

NORWEGIAN ACTION PLAN FOR ENVIRONMENT IN DEVELOPMENT COOPERATION

GUIDELINES FOR IMPLEMENTING PROJECTS RELATING TO CLIMATE CHANGE

1. Summary

The use of development cooperation funds to support climate-related projects is intended as a means of achieving two overall objectives: reduction of greenhouse gas emissions and adaptation to climate change. In order to achieve the first of these, efforts must primarily be targeted at countries that already generate large greenhouse gas emissions, or where emissions are expected to increase markedly. Efforts to achieve the second objective will give priority to the poorest and most vulnerable countries, i.e. those that will be hardest hit by and least able to adapt to climate change.

Climate-related efforts will focus on five sub-themes:

- a) adaptation measures and measures to reduce vulnerability to climate change;
- b) integrating measures to reduce vulnerability into national poverty and development strategies;
- c) reducing emissions, including measures to promote the use of clean, renewable energy, energy efficiency measures, and the development of low-carbon technology, as well as measures to avoid deforestation;
- d) climate proofing of development cooperation projects
- e) Clean Development Mechanism (CDM) – competence-building and facilitation of project development.

The adaptation funds under the UN Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol are the most important multilateral mechanisms with regard to the first sub-theme. Bilateral efforts in this area should also be scaled up considerably (for example within information and knowledge building, food security, economic diversification, improvements in land-use planning, including infrastructure planning).

The most important channels for the second sub-theme will be the bilateral dialogue with partner countries, as well as the OECD and other forums where development policy guidelines and principles are discussed.

One channel for efforts within the third sub-theme will be the Clean Energy for Development initiative, in which key elements will be scaling up energy cooperation with countries in Africa and Asia and regional cooperation. Cooperation with the regional development banks will also be important, as will participation in international initiatives and partnerships, including the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Global Energy Efficiency and Renewable Energy Fund (GEEREF).

Efforts within the fourth sub-theme must be directed towards the political dialogue with partner countries and relevant multilateral forums where issues such as development plans, poverty reduction strategies and donor coordination are discussed. In addition, specific recommendations must be developed for how climate proofing of development cooperation projects is to be carried out; this should preferably form part of the environmental assessment of projects and programmes.

The most relevant channels for the fifth sub-theme are multilateral institutions such as the United Nations Development Programme (UNDP) (for example the MDG Carbon Facility) and the World Bank (for example the Carbon Finance Unit), and to some extent the regional development banks. Increased bilateral efforts will also be important here.

2. Background

Global climate change is one of the greatest problems facing the world today. The impact of climate change will affect virtually every sector of society. The UN Intergovernmental Panel on Climate Change (IPCC) has established that serious and rapid climate change is very likely as a result of the rapidly rising concentrations of greenhouse gases in the atmosphere, and the Arctic Climate Impact Assessment clearly points in the same direction.

The UN Framework Convention on Climate Change and the Kyoto Protocol are the key international instruments in the field of climate change. Most countries have ratified both of these agreements, and the US and Australia are the only developed countries that are not parties to the Kyoto Protocol. These instruments set out a range of obligations, including emission reductions (for developed countries), adaptation to climate change, reporting of greenhouse gas emissions and the implementation of national programmes. Under these instruments, developed countries are committed to supporting developing countries in their efforts to meet their commitments, for example through capacity-building, transfer of technology and financing. The Kyoto Protocol sets out quantitative emission commitments for developed countries only. Negotiations have been started for the next commitment period under the Kyoto Protocol. However, these only concern new commitments for developed countries. At the same time, a dialogue on long-term cooperative action to address climate change, open to all parties to the Convention, has been under way for the past two years. Its report will be discussed at the Conference of the Parties in Bali in December 2007. The Government's goal is for the conclusions to include a decision to initiate a broader-based negotiation process that can result in a more ambitious climate agreement including a larger number of countries for the period after 2012.

The Ministry of the Environment has constitutional responsibility for Norway's role in the international climate change negotiations, and for climate change efforts in Norway. These issues are not considered in any detail in this document, but it is clear that our climate-related efforts vis-à-vis developing countries may also have an impact on the positions they adopt in the climate change negotiations, and that the need for Norway to meet its Kyoto commitment can influence our involvement in CDM project activities.

There are no Millennium Development Goals that are directly related to the climate. Climate change will, however, make it harder to achieve most of the goals because of the serious impacts it has on people living in poor areas and on their environment.

Global climate change is not only an environmental problem, but is also clearly linked to the challenges we are facing as regards peace-building, eliminating poverty and achieving the Millennium Development Goals. We must focus on the links between environment, peace and development.

The sub-themes for our efforts in this area, which are described in more detail in section 4, have been selected partly because of their importance for developing countries and the global climate, partly because they are political priority areas for Norway, and, in some cases, partly because Norway has special expertise to offer.

3. Objectives

Climate change is a global problem, and Norway must therefore engage in international efforts to address it. The Government's international climate change strategy contains three main elements. Firstly, Norway will work towards the establishment of an ambitious and comprehensive climate change regime after the first commitment period under the Kyoto Protocol (2008–2012). Secondly, Norway will meet its own Kyoto commitment by a combination of domestic emission reductions and reducing emissions in other countries. The latter efforts will mainly be channelled through two of the Kyoto mechanisms, the Clean Development Mechanism (CDM) and Joint Implementation (JI). Thirdly, the Government will help the most vulnerable countries to adapt to climate change.

A general goal of development cooperation is to contribute to the development of low-carbon solutions that both satisfy the need for growth and take environmental concerns into account. In its efforts to contribute to limitation of greenhouse gas emissions in other countries, Norway will initially concentrate on countries that generate large volumes of greenhouse gas emissions, or that are following an emission-intensive path of development. As a group, developing countries will overtake the industrial countries in terms of total emissions in a few years, and China will soon overtake the US as the country with the highest greenhouse gas emissions. It will therefore be important to limit the increase in emissions from developing countries where emissions are high and rising rapidly, such as Brazil, India, Indonesia, China and South Africa. None of these has taken on quantitative emissions reduction commitments. It is important that these countries (and the US) take part in a global climate change regime after the end of the first commitment period under the Protocol.

Deforestation and the drainage of peat bogs for the production of palm oil, soya or other agricultural products for biofuel is an increasing problem with respect to greenhouse gas emissions. About 20% of global greenhouse gas emissions are generated by deforestation, mainly in tropical forests. The Stern Review identifies curbing deforestation as a highly cost-effective way of reducing greenhouse gas emissions. Cooperation on protection and sustainable management of forest resources will therefore be of key importance in Southeast Asia, the Amazon basin and Central Africa. Deforestation rates are also very high in several of Norway's partner countries in Africa, such as Zambia, Mozambique, Tanzania and Uganda. Conservation and sustainable use of forests reduces the impacts of climate change and is therefore an important element of adaptation to climate change. Forests play a part in ensuring stable water supplies for people, agriculture and energy production, reducing the risk of landslides in mountainous areas and vulnerability in coastal areas, and preventing desertification.

In its efforts to help developing countries to adapt to climate change, Norway will give priority to the poorest and most vulnerable population groups, areas and countries. It is the poorest countries that are hardest hit by climate change even though they have least responsibility for it. It is also these countries that are least able to adapt to climate change. The key to adaptation is to identify and deal with the social causes behind the vulnerability of different groups, and strengthen the strategies used by local populations to survive under naturally variable environmental conditions. In this way, the focus is shifted away from macroeconomic targets and towards vulnerable groups and the mechanisms that determine their living conditions.

The action plan recommends that Norway should:

- support national and regional research programmes and studies on the regional impacts of and vulnerability to climate change, particularly in sub-Saharan Africa and small island developing states;

- support capacity-building, focusing particularly on technical cooperation in the field of climate change and air pollution. Priority will be given to cooperation with countries that are major polluters;
- support the development of climate change adaptation strategies and adaptation measures, particularly in the poorest and most vulnerable countries;
- focus on cooperation and the synergies between climate change measures, the Convention to Combat Desertification and the Convention on Biological Diversity with a view to developing adaptation strategies

4. Sub-themes, channels and actors

4.1. Sub- themes

The following gives an overview of the main sub-themes for measures relating to climate change for the next few years.

A). Adaptation measures and measures to reduce vulnerability to climate change

As has already been mentioned, it is the poorest countries and population groups that will be hardest hit by climate change and that are least able to adapt. The costs of failing to implement adaptation measures can vary from a few per cent of GDP in some developing countries to ten times this level in others. Long-term positive development trends will not be possible unless developing countries reduce their vulnerability to climate change. Adaptation measures should be an integral part of development cooperation designed to reduce vulnerability. Furthermore, projects relating to the sound management of biological diversity and natural resources, the restoration of ecosystems such as forests and wetlands, projects to improve water resource management, and improvements in the emergency response system for natural disasters that are linked to climate change will be important. Projects and strategies must take local conditions into account. There is no one model that fits all. Knowledge in this field will be developed by the Global Environmental Change and Human Security (GECHS) project, which is supported by Norad (the Norwegian Agency for Development Cooperation).

B). Integrating measures to reduce vulnerability into national poverty and development strategies

Climate change affects all sectors of society. The impacts of climate change and measures to reduce vulnerability must therefore be integrated into all development strategies, plans and budgets. Few countries, even developed countries, have done this so far. Substantial support is therefore needed for competence-building and closer cooperation with relevant institutions in developing countries. Relevant areas are risk and vulnerability studies and adaptation activities in different sectors. Climate issues must be put on the agenda in the dialogue with partner countries in order to ensure that climate change and reduction of vulnerability are integrated their development plans. It will also be important to focus on the fact that many climate-relevant measures can also give co-benefits as regards health and living conditions.

C). Reducing emissions, including measures to promote the use of clean, renewable energy, energy efficiency measures and the development of low-carbon technology, as well as measures to avoid deforestation

The developed countries have a particular responsibility for dealing with the problem of climate change, since they are responsible for the largest proportion of greenhouse gas emissions to date. However, the countries that have taken on commitments under the Kyoto Protocol account for only some 30% of total greenhouse gas emissions, and this proportion is declining. Norway's target is for the average rise in global mean temperature to be limited

to no more than 2°C above the pre-industrial level. It is therefore vital that all countries, both developed and developing, cooperate to achieve cuts in emissions. However, there can be no question of denying developing countries participation in the economic growth that developed countries have enjoyed over the last 200 years. Besides, sustainable development and economic growth are necessary to put countries in a position to adapt to climate change. The challenge, therefore, is to achieve economic growth in developing countries by a less carbon-intensive path than the one the developed part of the world has followed.

This sub-theme is vital to efforts to promote economic growth in developing countries while at the same time limiting the increase in emissions. It will also be vital as a basis for a dialogue with developing countries on the need for these countries too to take on emission reduction commitments.

Energy use in developing countries will rise. It will therefore be an important task to promote the use of new and more energy-efficient technologies to give developing countries the opportunity to choose a more climate-friendly path of development as regards energy than the one we have followed. In its development cooperation, Norway will focus on promoting the use of clean, renewable energy, energy efficiency measures, and the development of low-carbon technology. The planned Clean Energy for Development initiative will be important in this context.

In developing countries with large areas of forest land, the largest source of greenhouse gas emissions is deforestation and land use changes (about 60% in Brazil and 80% in the Democratic Republic of the Congo and Indonesia). Several of these countries have used various international forums to raise the issue of compensation for avoiding deforestation. They have a strong argument since conservation of forests is considered to a very cost-effective way of reducing greenhouse gas emissions, but there is still a great deal of uncertainty about how this could be put in practice. Norway will support initiatives to develop satisfactory implementation mechanisms.

D). Climate proofing of development cooperation projects

All projects funded by Norway are to be assessed in relation to current and future climate change. Such assessments must take future emissions into account and ensure that adaptation measures and steps to reduce vulnerability are included in all projects. Requirements to this effect will be included in Norad's Development Cooperation Manual as part of the assessment of sustainability elements, and should form a natural part of environmental assessment. Adaptation to climate change and mitigation measures at local level in developing countries will be of crucial importance in ensuring that other development efforts are not undermined.

E). Project activities under the Clean Development Mechanism.

The Clean Development Mechanism (CDM) is one of the three Kyoto mechanisms for cooperation between countries to achieve emissions reductions, and the only one that involves developing countries. Through project activities that reduce greenhouse gas emissions in developing countries, it is possible to achieve reductions where they are more cost-effective. Project activities under the CDM can have significant benefits for host developing countries through their general contribution to sustainable development, competence-building, transfer of technology, and in some cases modernisation and increased efficiency of important sectors such as energy supply. Investors or purchasers of the certified emission reductions (CERs) generated by project activities can use these to help meet their emissions targets under the Kyoto Protocol (private companies that are required to take part in national emission trading systems can also use them to fulfil a proportion of their commitments).

Norway will allocate development funds for capacity- and competence-building to put developing countries in a better position to act as host countries for CDM project activities. Funds may also be allocated to cooperation on the development of potential CDM projects and for carrying out projects. However, funds used to purchase CERs may not be reported as ODA. CDM project activities are an important means of increasing interest in and increasing the legitimacy of the Kyoto Protocol in developing countries. Norway intends to support the establishment of innovative carbon funds designed to ensure continuation of the carbon market post-2012 and until an international agreement is in place, thus providing incentives to include climate-friendly technology at the planning stage in future infrastructure projects.

The CDM is a market-based mechanism, and investments will primarily be made in countries with a relatively low risk where the likelihood of achieving documented emissions reductions is high. In practice, this means major emitters such as India, China and Brazil. It is also important to pave the way for the CDM to be used in less attractive parts of the world, particularly in Africa, for example through capacity-building. However, in many developing countries, the factors that traditionally discourage investment, such as corruption, poor governance and poor legal protection of investments play an important role in this context as well.

4.2 Relevant channels – present and future

So far, most of Norway's international climate change efforts have been multilateral.

Multilateral channels – the UN system

Within the UN system, the Climate Change Secretariat (the secretariat for both the UNFCCC and the Kyoto Protocol) is the main direct recipient of Norwegian funds for climate policy work. Support to the secretariat is used mainly for capacity-building, holding meetings and financing processes such as the international approval system for CDM and JI project activities. It has also been important in ensuring that developing countries can participate in various processes under the auspices of the secretariat, including training and participation in the climate change negotiations themselves. The UNFCCC and the Kyoto Protocol are the main arena for multilateral climate change processes, and the secretariat needs continued financial support in order to function satisfactorily. Norway also provides considerable support for various funds under the UNFCCC (and will probably also do so for funds under the Kyoto Protocol) that are used to finance adaptation measures in developing countries (see the section on GEF below).

As regards implementation, UNDP is the most relevant partner in the UN system. Norway is for example currently supporting the integrated drylands development programme in Ethiopia and Uganda. This programme is helping to reduce vulnerability to climate change and promoting more sustainable land management and cooperation and synergy between multilateral environmental agreements (the UNFCCC and the United Nations Convention to Combat Desertification (UNCCD)). UNDP has taken several climate-related initiatives, including the establishment of the MDG Carbon Facility, which particularly benefits poor countries. In cooperation with UNEP, it is involved in CDM capacity-building with a particular focus on countries in Africa, such as the Nairobi Framework. Norway may decide to support some of these measures.

Through the framework agreement with Norway, UNEP has received support for information activities in developing countries relating to climate change, the need for adaptation, the IPCC's reports, the UNFCCC and the Kyoto Protocol. These efforts are important and Norway may provide further support. Norway also supports UNEP's assistance to national authorities in connection with the preparation, implementation and enforcement of environmental legislation. UNEP has built up considerable expertise in this field, and some

of this work will probably be relevant for climate change efforts. Support for this work should therefore be continued.

Multilateral channels – the development banks

Climate issues are high up on the agenda of the development banks. In 2006, the G8 requested the World Bank to draw up an Investment Framework for Clean Energy and Development to highlight climate change issues and help countries to prepare for and adapt to climate change. The regional development banks are also starting to deal with climate issues. The Asian Development Bank launched its Carbon Market Initiative in the autumn of 2006, and the Inter-American Development Bank launched its Sustainable Energy and Climate Change Initiative (SECCI) in January 2007.

One of the advantages of working through the development banks is that they have considerable influence over the finance authorities in recipient countries. This can help to ensure that climate change issues are addressed to a greater extent within the framework of macroeconomic development and not just as an environmental issue.

The World Bank is the most important of these banks. Norway provides support through various funds, including the Norwegian Trust Fund for Private Sector and Infrastructure (NTF-PSI) and the Trust Fund for Environmentally and Socially Sustainable Development (TFESSD), for climate change and energy activities such as:

- The **Energy Sector Management Assistance Program (ESMAP)**, which provides global technical assistance and contributes to the transfer of knowledge. Norway provides support through the NTF-PSI.
- The **Prototype Carbon Fund (PCF)**: this was the first carbon fund in the world, and Norway was one of the World Bank's main partners in its development. It has been a model for a number of similar funds that have since been established. Statoil and Hydro are also involved.
- The **World Bank's Carbon Finance Unit** has since established several other carbon funds, such as the Community Development Carbon Fund (Statkraft and Statoil have invested in this), the BioCarbon Fund and the comprehensive Umbrella Carbon Fund. The Carbon Finance Unit also carries out extensive capacity-building related to the CDM.
- The **Program on Forests (PROFOR)**, which is a partnership that seeks to increase information and knowledge about various issues relating to forestry as a livelihood, governance, funding and cross-sectoral cooperation.
- **Global Gas Flaring Reduction (GGFR)**, which is a public-private partnership between the authorities in oil-producing countries, state-owned companies and the leading international oil companies that seeks to reduce flaring through exchange of information and support for programmes in oil producing countries. Norway took the initiative to establish this fund, and is an important contributor.
- In addition, Norway is supporting a number of innovative, free-standing activities, such as the development of adaptation strategies and of tools for measuring carbon footprints.

The World Bank is in the process of developing a number of new clean energy/climate change initiatives. Norway has for some time been engaged in a dialogue with the Bank on the development of a cooperation programme in this field, with a tentative budget framework of NOK 80-100 million. Norway has indicated a special interest in providing support for the following four areas: carbon funds to give incentives to reduce deforestation, and to keep the carbon market functioning after 2012 and until an international agreement is in place: access to clean energy, with an emphasis on hydropower and solar energy: adaptation to climate change: and incentives/guarantees/risk-sharing arrangements to encourage private-sector involvement in clean energy and new technology in developing countries. In addition,

Norway will consider supporting an environmental transformation fund to cover some of the extra costs of adaptation and provide incentives for the use of new technology (including carbon capture and storage) in middle-income countries.

Multilateral channels – other international funds

The **Global Environment Facility (GEF)**. Norway was one of the countries behind the initiative to establish the GEF in the early 1990s. The GEF funds the additional costs of measures that benefit the global environment, and it has been by far the most important of the environmental financial institutions so far. Climate change is one of the GEF's focal areas, and approximately one-third of its funds are used for various climate change measures. Some of its other focal areas, such as biodiversity and land degradation (including deforestation) often include significant climate change elements in their project activities. The GEF is increasingly seeking to take the links between the various focal areas into account. Some 77% of its funds are ODA-approved. For the present four-year replenishment period, the GEF's capital amounts to around USD 3 billion. Norway makes a general contribution to the facility (approximately NOK 57 million per year), and also co-finances projects under certain operational programmes.

Three new climate change funds have been established under the UNFCCC and the Kyoto Protocol, all of which focus on adaptation (the first two are managed by the GEF):

- The **Least Developed Countries Fund (LDCF)** under the UNFCCC. It has started by funding the preparation of national adaptation programmes of action by the Least Developed Countries (LDCs). Several of these plans have been completed, and the focus will increasingly be on concrete projects. Norway has contributed to the fund from the start, and plans to step up its contribution in line with the fund's increasing needs. The fund has so far received a total of just over USD 100 million, and the Norwegian contribution has been around NOK 30 million.
- The **Special Climate Change Fund**, which is also under the UNFCCC, is operational in two of its four focus areas (adaptation, and technology transfer and capacity building), and the first projects are now in the pipeline. Norway has contributed NOK 24 million to the fund, which totals some USD 100 million.
- The **Adaptation Fund** under the Kyoto Protocol is in the start-up phase. It is an innovative fund in that it is to be financed partly by a 2% share of proceeds from CDM project activities. It therefore has great potential. The fund is also open for voluntary contributions. These will be important in the preliminary phase until a sufficient CDM volume has been established. It has not yet been decided which institution will manage this fund.

Bilateral channels – state-to-state, private sector, research and NGOs

Norway's bilateral efforts in the climate change area have been modest, but we have established cooperation within such areas as research, studies and capacity-building with a number of major emitters such as China, India and South Africa. Norway has also sought to incorporate climate considerations into bilateral energy projects. In addition, support has been provided via a number of Norwegian actors (e.g. ECON, the Center for International Climate and Environmental Research – Oslo (Cicero), the Fridtjof Nansen Institute (FNI), the GECHS project) for research, studies and capacity-building for proposed CDM projects in several developing countries and for research on vulnerability and adaptation. Norway will also support climate-related work by international NGOs such as the International Centre for Integrated Mountain Development (ICIMOD), the International Institute for Environment and Development (IIED) and the International Institute for Sustainable Development (IISD).

A good deal of support has been provided through state-to-state cooperation for hydropower measures and other clean energy and energy efficiency measures, and these have also had a positive effect with regard to climate change. In accordance with the Clean Energy for Development initiative, such measures must not increase the vulnerability of groups of the

population to climate change. In other words, vulnerability must be taken into consideration when energy projects are being planned.

In recent years, development cooperation has given greater emphasis to helping the most vulnerable developing countries to adapt to climate change. So far, the emphasis has been on drawing up national vulnerability and adaptation strategies, but now many of these have progressed so far that the implementation of concrete measures is being discussed. It is very important that adaptation is fully integrated into countries' development plans and strategies.

It is expected that the bilateral channel will become more important in the time to come as awareness of climate change increases in both donor and recipient countries. Areas that are expected to receive more attention are vulnerability and adaptation to climate change (especially the implementation of adaptation measures), integrating climate change considerations into all development plans and activities and climate proofing of development cooperation projects. Another possible priority area is strategic projects in connection with emissions reductions in the major emitting countries.

A number of Norwegian NGOs are already working on projects of key importance in relation to adaptation to climate change. Some of the more important of these are WWF (water, forests, coastal zone management), the Rainforest Foundation Norway (forests), the Norwegian Development Fund (agricultural biodiversity, vulnerability), CARE (agricultural biodiversity, vulnerability) and the Drylands Coordination Group (desertification, drought, vulnerability). These organisations and their local partners also function as watchdogs, ensuring that climate issues are put on the agenda at local, national and international level. Civil society thus plays an important complementary role to state-to-state cooperation and efforts through multilateral channels.

The private sector also has an important role to play through greater focus on corporate social responsibility, the development of low-carbon technology, and investments in clean energy, for example through SN Power Invest and other Norwegian power companies. Norway's support for climate change related measures through the private sector can be strengthened through active use and adaptation of the private sector schemes. Support for the private sector should also be seen in connection with the use of national subsidies, the development of national legislation, for example for energy efficiency, the establishment of a carbon price and steps to strengthen the general framework for the private sector. Norway can play a part in strengthening this framework through bilateral cooperation, and at the same time pave the way for the development and use of low-carbon technology.

4.3. Cooperation partners and channels for the various sub-themes

This section presents the most important channels and cooperation partners for each sub-theme:

Sub-theme A): Adaptation measures and measures to reduce vulnerability to climate change

Increased support for mechanisms under the UNFCCC:

- the Least Developed Countries Fund;
- the Special Climate Change Fund;
- the Adaptation Fund under the Kyoto Protocol, which is unlikely to be relevant before 2008 or 2009.

These are the most important multilateral mechanisms for adaptation measures, and Norway should consider increasing its support to them. Norway is involved in the management of

these funds through its participation in the UNFCCC/Kyoto Protocol and its seat on the GEF board.

Norway should focus more on vulnerability to climate change and adaptation measures in its bilateral cooperation. Cooperation between Norwegian and international research centres will be important as a means of developing knowledge about the possible impacts of climate change at national and local level and the potential for adaptation. In drawing up adaptation strategies, it is also important to involve representatives of the target groups for relevant measures. NGOs can be effective in mobilising and ensuring grass-roots participation, and can bring local priorities into national processes.

Since active and clearly targeted efforts to reduce vulnerability to climate change and promote adaptation measures are a new area in development cooperation, we have provided some examples of possible activities below. This is not an exhaustive list, and not all these activities are equally relevant in all countries:

- Economic growth and diversification – food security
 - Use of more drought-resistant varieties in agriculture, changes to production methods and cultivation of different crops. Norway's agricultural programme in Zambia includes these elements.
 - Food security and support towards implementation of the Convention to Combat Desertification.
- Investments in health, education and the transfer of technology
 - Measures to fight malaria and other water-related diseases will help to reduce the risk of such diseases in the future (climate change is expected to increase their prevalence).
 - There is little knowledge about climate change and its impacts in most countries. Improved education and training at all levels for the public, the authorities and local and national NGOs will build up knowledge, understanding and capacity for addressing the challenges, and will make it easier to plan adaptation measures.
- Reduction of vulnerability to natural disasters and more effective response to disasters:
 - The recognition that prevention is the most cost-effective strategy for reducing vulnerability (see the Stern Review).
 - A white paper on the prevention of humanitarian disasters will be presented shortly and will discuss how to prevent environmental degradation and climate change from increasing vulnerability to humanitarian disasters. If its recommendations, including the development and strengthening of effective warning systems, are implemented, this could make an important contribution to the reduction of vulnerability to climate change.
 - Increased cooperation on land-use planning, particularly in growing urban areas.
 - Increased focus on infrastructure; for example, support will be given for flood-mitigation dams in connection with cooperation on hydropower.
 - Projects in Bangladesh have helped to reduce the impact of flooding considerably, for example through structural measures in agriculture (planting rice varieties that are adapted to the environment), better market access for agricultural products, increased private food imports, access to microcredit, transition to a more textile-based economy, etc. These efforts have to some extent been funded through development cooperation. The vulnerability of the economy has been considerably reduced.
 - Measures to reduce erosion, landslides, glacial lake outburst floods and avalanches.

- Improving access to and management of important resources that poor people use in their traditional adaptation strategies, such as grazing areas and forests that are used seasonally, and water sources.
- Reduction of risk, including establishing safety nets for the poorest:
 - Microfinance and insurance schemes.
 - Norway is one of the co-financers for the Mangroves for the Future initiative in Asia, together with the Clinton Foundation. This is a joint World Conservation Union (IUCN)/UNDP programme to re-establish mangrove forests along the coast.
 - Hydropower infrastructure in Nepal is vulnerable to glacial lake outburst floods (GLOF). Several measures are being considered in connection with hydropower developments, such as where plants are located, establishing warning systems, drainage of lakes, increasing reservoir capacity, and diversifying energy supplies.

Sub-theme B): Integrating measures to reduce vulnerability into national poverty and development strategies

Norway will raise this issue in its dialogue with partner countries, and will provide concrete support for projects that can contribute to this process (analytical studies, technical cooperation, etc.). The climate change issue must be taken out of the environmental box, and integrated into all sectors.

This issue should also be raised in relevant multilateral arenas (e.g. UNDP, the World Bank) in connection with discussions on poverty reduction strategies, development plans and so on.

It is important to make use of the experience and local knowledge of civil society and NGOs in studies of the environmental impacts of climate change. NGOs have expertise on management regimes and other factors that can be used to make ecosystems more resilient to global warming.

Sub-theme C): Measures to promote the use of clean, renewable energy, energy efficiency measures and the development of low-carbon technology, as well as measures to avoid deforestation

The implementation of the Clean Energy for Development initiative will be an important factor in the follow-up of this sub-theme. In addition to increasing energy cooperation in countries such as Mozambique, Uganda and Nepal, this will involve strengthening regional efforts, including Norway's engagement as lead donor to the South African Development Community (SADC) in the energy sector and the Nile Basin Initiative. For more details of these efforts, see the document on the Clean Energy for Development initiative.

The World Bank's report on an Investment Framework for Clean Energy and Development deals with the transition to a low-carbon and energy-efficient economy, promotion of technology development, measures to avoid deforestation, prevention of natural disasters and adaptation to climate change. In addition, the Asian Development Bank has established a Clean Energy and Environment Program.

The Programme Cooperation Agreement between Norway and UNDP on Norway's contribution to funds such as the Thematic Trust Fund for Energy and Environment will be revised in 2007.

The Global Energy Efficiency and Renewable Energy Fund (GEEREF) is an innovative private-public fund currently being established to increase access to risk capital for small- and medium-scale projects in the field of renewable energy and energy efficiency in developing countries. It is designed to fund projects that cost less than EUR 10 million, because experience shows that these fall outside the portfolio of commercial actors and

International Financial Institutions (IFIs). The fund has developed from the renewable energy initiative that was launched during the Johannesburg Summit. The European Commission has spearheaded the efforts to establish the fund. The fund's objectives are similar to those of the Norwegian Action Plan for Environment in Development, and it will be a supplement to the renewable energy efforts in development cooperation.

Norway is providing NOK 30 million for the Renewable Energy and Efficiency Partnership (REEEP) over a three-year period. REEEP is an international partnership made up of governments, NGOs and companies that promote renewable energy and energy-efficient technology. The partnership is focusing on lower carbon emissions, increased energy security and safe access to clean energy. Its goals are similar to those of the action plan for environment in development cooperation. REEEP is particularly active in China, Brazil, India and South Africa. Through REEEP, Norwegian funding is to be used to promote the use of clean energy in poor countries. It will for example be used on water pumps that run on solar cell technology and on insulation of homes in poor areas.

Norad has carried out a study of the multilateral channels in the energy area, which will be useful in implementing measures to increase the use of clean energy and renewable energy, energy efficiency measures and the development of low-carbon technology.

Sub-theme D) Climate proofing of development cooperation projects

Climate change issues, including both emissions reductions and adaptation measures, should be a cross-cutting theme in all development cooperation.

The potential for reducing greenhouse gas emissions is to be considered and followed up in all energy cooperation, and should be a key element in assessments in connection with cooperation on settlement and urbanisation.

It will be important to consider adaptation to climate change and reduction of vulnerability whenever funding is provided for infrastructure, such as homes and roads. It will also be important to include this dimension in land-use planning and the planning of new settlements. Guidelines will be drawn up for climate proofing of all projects funded by Norway as part of the assessment of sustainability elements. These efforts must be coordinated with other donors.

Support will be provided to the Climate Change Secretariat for meetings and other events to ensure progress with the climate change agenda, including assistance to enable developing countries to participate. Support may also be provided to enable developing countries to participate in other meetings and processes. This will be considered on an individual basis. Support for special measures that fall outside the sub-themes, such as support for UNEP's information efforts on climate change, will also be considered on an ad hoc basis.

Sub-theme E): Project activities under the Clean Development Mechanism (CDM)

UNDP has established the MDG Carbon Facility with the aim of encouraging the establishment of CDM projects in countries 26/11/2007 where the combination of risk level and expected return is not conducive to investment by commercial actors, particularly in Africa.

In 2006, UNDP and UNEP initiated the Nairobi Framework, a broad programme to increase capacity for CDM projects, focusing particularly on countries in Africa. Norway is considering providing support for various activities under the Nairobi Framework.

In addition to investing in various carbon funds, the World Bank's Carbon Finance Unit is also carrying out significant CDM capacity-building efforts in a number of developing countries. Although investments in carbon funds may not be reported as ODA, Norway will

consider supporting the Unit's capacity-building efforts. The Asian Development Bank and the Inter-American Development Bank have both launched carbon and energy initiatives – the Carbon Market Initiative (CMI) and the Sustainable Energy and Climate Change Initiative (SECCI) respectively.

Norway has supported the establishment of the various initiatives by the World Bank and the regional development banks. It is proposed that Norway should enter into a closer dialogue on financial support for the World Bank Group Clean Energy for Development Investment Framework and the funds in the regional banks, and that a reference group of experts should be established in Norway to give advice on which measures should be supported and intensify the technical dialogue and coordination with the development banks.

CDM capacity building through bilateral development cooperation is of particular interest in Africa, where there is an urgent need for competence- and knowledge-building regarding the CDM. This can also be a way of increasing support for the Kyoto Protocol in developing countries and ensuring their cooperation on a new and more comprehensive emissions reductions regime after the first commitment period under the Protocol ends in 2012. Cooperation with research and development institutions and, where relevant, finance mechanisms with a focus on international development, such as Norfund and the Norwegian Guarantee Institute for Export Credits (GIEK) may be appropriate. South Africa and Norway have reached agreement on bilateral cooperation on climate change. This will mainly be organised within the framework of development cooperation with South Africa in the energy sector. Climate change is one of three priority areas in this cooperation. Norway has contributed to the development of a CDM strategy for South Africa.