

Norwegian submission on Strategies and Approaches for scaling up climate finance

Introduction

Decision 3. CP/19 requested developed country Parties to update their strategies and approaches for scaling up climate finance up to 2020. We have found the process of compiling our updated strategies and approaches challenging, as it required collecting qualitative and quantitative information that was uncertain or not readily available. Despite these challenges, we feel it has been a learning process which serves an important purpose: to facilitate forward planning of scaled up climate action in developing countries. This purpose will clearly continue to be important in the post-2020 world.

Since last year, important strides have been made in the scaling up of climate finance, particularly through the pledges that have recently been made to the Green Climate Fund. Norway has done its part to contribute to predictability on expected levels of climate finance by:

- Confirming Norway's intent to continue to finance REDD+ at least at current levels until 2020, i.e. approx. USD 484¹ million, annually.
- Announcing our willingness to significantly scale up payments for measured, reported and verified forest-related emission reductions in the post-2020 period, as part of strong ambition and commitment to address deforestation from both developing and developed countries.
- Announcing a contribution to the Green Climate Fund of USD 129 million for the period 2015-2018.
- Decision 3. CP/19 urged developed countries to maintain continuity of mobilization of public climate finance at increasing levels. Based on the above confirmations and announcements, Norway expects to maintain continuity of its climate finance at high levels in the years to come, with an increase in 2015 compared to 2014.

At the in-session workshops on long-term climate finance in June 2014, several parties expressed that the strategies and approaches might be strengthened by more granular information. In order to make this document as useful as possible for developing countries as they plan future climate action, this submission also includes an Annex containing additional information on our programmes and priorities in climate financing.

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¹ Exchange rates used in this document are: for 2012: 1 USD= 5.8149 NOK, for 2013: 1 USD= 5.877 NOK, for 2014: 1 USD = 6.201 NOK. The 2014 exchange rate is equivalent to the rate used when calculating our Green Climate Fund (GCF) contribution for the period 2015-2018.

1. Information on Norwegian policies, programmes, priorities and information on actions and plans to mobilize additional finance.

Norway remains a major contributor of finance for climate action in developing countries. Our engagement in this area is motivated by the urgent need to enable more ambitious mitigation and adaptation action. Norway has taken firm steps to increase the climate relevant share of its ODA. Between 2006 and 2012, the share of bilateral climate finance in the ODA budget increased from around 3% to 18%. ODA's share of GNI was 0.93 in 2012.

In 2012 climate change mitigation and adaptation assistance was USD 851 million in 2012. In 2013, our climate finance amounted to approx. USD 1271 million. This includes an extraordinary payment to Brazil in 2013 under the Government of Norway's International Climate and Forest Initiative (NICFI) of USD 492 million, which were committed and set aside on promissory notes in the period 2010-2012, but finally transferred in 2013. Without this payment, our 2013 total climate finance was 779 million USD.

We expect an increase of our climate finance in 2015 compared to 2014, followed by high levels in the years to come, partly as a result of the Government's decision to continue REDD + financing to 2020 and a multi-year contribution to the Green Climate Fund (GCF).

Our climate finance is concentrated in three main areas; REDD+, clean energy and climate adaptation. We present these three areas in more detail in the annex. Below is a brief summary of financial support for these three main sectors:

- The Government of Norway's International Climate and Forest Initiative (NICFI) constitutes by far the largest part of Norway's mitigation assistance. In 2013 about USD 350 million was disbursed from NICFI. In 2014 the total budget for NICFI is approx. USD 484 million. The Government has confirmed Norway's intent to continue to finance REDD+ annually at least at current levels until 2020, i.e. approx. USD 484 million.
- Norwegian assistance to clean energy use public sources to finance ways that mobilize and incentivize commercial investments that lead to increased energy access, generation of renewable energy, improved energy efficiency and reduced greenhouse gas emissions in development partner countries. In 2013 Norway disbursed USD 209 billion in assistance to clean energy. In addition, Norfund² disbursed over USD 150 million to clean energy projects. In 2014, our energy-related mitigation assistance is expected to amount to approx. USD 210 million. In 2015 the Norwegian support to clean energy will be approx. USD 177 million. The investments by Norfund will come on top of this budget.

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² Norfund is the finance institution that serves as the commercial investment instrument of Norway's development policy.

 Norwegian assistance for climate change adaptation has been scaled up in recent years, both looking at activities for adaptation only, and when looking at activities targeting both adaptation and mitigation. The total amount in 2010 was USD 67 million. In 2013, the total amount was USD 112 million. For 2014, the figures are still uncertain, but are expected to increase.

Norway will remain a champion of approaches where support is linked to verified achievement of climate results, in particular emission reductions. Climate finance flows must be linked to concrete mitigation and adaptation action so as to deliver effective results with crucial development gains. We expect the Green Climate Fund to play an important role in the years to come. There is, however, significant work to do in developing the GCF and other funds and institutions further so they are fit to support scaled up climate action.

Furthermore, to respond effectively and appropriately to the needs of poor and vulnerable countries, international support must come from all Parties in a position to contribute.

2. Information to increase clarity on the expected levels of climate finance mobilized from different sources

Mobilising private finance

Public sources will not itself be sufficient to manage climate change. There will be no green shift without the private sector. Private finance on a large scale is necessary to transition the world's economy to a low carbon path, reduce greenhouse gas concentrations to safe levels, and build the resilience of vulnerable countries to climate change. For the public there is an important role to play in using its limited public funds as a lever to shift private investment towards climate friendly solutions. Through smart use of public funds, together with predictable and attractive policy frameworks that create the right incentives, we can attract private investment and unlock the major business opportunities that the transition to clean energy systems presents.

Many of the efforts undertaken by Norway in the field of climate change are directed at strengthening technical and institutional capacity to support private sector investment, often in cooperation with other donor-countries or through programs or funds in multilateral development institutions. One example is the <u>Global Energy Efficiency and Renewable Energy Fund (GEEREF)</u>, where Norway along with the EU and Germany, contributed to the establishment of the fund. GEEREF invests in private equity funds that specialize in providing equity finance to small and medium-sized project developers and enterprises, helping bring secure, clean and affordable energy to the world's poorer regions. Another example is Norway's support to the Asian Development Bank's Clean Energy Financing Partnership Facility. The purpose of the fund is to increase investment in and access to technology for clean energy, including support to development of strategies, implementation of reforms and institution and capacity in the energy sector to facilitate investments from the private sector.

<u>Norfund</u> serves as the commercial investment instrument of Norway's development policy. Norfund's purpose is to create sustainable commercial activities in developing countries by establishing and developing viable, profitable enterprises beyond what would otherwise be possible. Norfund supplies risk capital in environments in which capital is particularly scarce and always invests jointly with partners. By co-investing with others, Norfund leverage additional capital and ensures the industrial and local knowledge needed for each investment.

A number of different methods for estimating catalytic effect exist. In Norfund, the leverage ratio - the ratio of invested capital to leveraged capital – is used as an indicator to measure this effect. Norfund has calculated the leverage ratio based on actual commitments. However, it is important to note that the leverage ratio does not consider the extent to which Norfund's participation and active role has actually catalyzed private financing, nor does it capture project- and country-specific risks. The leverage ratio should therefore be used with caution. Below follows some key figures for Norfund's investments:

- Renewable energy is the largest part of Norfund's portfolio with committed investments of approx. USD 800 million at the end of 2013.
- In 2013, Norfund's portfolio of projects generated electricity equivalent to the annual consumption of 8.9 million people. Norfund's portfolio of projects in 2013 is estimated to have displaced the equivalent of 1.1 tonnes of CO2.
- Past analyses of Norfund's portfolio have shown an average leverage effect of investments in renewable energy of 1:9, meaning that Norfund's investments have been accompanied by around USD 7.2 billion in private funding.
- Government appropriations for Norfund are proposed to increase by approx. USD
 40 million for 2015 out of total budget for Norfund of approx. USD 239 million. It is
 expected that at least 50% of Norfund's capital contribution from the government in
 2015 will be invested in renewable energy.

Norfund's investments in energy have traditionally been focused on hydropower, but in recent years the fund has made substantial investments in wind and solar energy. Strong partners and proven technologies are key elements of Norfund's strategy, and leveraging of private capital will be a key feature of Norfund's investments also in 2015

Alternative sources

In the first commitment period of the Kyoto Protocol (2008-2012), the government entered into agreements to procure carbon credits with total expected delivery of 23.1 million. Preliminary estimates indicate that Norway needs 21.2 million credits to reach the goal set by the Government of 10 per cent over-achievement of the first commitment period.

- Overall, we have spent approx. USD 242 million on the purchase of carbon credits generated in the first Kyoto Period. This is over-achievement, i.e. – not required in order to reach our international Kyoto Protocol commitment.
- Approx. USD 139 million was paid out in 2013.
- Norway has only purchased UN approved credits.

In the second commitment period (2013-2020), the government has been authorized by the Parliament to enter into agreements to procure carbon credits of up to USD approx. 323 million. Total procurement requirements are still somewhat uncertain - it depends on amongst others the link between the EU ETS and the Kyoto Protocol.

Norway will primarily buy credits from registered projects at risk to discontinue operations due to low market prices (vulnerable projects) and from new projects. The Norwegian Carbon Procurement Facility (NoRCaP) was established in 2013, and is managed by the Nordic Environmental Finance Cooperation (NEFCO). The principal objective of NoRCaP is to prevent reversal of emission reduction activities by procuring credits from UN approved projects whose survival or continued emissions reduction activity depend on a higher carbon price than achievable under current market conditions. The fund's target is to procure up to 30 million CERs. Procurement of credits from new projects is primarily done through two World Bank funds and a fund administered by NEFCO.

For Norway is it important that the agreement in Paris 2015 must secure the possibility for cooperation on emissions reductions between Parties by using market based instruments and should reflect that such cooperation can take many forms; ia. International emissions trading (for example International Emissions Trading under the Kyoto Protocol), "sectoral" crediting (this could occur under the New Market Mechanism and possibly REDD+) as well as project based cooperation (examples are the Clean Development Mechanism and Joint Implementation). Such future market based mechanisms could have a role in generating revenues for climate actions.

Furthermore, an international price on carbon would give a clear signal to investors that it is less profitable to invest in activities with high CO2 emissions, more profitable to invest in renewables. Norway acknowledges the need to make this happen, for both climate and development reasons. Subsidies to fossil fuels are the opposite of a price on emissions. Norway therefore takes active part in international initiatives to phase out fossil fuel subsidies. Norway has been the largest donor to the Global Subsidies Initiative of the International Institute of Sustainable Development during 2008-2014, and will be scaling up financial support to the World Bank ESMAP Subsidy Reform Program. We are member of the Friend's Group on Fossil Fuel Subsidy Reform and support its work to promote reduction of fossil fuels subsidies worldwide.

3. Information on how Parties are ensuring the balance between adaptation and mitigation, in particular the needs of developing countries that are particularly vulnerable to the adverse effects of climate change.

Norwegian assistance for climate change adaptation has been scaled up in recent years. Our adaptation assistance increased by approx. 67% over the last four years. The total amount in 2010 was USD 67 million. In 2013, the total amount was USD 112 million. We expect a further increase in 2014. We are pleased that the Green Climate Fund has decided to aim for a balance of 50:50 allocation to mitigation and adaptation, and a floor of 50% of the

adaptation funding for particularly vulnerable countries. Contributions to the GCF will thereby improve the balance between adaptation and mitigation.

Adaptation to climate change is, however, still an area which unfortunately receives too little financial support. We expect the new agreement to recognize the importance of adaptation finance. Norway hopes to contribute to a change to this area and will direct a larger share of our climate finance to adaptation in the years to come.

4. Information on steps taken to enhance enabling environments

Enabling environments for Norwegian climate finance

Norway's government bases its policy on the responsibility to help safeguard the planet and on the precautionary principle. There is broad Parliamentary support for pursuing an ambitious climate policy, both nationally and internationally.

Enabling market conditions and creating market readiness is essential for private investments to be scaled up. The private sector needs reliable, long-term signals. Effective and predictable climate policy is a key. The most effective signal governments can give to encourage low-emission investments is to put a price on carbon, which Norway has worked for at a national and international level for many years. Norway will continue to work to identify measures that can reduce risk and make it more attractive for private sector investments in clean energy. A White paper on private sector in development cooperation is expected during the first half of 2015, in which this will particularly be addressed.

The Norwegian Government Pension Fund Global (GPFG) is a financial investor, with a mandate to aim for good financial returns for future generations within moderate risk. At the same time, we aim for best practice in responsible investing. A significant portion of the Fund can be characterized as environmentally friendly. About 6 percent of the value of the GPFG equity benchmark, corresponding to approx. USD 29 billion, is already accounted for by companies that derive more than 20 percent of their earnings from environment-related activities. In 2009, the government established environment-related investment mandates in the management of the GPFG. This has formed part of the responsible investment strategy ever since. This year, it has been decided that the range of these mandates should increase from approx. USD 3.2 - 4.8 billion to approx. USD 4.8 - 8 billion. The Norwegian Parliament has asked the government to establish an expert group to assess GPFG's appropriate use of policy instruments (exercise of ownership and exertion of influence vs. exclusion) regarding the investments in coal and petroleum companies. The Group shall also advise on possible criteria for the potential exclusion of these types of companies. We know that global climate risk may affect the future return on the Fund and have a long history for taking climate issues seriously in our fund management. This year we will initiate work to shed additional light on the risk to the future return on the Fund posed by climate change.

Enabling environments in developing countries

Norway is pleased that there is growing recognition that enabling policy frameworks and credible long-term planning in developing countries are a critical "pull-factor" to attract climate finance from various sources. Technical assistance and capacity building are important means to help developing countries create enabling environments. Norway has made this as important element of all our ODA, recognizing that enabling conditions, fuelled by national self-interest, will stimulate increasing flows of private and public investment to a climate-friendly, low-emission and inclusive economy. In particular we expect the Green Climate Fund to continue to play an important role in this regard. Norway also supports demand-driven assistance to countries interested in taking advantage of climate-friendly development opportunities, like the UN Poverty and Environment Initiative (PEI), the broad UN Partnership for Action on Green Economy (PAGE) and Global Green Growth Institute (3GI). Adding to this, The New Climate Economy report provides important evidence of how to achieve economic prosperity and development while also combating climate change. Norway has together with Colombia, Ethiopia, Indonesia, South Korea, Sweden and the UK commissioned the study which was launched September 2014.

In order for countries to benefit from technical assistance and capacity building, we also expect developing countries to provide resources for domestic climate action in line with their national capabilities and circumstances.

ANNEX – additional information on programmes and priorities in Norway's climate finance

1. Norway's International Climate and Forest Initiative (NICFI)

i) Finance

In 2013 about USD 350 mill was disbursed from the Norwegian Climate and Forest Initiative (NICFI). In 2014 the total budget for NICFI is approx. USD 484 million. The Government has confirmed Norway's intent to continue to finance REDD+ annually at least at current levels until 2020. The funds are being distributed through bilateral partnerships and multilateral collaborations and support to civil society.

The funds have been distributed as follows in the period 2008-2014 (as of 1.8.2014):

- Brazil: approx. USD 774 million
- Indonesia: approx. USD 37 million
- Guyana: approx. USD 69 million
- Ethiopia: approx. USD 13 million
- Tanzania: approx. USD 47 million
- Mexico: approx. USD 13 million
- Vietnam: approx. USD 17 million
- UN REDD Programme: approx. USD 191 million
- Forest Carbon Partnership Facility (adm. by the World Bank): approx. USD 236 million
- Forest Investment Programme: (part of the World Bank's Climate Investment Funds): approx. USD 145 million
- Congo Basin Forest Fund (CBFF) (channelled through the African Development Bank): approx. USD 85 million.
- Civil society and knowledge institutions (adm. by Norad The Norwegian Agency for Development Cooperation): approx. USD 188 million

ii) Objective

The three core objectives for the Climate and Forest Initiative are:

- To work towards the inclusion of emissions from deforestation and forest degradation in a new international climate regime.
- To take early action to achieve cost-effective and verifiable reductions in greenhouse gas emissions.
- To promote the conservation of natural forests to maintain their carbon storage capacity.

iii) Results

A real-time evaluation of NICFI³ from 2014 shows the following key results on achievement of the NICFI Objectives.

NICFI's contribution to the establishment of a Global REDD+ Regime has been a great success:

- NICFI is the largest REDD+ donor globally
- Substantial contribution to operational architecture and to engagement of both REDD+ and donor countries
- Flagship bilateral partnerships have leveraged political support for REDD+
- Instrumental to the progress on REDD+ in the UNFCCC climate change negotiations

NICFI has made a good contribution to taking early action on REDD+:

- Major contribution to international policy and national progress on REDD+ Measurement, Reporting and Verification (MRV) and Reference Levels
- Important contribution to REDD+ financial mechanisms
- Strong contribution to safeguards and broad stakeholder engagement in REDD+
- However, engagement with the private sector and partner country finance and agriculture ministries is insufficient

NICFI has made a solid contribution to promoting conservation of natural forests:

- Pilot projects and the establishment of new conservation forests
- A moratorium on new forest and peat land concessions in Indonesia
- Safeguards on natural forest conservation

NICFI has made an active contribution to achievement of Norwegian development policy goals:

- Forest governance has been strongly addressed
- Development of Social Safeguards
- Rights of indigenous people given strong attention; important progress made in Indonesia
- Strong contribution to sustainable development
- However, rights of non-indigenous people are less-well covered and progress on gender issues is limited by lack of expertise on gender in partner countries

iv) Examples of country programs

Brazil: Brazil's deforestation rate and corresponding greenhouse gas emissions have strongly decreased and activities established through NICFI's payments for these results are paving the way for future emissions reductions. The real-time evaluation states that one criteria of

³ The full evaluation report is available here: <a href="http://www.norad.no/en/tools-and-publications/publications/evaluations/publications/evaluations/publications/evaluations/publications/evalu

success in Brazil is that the country had already initiated action to reduce deforestation before the partnership with Norway was in place. Still, the Norwegian high profile commitment to the fund capitalized it and made it operational. In the evaluation, Brazilian stakeholders highlight the local and global importance of the fund. The financial support provided by NICFI has produced a significant stimulus to policy debates on deforestation and emission reductions in Brazil.

Indonesia: Many of the key structural systems and elements for REDD+ implementation have been designed under Phase 1 of the Indonesia- Norway bilateral agreement. These include a national REDD+ financial mechanism; an MRV system (with contributions from the UN-REDD Indonesia country programme and Forest Carbon Partnership Facility (FCPF) readiness grant); safeguards and a safeguards information system. These are anticipated to become operational during Phase 2 of the bilateral agreement. Substantial progress on REDD+ Phase 1 readiness planning has been made, with a National REDD+ Strategy and National REDD+ Action Plan developed; sub-national REDD+ strategies and action plans have been completed in seven provinces and are under development in a further four provinces and several districts. But with 34 provinces and 500 districts in total in Indonesia, there is also a long way to go. Despite a difficult consensus-building process, important progress on the institutional arrangements for REDD+ in Indonesia has been made, with the REDD+ Agency established by Presidential Regulation in late 2013. Good progress has been made in establishing the means for measuring and reporting of emissions reductions and the institutional framework for MRV.

Given the political climate and the weaknesses in the legal basis for REDD+, there is a serious risk that progress may slip backwards in Indonesia and achievements will be lost.

v) Barriers and how to cope with them

The real-time evaluation of NICFI makes the following recommendations:

- Using this report and other relevant material, assess the progress made on REDD+, the contribution of NICFI support together with that of other donors, the varied progress in REDD+ countries and a gap analysis to provide an objective basis for a review of NICFI policy and strategy.
- Develop a revised NICFI policy and strategy including a formal Theory of Change linked to a responsive, results-based reporting framework that takes into account the needs and priorities of all the agencies engaged in NICFI.
- Undertake a review of partnerships with other donors and the multilateral organisations, with a view towards optimising the multilaterals' activities. This should take into account their differing mandates, constraints and opportunities for synergy with NICFI's strengths.
- Develop a common approach with other donors to leverage greater efficiency and effectiveness from the multilateral institutions.

- For different reasons, there have been limitations to progress in Guyana and in Tanzania. Both countries should be visited by a high-level, multi-disciplinary team to discuss the reasons for this and whether and how NICFI support should be continued.
- NICFI should give attention to communication: providing more information on its progress and successes through a variety of means. This should include, but not be limited to, a comprehensive website with links to reports and other sources of information. It should also continue efforts to secure greater transparency on the flow of funds around REDD+, especially where funds are channeled through multilateral partners.

2. Norwegian assistance to Clean Energy

i) Financial support

In 2013 Norway disbursed USD 209 billion in assistance to clean energy. In addition, Norfund disbursed over USD 150 million to clean energy projects. Most of the funding was managed by Norwegian Embassies, the Ministry of Foreign Affairs, Norfund and Norad. The countries that received most of the support in 2013 were: Liberia (USD 25 mill.), Tanzania (USD 25 mill.) and Uganda (USD 22 mill.). In addition to bilateral funding, approx 30 % of the support runs through multilateral channels, incl. international development banks, the UN-system and specific international funds.

In 2014, our energy-related mitigation assistance is expected to amount to approx. USD 209 million. In 2015 the Norwegian support to clean energy will be approx. USD 177 million. The investments by Norfund will come on top of this budget.

ii) Objective

The Government of Norway has launched two energy initiatives for sustainable development. Clean Energy for Development and the International Energy and Climate Initiative, Energy+. The Clean Energy for Development initiative was launched in 2007 to increase access to affordable clean energy through efficient long-term management of natural resources and energy use. The funds are primarily used to support the production of clean energy, building of transmission and distribution systems and increased capacity in the energy sector. Energy+ is an international partnership launched in 2011. It aims to mobilise action to increase access to sustainable energy services and avoid greenhouse gas emissions, using a results-based and sectorial approach. Norway has in both initiatives a clear focus on developing business models to leverage private investments in the energy sector. Africa is the main focus area, but some countries in Asia and Latin America also receives support.

Norway and UNEP will launch the "1 Giga ton Coalition" at COP 20 in Lima which is a voluntary international framework to support efforts to measure and report reduced GHG emissions resulting from renewable energy and energy efficiency initiatives and programs in developing countries. According to UNEP's Emissions Gap report, the reduction of greenhouse gas emissions required in 2020 in addition to the present pledges made by countries, is about 8 - 12 GtCO2e/year on a global scale to stay on track to comply with the 2 degrees goal. 3 – 4.5 GtCO2e of emissions can be avoided by realizing the full potential for renewable energy and energy efficiency globally. The 1 Giga ton Coalition will help to mobilize action to reduce the emission gap.

iii) Results

Norway has contributed to access to sustainable energy services, production of renewable electricity, transmission, as well as energy efficiency. The Clean Energy for Development

Initiative works through bilateral cooperation, multilateral initiatives and organisations. Norway has worked closely with partner countries to enable long term institutional cooperation between actors in the Norwegian power sector and their sister organizations in partner countries. Through such processes capacity is built and the regulatory and institutional structures are strengthened. Such regulatory and institutional preparedness together with transmission lines are a prerequisite to attract private investors to invest in renewable generation. Norway supports efforts to rebuild the energy sector in countries with troubled pasts and a challenging situation today.

Energy+ has entered into country agreements with Ethiopia, Bhutan, Liberia, Kenya and Nepal. A key focus is to increase access to sustainable energy services in rural areas using results-based finance and a sectorial approach. Use of improved cookstoves is a key activity in e.g. Ethiopia. Sales of improved cookstoves have increased considerably the last year, with significant reduction in emissions of greenhouse gases.

iv) Examples of country programs

Nepal has a broad cooperation with Norway. An institutional cooperation program has prepared a new electricity Act, which has opened up for private investors in hydropower, so far in the order of 200 MW installed capacity. In 2013 the cooperation contributed to about 16 000 got access to electricity from mini hydro, while 98 000 households received access to electricity from solar panels. 87 000 households got improved cooking stoves. In 2014, Denmark, Norway, ADB, UNDP singed an Energy+ framework document with Nepal.

In **Uganda** a long term institutional cooperation has led to an institutional framework and legislation that now attracts private investments in hydropower, solar and biomass generation plants. The Get Fit Programme where Norway together with KfW, DFID and EU offers an attractive package to private investors have further increased the interest from private investors with more than 100 MW of new capacity for renewable electricity being planned and constructed.

In **Ethiopia** sales of improved cookstoves have increased from about 1.1 million to 2.4 million and 25 000 households received access to electricity from solar panels, partly attributed to the Energy+ cooperation.

In **Mozambique** 25 000 households in Niassa district got electricity from the grid in 2013 through the Norwegian Clean Energy Programme. The total number of connections in the project area may reach more then 80 000 households.

Liberia is one of the main partner countries for Norway. Norway has been involved in an emergency electrification project in Monrovia, through analyses of the grid and in the deliverance of an 8 MW diesel generator. The lack of access to electricity in the capital Monrovia is a key constraint on the development of Liberia. In 2010 The Government of Norway started supporting the Liberia Electricity Corporation (LEC). Since then the number of connection has increased from 1,217 to closer to 18,000 by the end of 2013. Norway is also supporting the rehabilitation of the Mt. Coffee hydropower plant and will through the

Energy+ program support efforts through the Scaling up Renewable Energy Program (SREP) in increasing access to sustainable energy in rural areas.

v) Barriers and how to overcome them

In order to scale up the production of clean energy, it is commonly agreed that the private sector has to bring the necessary capital. With the limitations in the investment environment in most developing countries, this has proven to be difficult. Norway has therefore focused on contributing to modern legislation and capable institutions, together with the construction of transmission lines to evacuate the power and distribution networks that can bring the electricity to the customers. That has led to more private investments in some of Norway's key partner countries, like Nepal and Uganda. This policy, together with reaching out to the poor with electricity services will be strengthend in the coming years. Through Energy+ results-based financing will be tested, and reduction of emissions of greenhouse gases will be estimated.

Through the 1 Giga ton Coalition developing countries will receive support to develop required capacity to measure and report reductions of greenhouse gas emissions resulting from their national actions on renewable energy and energy efficiency.

3. Norwegian assistance to Climate Adaptation

i) Finance

Norwegian assistance to climate change adaptation has been scaled up in recent years, both looking at activities for adaptation only, and when looking at activities targeting both adaptation and mitigation. The total amount in 2010 was USD 67 million. In 2013, the total amount was USD 112 million. For 2014, the figures are still uncertain, but are expected to increase further.

The bulk of Norway's support for adaptation activities in developing countries is mainly channelled through the general contributions to multilateral development institutions, including through the UNDP and international financing institutions. Support is given to the following main thematic areas: disaster risk reduction, food security, climate services and agriculture.

Africa received the largest share of this support, more than 40 % of the total adaptation expenditures in 2013. Among countries, Ethiopia, Zambia and Malawi received the highest amount of funding for climate change adaptation.

ii) Objective

Since 2010, Norwegian development assistance has aimed to design a strategically coherent contribution to climate adaptation in the assistance portfolio. A changing climate hits poor and vulnerable communities hard, because they rely directly on their own produce. Norway's approach is to assist countries in integrating climate change into national plans and strategies, in order to contribute to a holistic approach of each country's adaptation work. Such a holistic approach includes prevention, crisis management and reconstruction. Furthermore, in order for adaptation planning to be successful, local vulnerability assessments, information and capacity building are important preconditions. Norway does in particular support Norwegian and international organizations that emphasize prevention. Support to prevention should be interlinked with humanitarian efforts and development policies in general.

iii) Results

Food security

The total Norwegian support to food security in 2013, reached a total allocation of approx. USD 226 billion. Out of this, USD 67 million was marked as climate adaptation. The most significant new support in 2013 was USD 17 million to the Global Crop Diversity Trust, that is working to ensure conservation and availability of crop diversity. The support to the Consultative Group of Agricultural Research (CGIAR) was also increased, due to its global importance in advancing research that is highly relevant for food security. According to its

annual report of 2013, East Africa is among the regions where most progress has been made.

Agricultural research plays a crucial role in increasing food security. Therefore, Norway also supports local and international research on farming techniques that allow for increased productivity even in a changing climate. Integrated support to farmer outreach programmes ensures that the research responds to farmers' needs. Support to civil society organisations, such as the Eastern Africa Farmers Federation and its sister organisation Southern African Confederation of Agricultural Unions, is important in order to encourage climate-smart practices while building on existing knowledge.

Climate services

Norway is the main contributor to the Global Framework for Climate Services (GFCS) through the World Meteorological Organization (WMO). Norway has supported the establishment of a coordination secretariat at the WMO, as well as concrete programs aimed at designing and implementing climate services in vulnerable countries, especially in Africa. In an initial phase of the GFCS, Norway contributed approx. USD 9 million. In a new innovative pilot program (contribution of approx. USD 10 million from 2013-2016), WMO cooperates with several humanitarian organizations, research organizations and other UN agencies in order to provide climate services in selected regions in Malawi and Tanzania.

Agriculture

Since 2009, Norway has supported The New Partnership for Africa's Development (NEPAD) in revising the Comprehensive African Agriculture Development Programme's (CAADP) climate agenda. The CAADP Agriculture-climate change and Adaptation-mitigation Framework was adopted as an integral part of CAADP in 2014. The inception phase of the new CAADP framework also includes a policy level process for dialogue with farmers, their organisations, as well as private sector and other stakeholders. The purpose is to define key priority actions and policies at the continental, sub-regional level through regional economic communities such as Economic Community of West African States (ECOWAS) and Common Market for Eastern and Southern Africa (COMESA). The support provided to AU/NEPAD CAADP climate program constitutes a political umbrella for agricultural programs supported by Norway in Africa.

Integral to the new African climate agenda supported by Norway is a decision by AU/NEPAD to reach 25 million farmers with climate smart technologies by 2025 through partnerships with private sector, civil society, research institutions and governments. African countries are now driving the climate agenda through their own designated institutional framework. This marks a clear shift from the first 10 years of CAADP implementation, since its start in 2004.

Disaster risk reduction

Extreme natural disasters such as droughts, earthquakes, tsunamis, typhoons and floods also hit in 2013 millions of people worldwide. Norway contributed through funding of the United Nations humanitarian organizations and funds, the Red Cross system and non-governmental humanitarian organizations to relieve acute distress and save lives after a series of natural

disasters. Amongst others, Norway contributed extensively to alleviating acute suffering and to help people restore livelihoods as quickly as possible when Typhoon Haiyan hit the Philippines on November 8 in 2013. The main impression of the international response in the Philippines is that we now have a better equipped humanitarian system to handle sudden and severe natural disasters than we had a few years ago.

Furthermore, countries like Cuba, Vietnam, Bangladesh and China, where Norway has cooperated with authorities on prevention and disaster risk reduction, have now in place effective systems and capacity for handling emergencies. The effect is that these and other countries, especially in Asia, now handles emergencies on their own that previously demanded considerable international effort.

iv) Examples of country programs

In **Zambia**, politicians have recognised the potential of conservation agriculture (CA) to transform agriculture. CA is therefore a priority in the Norwegian development assistance. So far, 159000 farmers have adopted conservation agriculture techniques in their farming practices. With an average of around six family members in each household, this translates into around one million people reaping the benefits of the farming practice. In 2013 more than 200 000 farmers attended CA training. A large proportion of the participants were female farmers. The lessons learned from Zambia have inspired other countries in the region. Norway will through the support to CSA programs to reach more than 800 000 farmers with climate smart technologies during the next 5 years – a substantial contribution to the African target of 25 million climate smart farming households.

In **Ethiopia**, the World Bank received approx. USD 8 million for a large programme to combat land degradation. The programme has around 1.85 million beneficiaries. The program has contributed to an increase in vegetation cover by 9 percent and a yield increase of 10 percent for all crops in the different rehabilitated watersheds, as compared to baseline data from 2008. This will have a positive impact on food security. Rehabilitation of degraded land takes time and resources, but is vital to ensure future food supplies and economic development.

v) Barriers and how to overcome them

A major barrier has been a limited interest in many countries to invest in production of food and addressing climate change as an integral part of this. The African Comprehensive African Agriculture Development Programme's (CAADP) target of government investing 10% of their budgets in the sector has only been reached by a few countries. This is, however, gradually changing and the recognition of climate change as a major factor inhibiting growth in the sector as well as achieving food security has prepared a new platform for collaboration in the sector. Previous climate change programs have largely been supply driven. The new political platform and concrete targets can change this scenario.