 17. UNCCD | Does not indicate all recipients and which in particular are given funds for mitigation and/or adaptation. Recipients: <ol style="list-style-type: none"> 1. Albania 2. Algeria 3. Angola 4. Argentina 5. Brazil 6. Bulgaria 7. Ciad 8. China 9. Costa Rica 10. Croatia 11. Cuba 12. Egypt 13. Ethiopia 14. Honduras 15. India 16. Iraq 17. Israel 18. Jordan 19. Kenya 20. Libya | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|--------------|---|--|---|--------------|---|--|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 21. Morocco 22. Mozambique 23. Niger 24. Palestinian Territory 25. Peru 26. Rwanda 27. Serbia 28. Slovenia 29. Sudan 30. Tunisia 31. Uganda 32. Vietnam 33. Zimbabwe | |
| Japan | 1,508.1 (in units of 100 M Yen) and US \$6,114,789,955 | For GEF and Multilateral Orgs and Programmes : 2001-2004 For Bilateral and Regional Development Assistance: 2000-2003 | 485 (in units of 100 M Yen) “promissory notes” | US \$740,955 | 1,023.1 (in units of 100 M Yen) Recipients: 1. World Bank 2. International Finance Corporation 3. African Development Bank 4. Asian Development Bank 5. European Bank for Reconstruction and Development 6. Inter-American Development Bank 7. UNDP 8. UNEP | US \$6,114,049,000 (in loan aid, general grants and JICA-based Technical Cooperation) Does not indicate all recipients and which in particular are given funds for mitigation and/or adaptation. Recipients: | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------------|---|----------------|-----------------------|--|---|---|------------------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | 9. International Tropical Timber Organization | 1. China 2. Indonesia 3. Vietnam 4. Thailand 5. Guatemala 6. Azerbaijan 7. Turkey 8. Philippines 9. Mozambique 10. Chile 11. Maldives 12. Mongolia 13. Tunisia 14. Malaysia 15. Brazil 16. Syria 17. Laos 18. India 19. Myanmar 20. Burkina Faso 21. Egypt 22. Sri Lanka 23. Iran 24. Cambodia | |
| Liechtenstein | 206,700 CHF | 2004 | <i>Not indicated.</i> | 1,300 CHF (General Budget Contribution) | 205,400 CHF Recipients: 1. Annual Contribution to Multilateral Fund of | <i>Not indicated.</i> | <i>None indicated.</i> |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|------------------|--|----------------|-----------|--------|--|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | |) | Montreal Protocol 2. IUCN (World Conservation Union) Contribution to General Budget 3. UNEP Environment Fund (General Budget) 4. Basel Convention (General Budget) 5. Regional Environmental Center for the Caucasus 6. Central Asian Mountain Partnership/SDC 7. WWF (for Borjomi Kharagauli National Park) | | |
| Latvia | <i>Transition to Market Economy. Nothing on financial assistance in NC4.</i> | | | | | | |
| Lithuania | <i>Transition to Market Economy. Nothing on financial assistance in NC4.</i> | | | | | | |
| Luxembou | <i>No NC 4.</i> | | | | | | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|--------------------|---|----------------|---------------|----------------------------------|--|--|---------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| rg | | | | | | | |
| Monaco* | <i>No figures indicated in NC 4.</i> | | | | Recipients: 1. UNESCO 2. OMS 3. ONUSIDA 4. UNICEF 5. PNUD 6. HCR | Recipients: 1. Morocco 2. Tunisia 3. Senegal 4. Nigél 5. Burkina Faso 6. Madagascar | |
| Netherlands | 1,816.766 M euros | 2001-2004 | 73.89 M euros | 0.10 M euros (under LDCF) | 1,522.596 M euros Recipients: 1. UNEP 2. Desertification Treaty 3. IFAD 4. World Bank Partnership 5. UNDP 6. European Development Fund 7. International Development Association and Regional Development Bank and Funds 8. FAO Partnership 9. UNICEF 10. Asian Development Bank 11. African Development Bank 12. Bilateral Environmental Programmes 13. Miliev ProgrammePrivate | 188.94 M euros Recipients: 1. Bangladesh 2. Burkina Faso 3. Bolivia 4. Egypt 5. Eritrea 6. Ethiopia 7. Ghana 8. India 9. Indonesia 10. Macedonia 11. Mali 12. Mozambique 13. Nicaragua 14. Palestinian Authority 15. Sri Lanka 16. South Africa 17. Surinam | 31.24 M euros |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|--------------------|---|----------------|---------------------|-----------------------|--|--|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | Sector 14. MFO and SNV including PSO 15. Education and Research 16. "Other" | 18. Tanzania 19. Uganda 20. Vietnam 21. Yemen 22. Zambia 23. Brazil 24. Cape Verde 25. China 26. Colombia 27. Ecuador 28. Guatemala 29. Mongolia 30. Nepal 31. Pakistan 32. Peru 33. Philippines 34. Senegal (Exact amounts given to particular countries, and WON such funds were for mitigation and/or adaptation not indicated.) | |
| New Zealand | 119.836 M NZ dollars | 2001-2004 | 11.028 M NZ dollars | <i>Not indicated.</i> | 87.238 M NZ dollars Recipients: 1. World Bank Consultant | 12.73 M NZ dollars Recipients: 1. Tokelau | 8.84M NZ dollars Recipients: |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|--------|---|----------------|---------------------------------|----------------------------------|---|--|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | Fund 2. International Finance Corporation 3. Asian Development Bank 4. UNDP 5. UNEP 6. Montreal Protocol 7. South Pacific Regional Environment Programme 8. South Pacific Applied Geoscience Commission 9. Consultative Group on International Agricultural Research 10. Commonwealth Science Council 11. International Fund for Agricultural Development | 2. Philippines 3. Solomon Islands 4. Niue 5. Vietnam 6. Tonga 7. Sri Lanka 8. Cook Islands 9. China 10. Cambodia 11. Pakistan 12. Vanuatu 13. Nepal 14. South Asia Region 15. Pacific Region 16. Cambodia 17. Global (Geothermal Training) 18. Samoa 19. Africa Region 20. Cook Islands 21. Fiji 22. Indonesia 23. Kiribati | 1. Philippines 2. Pacific Region 3. South Asia Region 4. Vanuatu 5. Cambodia 6. Tonga 7. Samoa 8. Africa Region 9. Solomon Islands 10. Nepal 11. Uruguay 12. Sri Lanka 13. Fiji 14. Papua New Guinea 15. Vietnam |
| Norway | US \$770.45 M | 2001-2003 | US \$21.56 M <i>Official</i> | US \$0.57 M (supplementary fund) | US \$569.47 M Recipients: | US \$178.85 M Does not indicate | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|---------------|---|----------------|--|---|---|--|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | <p><i>Development Assistance:</i> (2001-2004) US \$7,299 M</p> | <p><i>Non-ODA Contributions to Other Climate Change Funds:</i> (2001-2003) Financing of Climate Change Activities: US \$2.69 M Nordic Environment Finance Corporation: US \$5.32 M Prototype Carbon Fund: US \$1.03 M</p> | <ol style="list-style-type: none"> 1. World Bank/IBRD 2. African Development Bank 3. Asian Development Bank 4. Inter-American Development Bank 5. UNDP 6. UNEP 7. African Development Fund 8. Nordic Development Fund | <p>all recipients and which in particular are given funds for mitigation and/or adaptation.</p> <p>Recipients:</p> <ol style="list-style-type: none"> 1. Romania 2. Burkina Faso 3. Mexico 4. Poland 5. Slovak Republic 6. China 7. Costa Rica | |
| Poland | | 2004 | “Poland as a Party not listed in Annex II to | | | “...in 2004 Poland provided 137.3 million USD for | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-----------------|---|----------------|--|-------------------------------|---|--|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | the Convention does not have a duty to fulfil the provisions, under Articles 4.3, 4.4 and 4.5 of the Climate Convention. However, by understanding the need for supporting sustainable development in the developing countries and in those with economies in transition, provides such assistance, to the extent possible.” | | | supporting the development of the developing countries and those in transition (mainly the developing countries). Additionally, over 20 million USD was submitted mainly to countries in transition. Activities related to bi- and multilateral humanitarian assistance were also undertaken amounting to app. 1 million USD , which was divided among Iran, North Korea, Sudan (Darfur) and the region of South and East Asia.” | |
| Portugal | US \$688.95 M and | 2001-2004 | US \$6.08 M | US \$0.23 M <i>Special</i> | US \$682.64 M Recipients: | 4,452,134 euros Does not indicate | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|----------------|---|----------------|-----------|--|---|--|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | 4,452,134 euros | | | <i>Climate Change Fund and Adaptation Fund for Kyoto Protocol and LDC Fund:</i> (2005) 1,070,000 euros | <ol style="list-style-type: none"> 1. World Bank 2. African Development Bank 3. Asian Development Bank 4. European Bank for Reconstruction and Development 5. Inter-American Development Bank 6. UNDP 7. UNEP 8. UNICEF 9. UNRWA 10. WFP 11. UNHCR 12. UNFPA 13. Other UN 14. European Development Fund 15. European Commission 16. European Investment Bank 17. Regional Banks 18. International Fund for Agriculture Development 19. Other Multilateral 20. EC for Part II of DAC | recipients and which in particular are funds given for mitigation and/or adaptation. | |
| Romania | <i>Transition to Market Economy. Nothing on</i> | | | | | | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | | |
|---------------------------|---|----------------|------------------|-------------------|--|--|--|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | | |
| | | | | | | Mitigation | Adaptation | |
| | <i>financial assistance in NC4.</i> | | | | | | | |
| Russian Federation | <i>Transition to Market Economy.</i> | | | | | | | |
| Spain* | 4,590,169,256.6 euros | 2001-2004 | 12,568,641 euros | 1,976,794.2 euros | 4,547,074,503.6 euros Recipients: 1. World Bank 2. Corporacion Financiera Internacional 3. Banco Africano de Desarrollo 4. Banco Asiatico de Desarrollo 5. Banco Europeo de Reconstruccion y Fomento 6. Programa de la Naciones Unidas para el Desarrollo 7. Programa de la Naciones Unidas para el Medio Ambiente 8. Fondo Europeo de Desarrollo 9. Presupuesto General de las Comunidades Europeas 10. Banco Centramericano de Integracion Economica | 26,538,029.1 euros Recipients: 1. Albania 1. Argelia 2. Bolivia 3. Burkina Faso 4. Cuba 5. Chile 6. China 7. Ecuador 8. Egypt 9. Ghana 10. Guinea Ecuatorial 11. Marruecos 12. Nicaragua 13. Peru 14. Congo, RDC 15. Philippines 16. Honduras 17. Mauritania 18. Sahara | 2,011,288.7 euros Recipients: 1. Albania 2. Argelia 3. Bosnia Herzegovina 4. Cuba 5. Egypt 6. Lebanon 7. Marruecos 8. Mauritania 9. Palestine 10. Serbia Y Montenegro 11. Extremo Oriente 12. Guatemala 13. Nicaragua 14. Tunes 15. Brazil 16. China 17. Colombia | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|---------------|---|----------------|-------------|----------|---|---|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | 11. Asociacion Internacional de Desarrollo 12. Banco Internacional de Reconstruccion y Fomento 13. Corporacion Andina de Fomento 14. Banco Centroaficano de Integracion Economica 15. Asociacion Internacional de Fomento 16. Fondo Africano de Desarrollo 17. Grupo de Accion Financiera Internacional | 18. Norte de Africa 19. Guinea Ecuatorial 20. Iberoamerica 21. Peru 22. Argentina 23. Haiti 24. Ecuador | 19. Tunez 20. Uruguay 21. Bosnia Herzegovina 22. Mali 23. Pakistan 24. Panama 25. Asia 26. Cameroon 27. Guatemala 28. Republica Dominicana 29. Tanzania 30. Africa Subsahariana 31. Norte de Africa 32. Angola 33. Senegal 34. Brazil 35. Guinea-Bissau 36. Haiti |
| Sweden | 27,825.74 SEK M | 2000-2003 | 241.7 SEK M | 10 SEK M | 20,843 SEK M Recipients: 1. World Bank 2. International Finance | 3,018.53 SEK M (583.75 SEK M credit) Recipients: | 2,112.51 SEK M (45 SEK M credit) Recipients: |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|--|---|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | Corporation 3. African Development Bank 4. African Development Fund 5. Asian Development Bank 6. Asian Development Fund 7. European Development Bank (bilateral aid to EBRD) 8. EBRD via European Union (EU's share) 9. Development Cooperation in EU Budget 10. European Development Fund 11. Inter-American Development Bank 12. UNDP 13. UNEP 14. CGIAR 15. International Union for the Conservation of Nature 16. International Science Programs 17. Asian Institute of Technology 18. World Maritime University 19. African Energy Policy Research 20. International Centre | 1. Mozambique 2. Tanzania 3. Vietnam 4. Zambia 5. Sri Lanka 6. Ethiopia 7. Laos 8. Russia 9. Poland 10. Zimbabwe 11. Palestine 12. Kosovo 13. Ghana 14. China 15. India 16. Thailand 17. Africa Regional 18. Asia Regional 19. Latin America Regional 20. Europe Regional 21. Global Programmes 22. Nepal 23. Uganda 24. Nicaragua 25. Serbia | 1. Mozambique 2. Tanzania 3. Vietnam 4. Nicaragua 5. Zambia 6. Sri Lanka 7. Ethiopia 8. Laos 9. Poland 10. Zimbabwe 11. China 12. India 13. Thailand 14. Africa Regional 15. Asia Regional 16. Latin America Regional 17. Europe Regional 18. Global Programmes 19. Bangladesh 20. Uganda 21. Ethiopia 22. Russia 23. Kosovo |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|--------------------|---|----------------|-----------|----------------------------------|---|--|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | Research Agroforest 21. World Resources Institute 22. Global International Water Assessment | 26. Ukraine 27. Jordan 28. Nepal 29. Lithuania 30. Honduras 31. Mongoliet 32. Bangladesh 33. Malawi 34. Latvia | 24. Palestine 25. Ghana 26. Ukraine 27. Jordan 28. Serbia 29. Nepal 30. Lithuania 31. Honduras <i>Others Apart from Mitigation and Adaptation:</i> 1,600 SEK M (281.05 SEK M credit) |
| Switzerland | 1,276,299,716 CHF | 2001-2004 | 82 M CHF | 2.4 M CHF (IPCC included) | 1,165.6 M CHF Recipients: 1. World Bank (NSS Programme) 2. International Bank for Reconstruction and Development 3. International Development Association 4. African Development Bank 5. African Development Fund 6. Asian Development Fund 7. European Bank for | 26,299,716 CHF Does not indicate which recipients in particular are given for mitigation and/or adaptation. Recipients: 1. Bolivia 2. Central America 3. Chile 4. China | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|---------------|---|---|--|--------|---|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | Reconstruction and Development 8. Inter-American Development Bank 9. UNDP 10. CGIAR 11. IFAD 12. IUCN 13. WMO Programmes 14. European Cooperation in the Field of Scientific and Technical Research 15. OECD Climate Change 16. UNIDO 17. UNEP Ozone Fund 18. UNEP 19. WB Climate Funds 20. UNITAR | 5. Cuba 6. Ecuador 7. Global 8. India 9. Indonesia 10. Mali 11. Maroc 12. Nepal 13. Nicaragua 14. Peru 15. Vietnam 16. West Africa | |
| Turkey | <i>No NC 4, only NC 1 has been submitted.</i> | “Turkey is not an Annex II country, and so, it is not directly obliged to provide any financial or technological assistance | “...Turkey has become eligible for GEF assistance after becoming party to the UNFCCC. ... as an Annex I country, contributed a total of | | | | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|--|---|--------|---|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | to developing countries, however it participates in many international projects which are co-financed by the Turkish government. The Turkish government co-finances several environmental projects, however, the exact amount other than the contribution of the Turkish government to the | \$23,326,400 to the GEF funding mechanism as annual fees. ... as a developing country Turkey has received \$33,134,000 funding in total, \$21,507,000 for national projects and \$11,627,000 for regional projects." | | | | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------------------------|--|---|--------------|---------------|--|--|--|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | related activities on climate change is not known.” | | | | | |
| Ukraine | <i>Transition to Market Economy. Nothing on financial assistance in NC4.</i> | | | | | | |
| United Kingdom | £130.065 M | For GEF and Multilateral Orgs and Programmes : 2002-2003 to 2004-2005 For Bilateral and Regional Development Assistance: 2001-2005 | £29.5 M | £0.3 M | £89.5 M Recipients: 1. African Development Bank 2. UNDP 3. UNEP 4. WMO “Details of other multilateral contributions on climate change are not available.” | £3.916 M Recipients: 1. China 2. East and West Africa 3. South Eastern Asia | £6.849 M Recipients: 1. Africa 2. Bangladesh 3. Global 4. South Eastern Asia |
| United States of | US \$252,576.664 | 2001-2004 | US \$493.6 M | US \$25.476 M | US \$5,112.748 M | US \$246,938.05 M | US \$6.79 M |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|---------|---|----------------|-----------|--------|---|--|---|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| America | M and 29,746.05 M ROK | | | | Recipients: 1. World Bank 2. Inter-American Investment Corporation 3. Inter-American Development Bank 4. Asian Development Fund 5. African Development Bank 6. African Development Fund 7. European Bank for Reconstruction and Development 8. International Fund for Agricultural Development 9. UNDP 10. UNEP 11. OAS Development Assistance Programs 12. World Food Program 13. UN Development Fund for Women 14. WTO 15. International Civil Aviation Organization 16. Montreal Protocol Multilateral Fund 17. International Conservation Programs 18. International Contributions | plus 29,746.05 M ROK Recipients: 1. Africa Regional 2. Angola 3. Benin 4. Botswana 5. Burkina Faso 6. Burundi 7. Cameroon 8. Cape Verde 9. Central American Rep. 10. Chad 11. Comoros 12. Congo 13. Cote D'Ivoire 14. Djibouti 15. Eritrea 16. Ethiopia 17. Gabon 18. Gambia 19. Ghana 20. Guinea 21. Guinea-Bissau 22. Kenya 23. Lesotho | Recipients: 1. Latin America/Caribbean 2. Kazakhstan 3. Europe/Eurasia 4. Asia/Near East |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|--|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | for Scientific, Educational and Cultural Activities 19. WMO 20. Center for Human Settlements | 24. Liberia 25. Madagascar 26. Malawi 27. Mali 28. Mauritania 29. Mauritius 30. Mozambique 31. Namibia 32. Niger 33. Nigeria 34. Rwanda 35. Senegal 36. Sierra Leone 37. Somalia 38. South Africa 39. Sudan 40. Swaziland 41. Tanzania 42. Uganda 43. West Africa 44. Zambia 45. Zimbabwe 46. Afghanistan 47. Algeria 48. Asia/Near East Regional 49. Bangladesh 50. Bhutan 51. Brunei | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|---|--|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 52. Burma 53. Cambodia 54. China 55. East Timor 56. Egypt 57. Hong Kong 58. India 59. Indonesia 60. Iraq 61. Jordan 62. Korea 63. Laos 64. Lebanon 65. Macao 66. Malaysia 67. Maldive Islands 68. Marshall Islands 69. Mongolia 70. Morocco 71. Nepal 72. Pakistan 73. Philippines 74. Reunion 75. Seychelles 76. Singapore 77. Sri Lanka 78. Thailand | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|---|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 79. Tunisia 80. Vietnam 81. Yemen 82. Albania 83. Armenia 84. Azerbaijan 85. Bosnia & Herzegovina 86. Bulgaria 87. Central Asia Regional 88. Croatia 89. Czech Republic 90. Europe & Eurasia Regional 91. Georgia 92. Hungary 93. Kazakhstan 94. Kosovo 95. Kyrgyzstan 96. Macedonia 97. Moldova 98. Montenegro 99. Poland 100. Romania 101. Russia 102. Serbia 103. Slovak | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|---|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | Rep. 104. Slovenia 105. Tajikistan 106. Turkmenistan 107. Ukraine 108. Uzbekistan 109. Yugoslavia 110. Anguilla 111. Antigua & Barbuda 112. Argentina 113. Aruba 114. Bahamas 115. Barbados 116. Belize 117. Bermuda 118. Bolivia 119. Brazil 120. British Virgin Islands 121. Caribbean Regional 122. Cayman Islands 123. Central America Regional 124. Chile | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|---|--|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 125. Colombia 126. Costa Rica 127. Dominica Islands 128. Dominican Republic 129. Ecuador 130. El Salvador 131. French Guiana 132. Grenada Islands 133. Guadeloupe 134. Guatemala 135. Guyana 136. Haiti 137. Honduras 138. Jamaica 139. Latin America Regional 140. Martinique 141. Mexico 142. Montserrat Islands 143. Nicaragua 144. Panama 145. Paraguay | |

| Party | Total Contribution in NC4 Claimed as Compliance With Art. 4.3 | Years Included | Recipient | | | | |
|-------|---|----------------|-----------|--------|---|---|------------|
| | | | GEF | UNFCCC | Multilateral Organizations and Programmes | Bilateral and Regional Development Assistance | |
| | | | | | | Mitigation | Adaptation |
| | | | | | | 146. Peru 147. Saint Kitts-Nevis 148. Saint Lucia Islands 149. Saint Pierre & Miquelon 150. Saint Vincent & Grenadines 151. Suriname 152. Trinidad & Tobago 153. Uruguay 154. Venezuela | |

Double-Counting ODA as Climate Financing

| Annex II Party | Bilateral Climate Financing for Mitigation and Adaptation as Part of ODA? | |
|--------------------|--|---|
| | YES (Implementing Agency) | NO (Implementing Agency) |
| Australia | Australian Agency for International Development (AusAID) | |
| Austria | Austrian Development Cooperation; Ministry of Agriculture, Forestry, Environment and Water; Federal States, Municipalities and NGOs | |
| Belgium | Directorate General for Development Cooperation under Federal Public Service Foreign Affairs, Foreign Trade and Development Cooperation | |
| Canada | Canadian International Development Agency (CIDA) | |
| Denmark | Danish International Development Assistance (Danida) | |
| European Community | European Development Fund; European Investment Bank (primary lending institution) | |
| Finland | Finland development cooperation system under Finland Ministry of Foreign Affairs | |
| France | L'Aide Publique Française au Développement; Le Fonds Français pour L'environnement Mondial; Direction Générale de la Coopération Internationale et du Développement | |
| Germany | Federal Ministry for Economic Cooperation and Development (BMZ) | |
| Greece | Greek ODA system | |
| Iceland | Icelandic International Development Agency; International Development Agency | |
| Italy | Interministerial Committee on Economic Planning (CIPE – Comitato Interministeriale per la Programmazione Economica); Directorate-General on Development Co-operation | Since 2002, in order to meet “new and additional financing” commitments under Art. 4.3, 4.4, and 4.5 and pursuant to COP decisions in FCCC/CP/2001/L.14, FCCC/CP/2001/L.15 and the Bonn Declaration of 2001, the Italian Ministry for the Environment, Land and Sea (IMELS), has been authorized by the law June 1, 2002, n° 120, to finance activities for 68 million euro/year in developing countries to substantively contribute to the implementation of the |

| | | |
|----------------|---|-----------------------------------|
| | | [UNFCCC] and the Kyoto Protocol.” |
| Ireland | Irish Aid | |
| Japan | Government of Japan’s ODA program | |
| Netherlands | Netherlands Development Cooperation Programme | |
| Norway | Nordic Environment Finance Corporation; Activities Implemented Jointly; Other bilateral funding of projects | |
| New Zealand | New Zealand Agency for International Development (NZAID) | |
| Portugal | Portuguese Development Support Institute | |
| Spain | Agencia Espanola de Cooperacion Internacional (AECI); Fondo de Ayuda al Desarrollo (FAD) | |
| Sweden | Swedish International Development Cooperation Agency (SIDA) | |
| Switzerland | Swiss Agency for Development and Cooperation (SDC) | |
| United Kingdom | Department for International Development (DFID) | |
| United States | U.S. Agency for International Development (USAID); U.S. Environmental Protection Agency; U.S. Department of Energy; U.S. Department of State; U.S. Department of Agriculture; National Oceanic and Atmospheric Administration; National Aeronautics and Space Administration; U.S. Department of Commerce | |

Adaptation

Annex II Parties Adaptation Actions and Adaptation Financing under Art. 4.4: 2001-2004

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|-----------|---|-----------------------------|---|-------------------|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| Australia | <ul style="list-style-type: none"> National Climate Change Adaptation Programme in 2004–05 | \$14.2 million | <ul style="list-style-type: none"> January 1991-December 2005-South Pacific Sea Level and Climate Monitoring Project March 2001-June 2004-China-Australia Datong Cleaner Environmental Project Bilateral and regional financial contributions related to the implementation of the UNFCCC for the financial year 2000-01 Bilateral and regional financial contributions related to the implementation of the UNFCCC for the financial year 2001-02 Bilateral and regional financial contributions related to the | Pacific Countries | US\$7 million |
| | <ul style="list-style-type: none"> Greenhouse Action in Regional Australia Programme | \$20.5 million | | China | US\$4.42 million |
| | <ul style="list-style-type: none"> Adaptation research in 2004–05 | \$880,000 | | Total | US\$1.64 million (rounded to the nearest 10,000) |
| | <ul style="list-style-type: none"> June 2004 develop a climate change action plan for the Great Barrier Reef | \$2 million over four years | | Total | US\$9.53 million (rounded to the nearest 10,000) |
| | <ul style="list-style-type: none"> Australian Water Fund | \$2 billion over five years | | Total | US\$9.7 million (rounded to the nearest 10,000) |
| | <ul style="list-style-type: none"> Managing Climate Variability Program | | | | |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|--|---------------------------------------|---|------------------------------------|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | implementation of the UNFCCC for the financial year 2002-03 <ul style="list-style-type: none"> Bilateral and regional financial contributions related to the implementation of the UNFCCC for the financial year 2003-04 Contributions to the Adaptation Fund Administrative Trust Fund as of May 15, 2009 Global Facility for Disaster Reduction and Recovery 2007-2010 Cumulative IDA Subscriptions and Contributions as of June 30, 2008 Least Developed Countries Fund, as of March 4, 2008 | Total | US\$9.97 million (rounded to the nearest 10,000) \$191,340.00 (LOAN) USD 5.308 million (GRANT) USD 2,645.63 million USD 6,600,750 [†] |
| Austria | <ul style="list-style-type: none"> Tourism-Snowmaking facilities Avalanche, Erosion and Torrent Control Measures | €176 million per year €122 million | <ul style="list-style-type: none"> 2004-climate change adaptation Spending for 2000-2004- | Western Africa Burkina Faso | ODA US\$ 8.5 million US\$0.75 million US\$0.70 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|---|---------------|---|---|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | <ul style="list-style-type: none"> Improvement of the protective forest function | €14.3 million | Particularly vulnerable developing countries <ul style="list-style-type: none"> Bilateral financial contributions related to the implementation of the Convention 2000 Bilateral financial contributions related to the implementation of the Convention 2001 Bilateral financial contributions related to the implementation of the Convention 2002 Bilateral financial contributions related to the implementation of the Convention 2003 Bilateral financial contributions related to the implementation of the Convention 2004 Cumulative IDA Subscriptions and Contributions as of June | Cape Verde Ethiopia Kenya Mozambique Nepal Palestine Senegal Total Total Total Total Total Total Total | US\$1.03 million US\$2.01 million US\$0.27 million US\$0.72 million US\$2.79 million US\$4.94 million US\$0.83 million US\$0.32 million US\$0.33 million US\$1.25 million US\$0.24 million USD 1,499.63 million USD 5 80,400† |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|----------|---|-------------------------------------|--|---|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | 30, 2008 • Least Developed Countries Fund, as of March 4, 2008 | | |
| Belarus | | | | | |
| Belgium | <ul style="list-style-type: none"> • 2003 -PLUIES plan-Flood Prevention • Various palliative measure for flood control • 2000-Large Scale information campaign regarding Water Resources • 2005-Sigma Plan for flood control zones revised • Heat waves and ozone Plan | | <ul style="list-style-type: none"> • Bilateral and regional financial contributions related to climate change (2003-2004) • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | Total | €17.367 million USD 2,478.64 million |
| Bulgaria | <ul style="list-style-type: none"> • Planned felling for improvement of light and water regime | | | | |
| Canada | <ul style="list-style-type: none"> • 2001-2006- <i>Climate Change Impacts and Adaptation Program</i> (CCIAP) • Environment Canada's Northern Ecosystem Initiative | \$37.5 million \$1.0 million | <ul style="list-style-type: none"> • Contributions on Adaptation for Reference Year 2000/2001 • Contributions on | Total Total (minus Annex 1 Countries) Total Total (minus Annex 1 | CAD\$8.62 million CAD\$8.225 million CAD\$15.132million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|---|-------------|---|---|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | <p>(RESEARCH)</p> <ul style="list-style-type: none"> • The Health Policy Research Program at Health • Canada (RESEARCH) • Prairie Adaptation Research Collaborative (RESEARCH) • Pacific Climate Impacts Consortium (RESEARCH) • Ouranos Consortium on Regional Climatology and Adaptation to Climate Change (RESEARCH) • Canadian Climate Impacts and Adaptation Research Network (RESEARCH) | \$700,000 | <ul style="list-style-type: none"> • Adaptation for Reference Year 2001/2002 • Contributions on Adaptation for Reference Year 2002/2003 • Contributions on Adaptation for Reference Year 2003/2004 • Global Facility for Disaster Reduction and Recovery 2007-2010 • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Special Climate Change Fund, as of March 4, 2008 • Least Developed Countries Fund, as of March 4, 2008 | <p>Countries) Total Total (minus Annex 1 Countries) Total Total (minus Annex 1 Countries)</p> | <p>CAD\$14.565million CAD\$14.381million CAD\$14.199million CAD\$16.750million CAD\$16.750million USD3.511 million (GRANT) USD6,366.57 million USD 10,342,172 USD 6,518,366</p> |
| Croatia | | | <ul style="list-style-type: none"> • Cumulative IDA Subscriptions and Contributions as of June | | USD5.83 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|----------------|---|-------------|---|-----------|-------------------|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | 30, 2008 | | |
| Czech Republic | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 84.84 million |
| Denmark | <ul style="list-style-type: none"> 2006 Completion-CONWOY-(RESEARCH) 2007/2008 Completion- CLIMATE (RESEARCH) | | <ul style="list-style-type: none"> Danish Bilateral and Regional Assistance in 2000 for Implementation of the Climate Convention Danish Bilateral and Regional Assistance in 2001 for Implementation of the Climate Convention Danish Bilateral and Regional Assistance in 2002 for Implementation of the Climate Convention Danish Bilateral and Regional Assistance in 2003 for Implementation of the Climate Convention Danish Bilateral and Regional Assistance in 2004 for Implementation of the Climate Convention Contributions to the | Total | DKK80.9 million |
| | | | | Total | DKK113.9 million |
| | | | | Total | DKK214.6 million |
| | | | | Total | DKK145.3 million |
| | | | | Total | DKK106.9 million |
| | | | | | USD544,030.18 |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|--------------------|---|--|--|---|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | Adaptation Fund Administrative Trust Fund as of May 15, 2009 | | (GRANT) |
| | | | <ul style="list-style-type: none"> Global Facility for Disaster Reduction and Recovery 2007-2010 | | USD9.234 million (GRANT) |
| | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD2,801.44 million |
| | | | <ul style="list-style-type: none"> Special Climate Change Fund, as of March 4, 2008 | | USD 5,270,838 |
| | | | <ul style="list-style-type: none"> Least Developed Countries Fund, as of March 4, 2008 | | USD 12,179,225 (USD 4,077,389 still due payable in October 2008) |
| Estonia | | | | | |
| European Community | <ul style="list-style-type: none"> The Rural Development Regulation European Flood Alert System European Forest Fire Information | €48.5 million for Portugal €1.3 million for Spain | <ul style="list-style-type: none"> 2004-2008 Tropical forests and climate change adaptation | South-East Asia (Indonesia); West Africa (Burkina Faso, Mali, Ghana); Central America | €3 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|------------------------------|-------------|--|---|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | System | | <ul style="list-style-type: none"> Bilateral and regional financial contributions related to the implementation of the Convention Global Facility for Disaster Reduction and Recovery 2007-2010 | (Honduras, Nicaragua, Costa Rica) Africa - Latin America | €0.8 million USD0.325 million (GRANT) |
| Finland | | | <ul style="list-style-type: none"> Contributions to the Adaptation Fund Administrative Trust Fund as of May 15, 2009 Cumulative IDA Subscriptions and Contributions as of June 30, 2008 Special Climate Change Fund, as of March 4, 2008 Least Developed Countries Fund, as of March 4, 2008 | | \$155,340.00 (GRANT) USD 1,033.37 million USD 2,214,856 USD 4,854,110 |
| France | | | <ul style="list-style-type: none"> Contributions to the Adaptation Fund Administrative Trust Fund | | \$122,692.50 (GRANT) |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|--|-------------|---|-----------|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | as of May 15, 2009 <ul style="list-style-type: none"> • Global Facility for Disaster Reduction and Recovery 2007-2010 • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Least Developed Countries Fund, as of March 4, 2008 | | USD1.2 million (GRANT) USD 13,028.72 million USD 4,468,380 (USD 11,394,367 still due payable in three installments of EUR 2.5 million each in June 2008, June 2009 and June 2010.) |
| Germany | <ul style="list-style-type: none"> • New growing methods-regarded as partly introduced • Appropriate irrigation methods-regarded as partly introduced • Federal Organic Farming Programme • Federal Soil Protection Act, Federal Nature Conservation Act and Direct Payment • Obligations Act | | <ul style="list-style-type: none"> • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Special Climate Change Fund, as of March 4, 2008 | | USD 20,174.39 million USD 3,898,100 (USD 10,634,742 still due payable in installments of EUR 1.0 million each in April 2008, July 2008, April 2009, July 2009, July 2010, July 2011) |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|--|-------------|--|---------------------------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | <ul style="list-style-type: none"> • Joint Task of Improving Agricultural Structures and Coastal Protection • Federal Nature Conservation Act • Flood Control Articles Act • Dyke retrenchment measures, restoration of flood-plain forests and re-connection of old river arms- regarded as partly introduced • Working Alliance of Scientific Medical Specialist Associations- (Research) • Artificial Snow • Periodic increase of 25 cm in the height of the dykes | | <ul style="list-style-type: none"> • Least Developed Countries Fund, as of March 4, 2008 | | <p>and July 2012.)</p> <p>USD 19,672,650 (USD 37,981,222 still due)</p> |
| Greece | <ul style="list-style-type: none"> • 2006-2006-Operational Programme “Agricultural Development of the Countryside • Operational Programme for Forestry • National Committee for Combating Desertification • LEADER Community Initiative | | <ul style="list-style-type: none"> • Financial support provided by Greece to developing countries related to the implementation of the UNFCCC and the Kyoto Protocol (2001 • Financial support provided by Greece to developing countries related to the implementation of the | <p>Total</p> <p>Total</p> | <p>US\$742,300</p> <p>US\$472,800</p> |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|--------------------------------------|-------------|---|--|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | UNFCCC and the Kyoto Protocol (2002) <ul style="list-style-type: none"> Financial support provided by Greece to developing countries related to the implementation of the UNFCCC and the Kyoto Protocol (2003) Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | Total | US\$1.1241 million USD 151.60 million |
| Hungary | VAHAVA Programme (Research) | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 76.91 million |
| Iceland | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 43.60 million |
| Ireland | | | <ul style="list-style-type: none"> 2003-2005- Grant | United Nations Institute for Training and Research Least Developed | US\$ 333,684 |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|------------------------------|-------------|--|---|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | <ul style="list-style-type: none"> • 2005-Irish Aid • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Special Climate Change Fund, as of March 4, 2008 • Least Developed Countries Fund, as of March 4, 2008 | Countries Fund | US\$ 2 million USD 377.42 million USD 960,000 USD 7,749,794 |
| Italy | | | <ul style="list-style-type: none"> • 2007-2008- Water Programme for Environmental Sustainability - Towards adaptation measures to human and climate change impacts • Global Facility for Disaster Reduction and Recovery 2007-2010 • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Special Climate Change | North-Africa, Latin America, China, South-East Asia | US\$ 3 million USD 5.19 million (GRANT) USD 7,883.43 million (USD 5,000,000 still due was payable in February 2008.) |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|------------------------------|-------------|---|-----------|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | Fund, as of March 4, 2008 • Least Developed Countries Fund, as of March 4, 2008 | | USD 1,000,000 |
| Japan | | | <ul style="list-style-type: none"> • 1997-2003- Loan aid and grant aid ODA mainly through the Kyoto Initiative • Initiative for Disaster Reduction through ODA • Initiative for Japan's ODA on Water and Sanitation • Asia Forest Partnership • Environmental Conservation Initiative for Sustainable Development • New Rice for Africa (NERICA) Project • Contributions to the GEF Trust Fund • Contributions to the Adaptation Fund Administrative Trust Fund as of May 15, 2009 • Global Facility for Disaster Reduction and Recovery 2007-2010 | | JPY180 billion To date US\$1.21 billion \$13,093.97 (GRANT) USD 6 million (GRANT) |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------------|---|-------------------|---|-----------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 Least Developed Countries Fund, as of March 4, 2008 | | USD 34,302.66 million USD 250,000 |
| Latvia | | | | | |
| Liechtenstein | 2000- Revised Tourism Act for gentle tourism | | <ul style="list-style-type: none"> Campaign for better insulation of homes in Central Asia Establishment of an information-protection cabin in the Borjomi Kharagauli National Park Sustainable development of mountain regions in the Caucasus Pilot projects for the creation of a regional strategy (financial contribution and Liechtenstein advisor/expert) | | 75,000CHF 30,000CHF 32,000CHF |
| Lithuania | <ul style="list-style-type: none"> 2005- Promoting production of biofuels The State Programme for Mitigation of Pollution Caused by | LTL 7.799 million | | | |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|-------------|---|---|--|-----------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | <ul style="list-style-type: none"> • Nitrates From Agricultural Sources • Increased ecological production farms take-up through increased funding • 2004-2006-Afforestation (EU subsidised) • Coast management project (EU and Government funded) | <p>LTL 113 million</p> <p>LTL 5.6 million</p> | | | |
| Luxembourg | NO REPORT | | <ul style="list-style-type: none"> • Global Facility for Disaster Reduction and Recovery 2007-2010 • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Least Developed Countries Fund, as of March 4, 2008 | | <p>USD 2.936 million (GRANT)</p> <p>USD 175.05 million</p> <p>USD 3,090,000 (USD 2,549,249 still due payable in October 2008)</p> |
| Monaco | | | | | |
| Netherlands | <ul style="list-style-type: none"> • 2006-Improving safety against flooding in river areas • By 2015-Programme is to defend | <p>€2.2 billion</p> <p>€1.9 billion</p> | <ul style="list-style-type: none"> • Expenditure of climate change related activities applying OECD reporting guidelines 2001 | Total | €4.50 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|-------------|---|---|---|---------------------------------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | against discharges from the Rhine up to 16,000 m ³ /s <ul style="list-style-type: none"> • After 2015-Programme is to defend against discharges from the Rhine up to 18,000 m³/s • 2004-2010- Maintenance of the inland waterways • After 2010- Maintenance of the inland waterways • Sand supplements | (reserved for after 2015) €700 million €10.3 billion (for period after 2010) €45 million per year (projected costs) | <ul style="list-style-type: none"> • Expenditure of climate change related activities applying OECD reporting guidelines 2002 • Expenditure of climate change related activities applying OECD reporting guidelines 2003 • Expenditure of climate change related activities applying OECD reporting guidelines 2004 • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Special Climate Change Fund, as of March 4, 2008 • Least Developed Countries Fund, as of March 4, 2008 | Total Total Total | €10.78 million €9.38 million €6.58 million USD 6,602.93 million USD 3,128,880 USD 11,382,998 (USD 5,165,471 still due payable in October 2008) |
| New Zealand | | | <ul style="list-style-type: none"> • Bilateral and regional financial contributions related to the implementation of the | Total | NZ\$0.18 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|------------------------------|-------------|---|---------------------------------|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | Convention, 2001 <ul style="list-style-type: none"> • Bilateral and regional financial contributions related to the implementation of the Convention, 2002 • Bilateral and regional financial contributions related to the implementation of the Convention, 2003 • Bilateral and regional financial contributions related to the implementation of the Convention, 2004 • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Least Developed Countries Fund, as of March 4, 2008 | Total Total Total | NZ\$2.17 million NZ\$2.4 million NZ\$4.09 million USD 237.24 million USD 2,509,740 |
| Norway | | | <ul style="list-style-type: none"> • Forest conservation and replanting • Contributions to the Adaptation Fund | Costa Rica | US\$1.7 million \$201,726.78 (GRANT) |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|----------|--|-------------|--|-----------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | Administrative Trust Fund as of May 15, 2009 <ul style="list-style-type: none"> • Global Facility for Disaster Reduction and Recovery 2007-2010 • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Special Climate Change Fund, as of March 4, 2008 • Least Developed Countries Fund, as of March 4, 2008 | | USD 3.733 million (GRANT) USD 2,936.44 million USD 7,632,278 USD 6,675,406 |
| Poland | <ul style="list-style-type: none"> • 2003-Programme on the protection of the coastline • 2005-Water Management Strategy | | <ul style="list-style-type: none"> • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 86.15 million |
| Portugal | <ul style="list-style-type: none"> • The Climate Change in Portugal: Scenarios, Impacts, and Adaptation Measures (SIAM) (RESEARCH) | | <ul style="list-style-type: none"> • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 • Special Climate Change Fund, as of March 4, 2008 • Least Developed Countries Fund, as of March 4, 2008 | | USD 254.56 million USD1,299,099 USD 64,065 |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|--------------------|------------------------------|-------------|--|-----------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| Romania | | | | | |
| Russian Federation | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 304.15 million |
| Slovakia | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 17.76 million |
| Slovenia | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 24.37 million |
| Spain | | | <ul style="list-style-type: none"> Global Facility for Disaster Reduction and Recovery 2007-2010 Cumulative IDA Subscriptions and Contributions as of June 30, 2008 Special Climate Change Fund, as of March 4, 2008 Least Developed Countries Fund, as of March 4, 2008 | | USD 6 million (GRANT) USD 2,450.74 million USD 1,299,000 USD 987,178 |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------|--|-------------|---|-----------|-------------------------|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| Sweden | Local initiatives: <ul style="list-style-type: none"> In Malmo and Gothenburg raised minimum building level by 0.5m above sea level All new pistes have snow manufacturing capabilities. | | <ul style="list-style-type: none"> Climate-related bilateral and regional development assistance per sector and per year, based on Annex 3, 2000 | Total | SEK471 million |
| | | | <ul style="list-style-type: none"> Climate-related bilateral and regional development assistance per sector and per year, based on Annex 3, 2001 | Total | SEK502million |
| | | | <ul style="list-style-type: none"> Climate-related bilateral and regional development assistance per sector and per year, based on Annex 3, 2002 | Total | SEK605 million |
| | | | <ul style="list-style-type: none"> Climate-related bilateral and regional development assistance per sector and per year, based on Annex 3, 2003 | Total | SEK559 million |
| | | | <ul style="list-style-type: none"> Contributions to the Adaptation Fund Administrative Trust Fund as of May 15, 2009 | | \$251,154.11 (GRANT) |
| | | | <ul style="list-style-type: none"> Global Facility for Disaster Reduction and Recovery 2007-2010 | | USD 8.6 million (GRANT) |
| | | | | | USD 5,661.04 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|-------------|--|---|---|---------------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 Special Climate Change Fund, as of March 4, 2008 Least Developed Countries Fund, as of March 4, 2008 | | USD 3,308,248 USD 886,747 |
| Switzerland | <ul style="list-style-type: none"> 2000-2003- Sustainable forestry 2000-2003- Maintain the vitality of forests 2000-2003- Conservation of the genetic resources of forests Flood Protection Strategy | CHF 57.8 million (Average annual Subsidy) CHF 69.65 million (Average annual Subsidy) CHF 1.5 million (Average annual Subsidy) | <ul style="list-style-type: none"> 2001-2007- National Communication Support Programme 2001-2004- Adaptation in semi-arid areas Contributions to the Adaptation Fund Administrative Trust Fund as of May 15, 2009 Global Facility for Disaster Reduction and Recovery 2007-2010 Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | India (total) | USD 968,000 CHF 235,821 \$178,651.18 (GRANT) USD 2.324 million (GRANT) USD 2,454.82 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|----------------|--|-------------|---|-----------------|--|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | <ul style="list-style-type: none"> Permafrost mapping Giandains avalanche and debris flow dam | | <ul style="list-style-type: none"> Special Climate Change Fund, as of March 4, 2008 Least Developed Countries Fund, as of March 4, 2008 | | USD 1,898,381 USD 2,366,860 |
| <i>Turkey</i> | | | <ul style="list-style-type: none"> Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | | USD 143.49 million |
| Ukraine | | | | | |
| United Kingdom | Examples of adaptation: <ul style="list-style-type: none"> Water Act 2003 Building further flood defenses Thames Estuary 2100 project Coastal Realignment Habitat restoration project in the Fenlands | | <ul style="list-style-type: none"> Advancing capacity to Support Climate Change Adaptation DFID (for collaborative research into adaptation) Contributions to the Adaptation Fund Administrative Trust Fund as of May 15, 2009 Global Facility for Disaster Reduction and Recovery 2007-2010 Cumulative IDA Subscriptions and Contributions as of June | Asia and Africa | Pledged €0.3m for a start-up phase and another €0.3m £15 million over three years \$990,300.00 (LOAN) USD8.761 million (GRANT) USD 18,232.65 million |

| Country | Domestic Adaptation Measures | | Meeting Commitments in relation to Article 4.4 Adaptation Financing | | |
|---------------------------------|---|-------------|--|-----------|---|
| | Measure | Expenditure | Measure | Recipient | Expenditure |
| | | | 30, 2008 | | USD 18,603,167 (Pledge Outstanding USD 991,827) |
| | | | <ul style="list-style-type: none"> • Special Climate Change Fund, as of March 4, 2008 • Least Developed Countries Fund, as of March 4, 2008 | | Pledge outstanding (USD 19,836,546 to be paid over three years) |
| <i>United States of America</i> | Examples of adaptation (mainly research and assessment): <ul style="list-style-type: none"> • Climate Impacts Group— • Western Water Assessment • Climate Assessment for the Southwest • National Integrated Drought Information System • New York City Task Force on Climate Change • Global Change Research Program Assessments | | <ul style="list-style-type: none"> • 2001 U.S. Direct Financial Contributions Related to Implementation of the UNFCCC • 2004 U.S. Direct Financial Contributions Related to Implementation of the UNFCCC • Cumulative IDA Subscriptions and Contributions as of June 30, 2008 | Total | USD0.65 million |
| | | | | Total | USD6.14 million |
| | | | | | USD 38,981.03 million |

Technology Transfer

**Technology Transfer Activities Reported
in the 4th National Communications of Annex II Parties: 2001-2004**

| Party | Number of Technology Transfer Projects or Programmes | Technology Number of Capacity- Building Projects or Programmes | Total Amounts for Technology Transfer and Capacity-Building (in currency reported) |
|-----------------------|--|---|---|
| 1. Australia | 2 | - | AUS\$11.42 million |
| 2. Austria | 5 | - | US\$18.8 million |
| 3. Belgium | 3 | 3 | EUR0.569 million |
| 4. Canada | 1 | 5 | CDN\$28.7 million |
| 5. Denmark | 1 | 2 | DKK906.7 million |
| 6. European Community | 1 | 7 | EUR98.75 million |
| 7. Finland | 2 | 1 | EUR9.6 million |
| 8. France | 19 (no clear indication as to nature of project or programme reported) | | EUR382.088 million |
| 9. Germany | - | 7 | EUR6.706 million |
| 10. Greece | Not indicated | Not indicated | US\$3 million |
| 11. Iceland | Not indicated | Not indicated | Not indicated |
| 12. Ireland | - | 3 | EUR7.304 million |
| 13. Italy | Not indicated | Not indicated | Not indicated |
| 14. Japan | 1 | 2 | JPY7.556 billion |
| 15. Liechtenstein | Not indicated | Not indicated | Not indicated |
| 16. Monaco | Not indicated | Not indicated | Not indicated |
| 17. Netherlands | - | 3 | EUR7.8 million |
| 18. New Zealand | 1 | - | NZ\$0.111 million |
| 19. Norway | - | 2 | No data |
| 20. Portugal | - | 2 | No data |
| 21. Spain | Not indicated | Not indicated | Not indicated |

| Party | Number of Technology Transfer Projects or Programmes | Technology Number of Capacity-Building Projects or Programmes | Total Amounts for Technology Transfer and Capacity-Building (in currency reported) |
|--------------------|---|--|---|
| 22. Sweden | - | 3 | No data |
| 23. Switzerland | 2 | 3 | CHF13.25 million |
| 24. United Kingdom | - | 1 | GBP3.5 million |
| 25. United States | - | 4 | US\$42.25 million |

Source: South Centre calculations using data sources from the relevant fourth national communications of the Annex II Parties, all of which are available at http://unfccc.int/national_reports/annex_i_natcom/submitted_natcom/items/3625.php

Party-by-Party Annex II Technology Transfer Projects or Activities: 2001-2004

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|-----------|--|---|----------------------|-------------------|
| Australia | 1. South Pacific Sea Level and Climate Monitoring Project | 1. Sea level and climate monitoring equipment and databases (hard), National and regional capacity to gather and analyze sea level and climate data | 1. Pacific Countries | 1. \$7 million |
| | 2. China-Australia Datong Cleaner Environment Project | 2. Developed breakthrough technology for treating wastewater to Grade 1 National Standard | 2. China | 2. \$4.42 million |
| Austria | 1. Hydropower Plants Baso Chu | 1. Hydropower plant | 1. Bhutan | 1. \$15 million |
| | 2. Geothermal System Kocani | 2. Know-how concerning combined heat and power and long-distance community heating | 2. Zimbabwe | 2. \$.5 million |
| | 3. Solar Energy for Cuba | 3. Photovoltaic systems and information related to the use of solar energy | 3. Cuba | 3. \$.3 million |
| | 4. Solar Drying Systems for Crops | 4. Advanced system for the use of solar energy for drying crops | 4. Burkina Faso | 4. \$.5 million |
| | 5. Integrated Livestock Development in North Gondar | 5. Know-how regarding manure management, biogas equipment, handling of biogas energy | 5. Ethiopia | 5. \$.2.5 million |
| Belarus | N/A | N/A | N/A | N/A |
| Belgium* | | | | |
| Bulgaria | N/A | N/A | N/A | N/A |
| Canada | 1. Canadian Initiative for International Technology Transfer | 1. Capacity building and demonstrations | 1. No data available | 1. \$2 million |
| | 2. Climate Change Technology Promotion Officers | 2. Workshops, and technology seminars | 2. No data available | 2. \$3 million |
| | 3. Technology early action | | | |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|----------------|--|---|------------------------------------|---|
| | measures | 3. Brings together public and private sector partnerships, supports hard technology transfer and capacity building and information exchange between public and private sectors | 3. India, Brazil, China | 3. \$16.4 million |
| | 4. Landfill Gas Project in the Latin American and Caribbean | 4. Supported the promotion of landfill gas recovery | 4. Latin America and the Caribbean | 4. \$1.1 million |
| | 5. The ARPEL Environmental Project Phase III | 5. Capacity building | 5. No data available | 5. \$4.8 million |
| | 6. Canada-Ukraine Environment Cooperation Program | 6. Capacity building | 6. Ukraine | 6. \$1.4 million |
| Czech Republic | N/A | N/A | N/A | N/A |
| Denmark | 1. Development of building regulations concerning energy consumption in Botswana | 1. Danish experience with administration and regulation of the construction area as well as the funds to monitor compliance with the building regulations | 1. Botswana | 1. DKK 13.7 million |
| | 2. Zafarana wind turbine farm in Egypt | 2. Danish windpower technology | 2. Egypt | 2. DKK 253 million, credit scheme DKK 175 million |
| | 3. Sector programme assistance for the energy sector in Mozambique | 3. Know-how as support for the development of the energy sector, efficient energy planning and thereby sustainable energy supply and institutional capacity building. Transferal of know-how when expanding the national transmission and distribution net as well as making it more efficient. | 3. Mozambique | 4. DKK 465 million |
| EEC | 1. The Regional Solar Programme | 1. 626 pumping systems and 629 community | 1. Sub-Saharan | 1. €73 million |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|---------|---|---|---|--|
| | 2. Energy Environment Programme for China | electrification schemes | Africa | 2. €20 million |
| | 3. CO ₂ Mangers for the Industry in China | 2. Capacity building, energy related technologies | 2. China | 3. €2 million |
| | 4. Capacity Building of Developing NGO's to Achieve Sustainable Development through Implementation of Principle 10 | 3. Capacity building | 3. China | 4. €1.3 million (only part is climate related) |
| | 5. Capacity building-The UNFCCC Facilitating implementation and participation in Asia-Pacific | 4. Electronic tools and assessment methodologies | 4. Cameroon, Chile, India, Malawi, Paraguay, the Philippines, South Africa, Thailand, Uganda, Vietnam, and Zimbabwe | 5. €75 million |
| | 6. Environment and community based framework for designing afforestation, reforestation, and revegetation projects in the CDM | 5. Networks and awareness raising | 5. Tuvalu, Cook Islands, Indonesia, and Nepal | 6. |
| | 7. The Clean-Air Initiative in Sub-Saharan African Cities | 6. Information, computer models, and data evaluation network | 6. Kenya, Uganda, Ecuador, and Bolivia | 7. €5 million |
| | 8. Tropical forests and climate change adaptation | 7. Raising awareness, co-operation in the design and implementation of technical, institutional and regulatory measures, and support for the design and implementation of | 7. Sub-Saharan Africa | |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|---------|--|---|---|-----------------|
| | | <p>Action Plans. Most of the inputs required for the implementation of the Clean Air Initiative are related to services and capacity building.</p> <p>8. Expert systems, databases, monitoring protocols, and awareness raising</p> | <p>8. South-East Asia, West Africa, and Central America</p> | 8. € million |
| Estonia | N/A | N/A | N/A | N/A |
| Finland | 1. Support to the meteorological services in Mozambique | 1. Rebuilding and strengthening the meteorological observation system and improving telecommunication connections. Foreca Ltd trains local people to maintain the system. Meteorological radar was funded through the programme. | 1. Mozambique | 1. €5.5 million |
| | 2. Development of the meteorological systems in the Caribbean Region | 2. Telecommunications systems and equipment, observation network, regional calibration laboratory, database management system, data rescue equipment | 2. Caribbean region | 2. €1.1 million |
| | 3. Energy and Environment Partnership with Central America | 3. Demonstration projects, such as installation of a solar system for the vaccination programme in Honduras, a photovoltaic system for two Kuna communities in Panama, solar electrification in Guatemala and a solar pumping system in El Salvador; use of sawdust, coffee residues and sugar cane bagasse as biomass suitable for energy co-generation; ecological stoves endowment in Honduras and Guatemala, feasibility studies and equipment for small hydroelectric power plants | 3. Central American countries | 3. € million |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|----------|---|--|--|--------------------|
| France # | | | | |
| Germany | 1. Contribution to sustainable energy supply through increased utilization of wind energy | 1. Capacity building concerning wind energy, one-year training programme for young wind energy experts | 1. Brazil, Argentina, China, Algeria, Burkina Faso, Egypt, Ethiopia, Kenya, Mali, Namibia, Nigeria, South Africa, Uganda | 1. 2, 238,000 euro |
| | 2. Climate protection and development in MERCOSUR through sustainable energy supplies | 2. Capacity building, information transfer | 2. Brazil, Argentina | 2. 720, 000 euro |
| | 3. Integrated Southern Africa Business Advisory | 3. Advising, capacity building | 3. South Africa, Namibia, Botswana, Zambia | 3. 237, 367 euro |
| | 4. Designing CDM and JI projects to reduce CO ₂ emissions | 4. Series of workshops to foster an exchange of information | 4. Brazil, China, South Africa | 4. 200,000 euro |
| | 5. Energy and the environment in the Indian energy sector | 5. Capacity building, information sharing | 5. India | 5. 1,252,486 euro |
| | 6. Innovative energy supply strategies for rural areas of Africa | 6. Demonstrated the technical feasibility, economic soundness, and social suitability of innovative hybrid village power plants, enabled multipliers to train the local personnel needed to produce and operate these plants | 6. Mali, Ghana, Tanzania | 6. 1,114,000 euro |
| | 7. Environmental management in Cuban industry | 7. Capacity building, training Cuban experts | | |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|----------|--|--|---|---|
| | | as energy advisors | 7. Cuba | 7. 944, 824 euro |
| Greece* | | | | |
| Hungary | N/A | N/A | N/A | N/A |
| Iceland* | | | | |
| Ireland | 1. The Tanga Coastal Zone and Conservation Development Programme 2. Productive Safety Nets programme 3. Ethiopian Bale Eco-region Sustainable Management Programme | 1. Capacity building, information sharing 2. Capacity building 3. Improved planning and management of the largest area of Afroalpine habitat on the African Continent | 1. Tanzania 2. Ethiopia 3. Ethiopia | 1. N/A 2. \$6.9 million 3. \$404,000 |
| Italy* | | | | |
| Japan | 1. Northern Luzon Wind Power Project 2. The Project for Afforestation for Conservation of Middle Stream of Huang He 3. Group Training Course to Develop National Inventories and Strategies Against Climate Change | 1. Technology related to wind power 1. Development of model forests to stimulate interest in afforestation, demonstration of afforestation methods, the implementation of work training , general afforestation technology 3. Raising skills enabling the self-creation of inventories for greenhouse gases, provision of and upgrading skills for information required to establish strategies to arrest global warming | 1. The Philippines 2. China 3. Indonesia, the Philippines, Cambodia, India, Mexico, Argentina, Brazil, Nicaragua, Peru, Tuvalu, Senegal, Turkey, Cote d'Ivoire, | 1. 5.857 billion yen 2. 1.494 billion yen 3. 205.41 million yen (1997-2004) |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|-------------|--|--|--|--|
| | | | Tunisia, Saint Lucia, and Sao Tome and Principe | |
| Latvia | N/A | N/A | N/A | N/A |
| Lithuania | N/A | N/A | N/A | N/A |
| Luxembourg* | | | | |
| Netherlands | <p>1. Biomass Gasification Unit for Sustainable Energy</p> <p>2. Joint Venture Rural Energy Services</p> <p>3. Promotion of Rural Renewable Energy</p> | <p>1. Information transferred on the generation of electric energy by using locally available biomass</p> <p>2. Local energy shops were created to supply energy through solar home systems and other energy sources</p> <p>3. Comprehensively developing and utilizing the area's renewable energy sources through capacity building and demonstration projects</p> | <p>1. Boliva</p> <p>2. South Africa</p> <p>3. China</p> | <p>1. 1.5 million euro</p> <p>2. 1 million euro</p> <p>3. 5.3 million euro</p> |
| New Zealand | 1. Niuas Electrification Project | 1. Solar technology and its support infrastructure, information and participatory planning approaches | 1. Tonga | 1. NZ\$111,293 |
| Norway | <p>1. Bi-lateral cooperation programme on the environment</p> <p>2. Bi-lateral cooperation with Vietnam</p> | <p>1. Assistance in developing monitoring systems for air pollution, environmental law and reporting and the energy sector</p> <p>2. Design and establish an Air Quality Monitoring and Planning System, training for maintenance and calibration and provide support in collecting adequate data</p> | <p>1. South Africa and Namibia</p> <p>2. Vietnam</p> | <p>1. No data available</p> <p>2. No data available</p> |
| Poland | N/A | N/A | N/A | N/A |
| Portugal | 1. Portuguese Speaking Countries Climate Change Network | 1. Facilitating climate change initiatives through partnership, capacity building, and information exchange | 1. Angola, Brazil, Cape Verde, Guinea-Bissau, Mozambique, Portugal, Sao Tome | 1. No date available |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|---------------------|--|--|--|--|
| | 2. Iberian-American Climate Change Network | 2. Facilitating climate change initiatives through partnership, capacity building, information exchange | and Principe and East- Timor 2. Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Spain, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Portugal, Dominican Republic, Uruguay and Venezuela | 2. No data available |
| Romania | N/A | N/A | N/A | N/A |
| Russian Federation# | | | | |
| Slovakia | N/A | N/A | N/A | N/A |
| Spain # | | | | |
| Sweden | 1. Pungue River 2. Asian Regional Research Programme in Energy, Environment and Climate 3. Greenhouse gas Emission Reduction from Industry in Asia-Pacific | 1. Capacity building to improve adaptation and access to water 2. Supports research into energy, environment, and climate 3. Capacity building, training of operators and civil servants | 1. Zimbabwe and Mozambique 2. Asia 3. China, India, Indonesia, Mongolia, the Philippines, Sri Lanka, Thailand | 1. No data available 2. No data available 3. No data available |

| Country | Project | Technology Transfer Project or Activity | Receiving Country and Vietnam | Total |
|-------------|--|--|-------------------------------|---------------------|
| Switzerland | 1. Vertical Shaft Brick Kiln Technology Transfer Programme in Nepal | 1. Design, construction and operation of VSBK, energy and emission monitoring, metal part production, refractory brick masonry training, training in the development of skill-based training manuals | 1. Nepal | 1. CHF 1.4 million |
| | 2. Reduccion del Consumo de Electricidad por Illuminacion en Cuba | 2. Training on installation of energy efficient lighting systems, capacity building for establishing and managing a revolving fund, creating of awareness of energy efficient lighting systems | 2. Cuba | 2. CHF 1.8 million |
| | 3. Vulnerability assessment and enhancing adaptive capacity to climate change in semi-arid India | 3. Capacity building in tools and techniques for climate adaptation in the agriculture, water and rural energy sector, transfer of best practices and improvement of service delivery systems in these sectors with regard to climate change adaptation e.g. through demonstration and training | 3. India | 4. CHF 2.6 million |
| | 4. National Strategy Study on the Application of the Clean Development Mechanism in China | 4. Capacity building and technical advice on the application of the CDM methodology | 4. China | 4. CHF .8 million |
| | 5. Swiss Thermal Energy Project | 5. Two small gas-powered, co-generation units, supplying a neighborhood with heat and feeding electricity into the grid, pre-insulated pipes based on the two-pipes concept, corrosion resistant heat-exchanger substations at each building, metering, connecting pipes in buildings, automatic control, installation | 5. Romania | 5. CHF 6.65 million |
| | 6. Fortalecimiento de la red Ambiental de Colombia | 6. State-of-the-art environmental monitoring equipment, including multi-purpose data | 6. Colombia | 6. CHF 12 million |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|--------------------------|---|--|--|--------------------------|
| | | acquisition platforms with satellite transmission for real time data, environmental laboratory equipment, mobile equipment for environmental monitoring in urban areas; capacity building in scientific know-how and modeling techniques in hydrology, water quality, glaciology, climate change and data processing | | |
| Turkey* | | | | |
| Ukraine | N/A | N/A | N/A | N/A |
| United Kingdom | 1. EU-China Partnership | 1. Supporting a new initiative on near zero emissions coal with carbon capture and storage, demonstrations, and training | 1. China | 1. 3.5 million pounds |
| United States of America | 1. US/China Energy Environmental Technology Center | 1. US clean energy and environmental technologies and expertise | 1. Implemented by US and China | 1. \$1 million |
| | 2. Famine Early Warning System Network | 2. US environmental monitoring expertise, remote-sensing data acquisition processing and analysis, geographic information systems analytical skills, geographic information systems hardware and software | 2. Afghanistan, Burkina Faso, Chad, Djibouti, Eritrea, Ethiopia, Guatemala, Haiti, Honduras, Kenya, Malawi, Mali, Mauritania, Nicaragua, Niger, Mozambique, Rwanda, Somalia, Sudan, Uganda, Zambia, Zimbabwe | 2. \$13 million per year |
| | 3. International Nuclear Energy Research Initiative | 3. Safety reactor physics, and materials technologies | 3. Brazil and Republic of Korea | 3. \$28 million |
| | 4. International Partnership for | 4. Expertise in development of hydrogen | | 4. \$250,000 |

| Country | Project | Technology Transfer Project or Activity | Receiving Country | Total |
|---------|---|---|--------------------------------|-------|
| | the Hydrogen Economy Hydrogen Energy Technology Roadmap Development Assistance | energy technology road mapping | 4. China, India, and Brazil | |

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