

European Commission

Supporting a Climate for

CHAN

The EU and developing countries working together





cooperation and

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FOREWORD

Supporting a climate for change

limate change affects us globally. The most exposed however are often the less equipped to respond to these impacts, already a harsh reality for millions of people around the planet. They have the potential to undermine development efforts and delete the progress made to reduce poverty. In this regard, our joint efforts are essential to enable states and people to address the climate challenge.

It is also crucial that climate action go hand in hand with efforts to achieve Sustainable Development Goals and to ensure financing for development. On these fronts, the EU is present and active, and ready to take its share of the global efforts.

One of the EU' main objectives is to reach 20% of climate-relevant investment in all its budgets, including in development cooperation. To do so, the European Union works to integrate climate change in all its portfolio of actions. It seeks to address both mitigation and adaptation objectives through policy development, capacity-building and support to action.

The Global Climate Change Alliance initiative supports countries and regions most vulnerable to climate change, mainly Least Developed Countries and Small Island Developing

> States. It has so far supported over 50 projects in 38 countries, investing over 320 million Euro since 2008.

The GCCA+ will be strengthened up to 2020 to continue policy dialogue and support and address new challenges.

Adaptation also reguires that climate

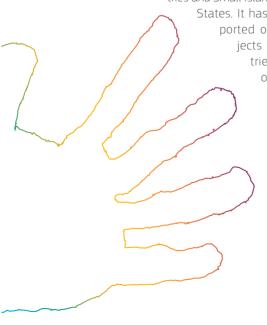


To support these efforts, the mobilisation of finance is essential. Besides grants, the EU has developed several blending facilities to mobilise additional private financing. with a leverage effect that multiplies the impact of public resources.

I see in 2015 many reasons for hope as the world is reshaping its global commitment to achieve better livelihoods for all. This publication provides you with positive examples of how the EU contributes to such a noble objective.

COMMISSIONER NEVEN MIMICA INTERNATIONAL COOPERATION & DEVELOPMENT





The European Union facilitates **change**

1.1. Engaging with others

Climate change confronts the world with a challenge of unprecedented magnitude. Its complexity and pervasiveness require an ambitious global response.

To limit average temperature rises to less than 2°C, we must reduce greenhouse gas (GHG) emissions very significantly and build links between economic growth and greener economies. Reversing GHG emissions will take time, however, and the first effects of climate change can already be felt. Ultimately, we will all feel these effects, and all of us will have to adapt. Some countries, though, are more vulnerable to climate change than others. The most vulnerable countries often lack the resources to adapt well, which is why they need international support.

The European Union (EU) places climate change at the heart of its external relations, including development cooperation, and actively supports multilateral negotiations under the United Nations Framework Convention on Climate Change (UNFCCC).

First, the EU systematically discusses climate change issues with partner countries, exchanging information and building mutual understanding. This helps build trust in the UNFCCC process. The EU also supports partners' efforts to integrate climate change into national decision-making, planning and management.

Second, the EU helps boost capacity and knowledge by facilitating dialogue with partner governments, scientists, civil society and business. These meetings allow best practices to be exchanged, resources to be pooled, and priorities and joint action to be agreed. Roundtables and conferences take place all over the world from Brussels to Africa, Asia, and the Caribbean and Pacific regions.

Finally, the EU supports research on emerging issues, such as linkages between climate change, security and

migration, and the role of Official Development Assistance (ODA) in meeting future climate finance needs.

1.2. From dialogue to action

Already the largest contributor of ODA and climate finance, the EU is continuing to increase spending on climate change in developing countries. The Union is intent on contributing its fair share of the global commitment to mobilise USD100 billion per year by 2020 to support meaningful mitigation measures.

Between 2007 and 2013 an estimated eight per cent of Europe's aid budget was spent on climate issues. Annual spending on climate-related grants increased from around EUR 490 million in 2007 to more than EUR 900 million in 2013 (see Figure 1)¹.

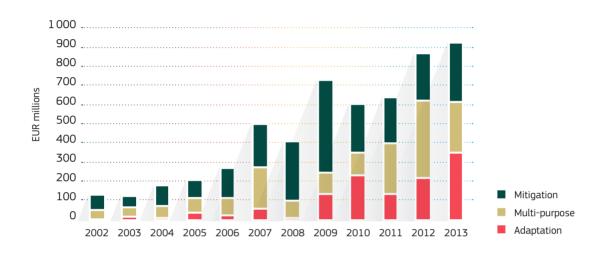
Direct contributions from EU Member States increase these figures significantly. In 2013, the EU and its Member States collectively provided EUR 9.51 billion to help developing countries tackle climate change². The European Commission (Commission) alone has spent over EUR 6 billion on climate-related ODA since 2002.

EU climate change spending is divided into three, roughly equal parts: mitigation actions, adaptation actions, and actions that support both. It includes both practical measures and mainstreaming climate change into other related sectors.

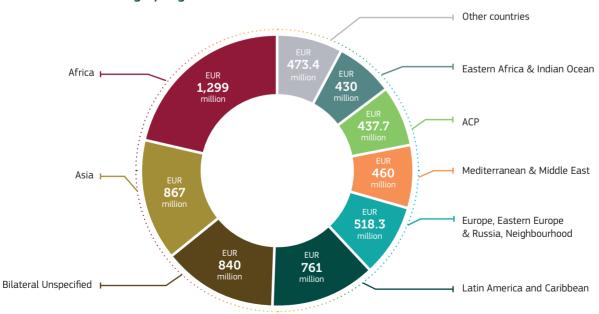
The EU today has Regional Investment Facilities that cover seven regions. These facilities blend EU grants with other financial instruments to maximise investment in climate-related infrastructure and projects. The European Union is proud to be engaging in ambitious global efforts to tackle climate change. The following chapters outline these efforts.

- 1. This figure includes spending under the DCI, EDF, and ENPI/ ENI, but not IPA and EIB contributions.
- 2. This figure includes spending by public budgets and other development financial institutions.

Figure 1: Funding for adaptation, mitigation and both 2002-2013









Islands

Many of us dream of living on a remote, sandy island, bathed by a warm sea - a paradise on earth. The reality can be very different: Small Island Developing States (SIDS) are fragile by their very nature; remoteness, insularity and exposure to the elements make them more susceptible to natural disasters and climate change. Small island economies also tend to be weak, with limited institutional capacity, lack of diversification and few external sources of capital. Individually, SIDS lack the range of skills and depth of support needed for a sustained and effective response to climate change and other environmental pressures.

The Mauritius Strategy (2005) outlined action needed to accelerate sustainable development in Small Island Developing States. The EU ISLANDS programme is designed to support implementation of the Mauritius Strategy in the Eastern and Southern Africa – Indian Ocean (ESA-IO) region. ISLANDS involves international agencies as well as governments from across the region, and received EUR 10 million from the EU in its first phase from 2011 to 2014.

ISLANDS involves strategic interventions such as institutional capacity building, budgetary support and technology transfer, and an operational system to monitor implementation of the Mauritius Strategy itself. Best practices have been developed for mitigating vulnerabilities in the areas of coral reef protection, disaster risk management and sustainable island development. A number of countries in the ESA-IO region have been able to leverage EU funds and attract investment to put the theory into practice, and stronger partnerships at national, regional and international level are now more committed and better able to implement the Mauritius Strategy.

EUROCLIMA reinforces South-South cooperation by providing a platform to hear and discuss experiences of other Latin-American countries. At the same time, the programme provides us with tools and knowledge not readily available otherwise."

Wiliam Alpizar

Director of Climate Change,
Ministry of Environment and Energy, Costa Rica

EUROCLIMA is a EUR 16.45 million regional climate change cooperation programme involving 18 Latin American countries and the European Union. It focuses on mainstreaming mitigation and adaptation into public policy to increase resilience and promote green growth.

1.3. Mainstreaming climate change

Many of the world's poorest communities are almost wholly dependent on their environment. These communities tend to be hardest hit by environmental damage. Pollution, natural disasters, and degraded natural resources directly affect their livelihoods, which are based on the qoods and services provided by the local environment.

Environmental protection is therefore central to European efforts to meet the universally agreed goals on sustainable development and poverty reduction (or Agenda 2030), and environment is a major consideration when defining cooperation policies and interventions: environment is 'mainstreamed' into both EU policy and action. Mainstreaming brings other benefits too: it reduces vulnerability and builds resilience; it generates sustainable livelihoods and helps build inclusive, 'green' economies.

In 2011, the European Commission expressed its intention 'to increase the proportion of the EU budget that is related to climate mainstreaming to at least 20%' by 2020^3 . This is designed to facilitate Europe's transition to a low-carbon, climate-resilient society. The spending target also applies to Europe's external actions, including development cooperation.

The EU uses a range of tools to integrate environmental and climate change issues into multi-year programming. One of these is the Country Environmental Profile (CEP), which is used to develop a country analysis and response strategy, and to inform policy dialogue and decisions on the use of 'budget support' funds. With general or sectoral budget support, funds are made available to partner governments to plan and carry out their own priority interventions, based on mutually agreed objectives.

Sector Policy Support Programmes are screened for environmental and climate implications. If impacts are potentially significant, Strategic Environmental Assessments (SEA) of national development policies or sector programmes are carried out. With general budget support, governments should lead environmental integration in coordination with donors. Climate Risk Assessments (CRAs) and Environmental Impact Assessments (EIAs) provide critical analysis for project-based support. They identify measures to mitigate possible negative project impacts on climate change and the environment, and to enhance their positive outcomes. Environmental indicators are systematically used in all aid delivery methods.

1.4. Green economy

At its simplest, sustainable development is development that recognises the links between the economy, society and the environment, and balances the needs of all three. Healthy environments, a stable climate and equitable access to environmental goods and services are needed for both sustainable development and poverty reduction. Economic development and environmental sustainability must go hand in hand if we are to eradicate poverty and stay within the limited resources of our planet. Improving the environment also increases equity. Europe's commitment to inclusive, green economies where benefits are widely shared is exemplified by the EC's 2013 Communication, A decent life for all: Ending poverty and giving the world a sustainable future⁴.

The EU promotes the 'greening' of the economy over and above the 20% spending target through initiatives such as Global Public Goods and Challenges programme (GPGC)⁵, which runs from 2014 to 2020. More than half of its activities focus on environment, climate change, making economies greener and more inclusive, and mainstreaming environment, climate change and disaster risk reduction into public policies and action.

EU development cooperation promotes inclusive green economies by:

- integrating environment and climate change in all development cooperation;
- providing dedicated support to partner countries on issues such as pollution and waste, biodiversity, forestry, water and sanitation, and making the economy 'greener' more generally;
- stimulating economic actors to develop green businesses, and promoting sustainable production and consumption patterns.

1.5. migration and gender

Migration is a phenomenon caused by complex combinations of factors: social, economic, environmental, personal and political. Climate change is an increasingly important factor, one that any debate on migration must include.

EU research on climate migration in recent years has helped build understanding of the key issues. Since 2011, the EU's climate diplomacy network has been examining the links between environmental change, security risks and migration. In March 2013, the Commission published a *Staff Working Paper on Migration and Climate Change⁶*, outlining the conclusions of a research project and related expert meetings.

Climate change can prompt migration when it affects human development and wellbeing. Agricultural productivity can fall, water can become more scarce, floods and extreme weather events more likely. Climate change can degrade ecosystems and increase the risk of disease and disability. When it prompts insecurity and violence, climate change can exacerbate pre-existing social and economic vulnerabilities and reverse human development.

EU action to support human development and fight climate-related migration is multifaceted. First, the EU is actively involved in efforts to keep climate change within safe limits: significantly lower GHG emissions would help limit climate change and bring about significant social and health benefits⁷. EU external action helps developing countries to adopt low emission development paths.

Second, the EU reduces vulnerability, by making resilience a central part of its support to developing countries. The Global Climate Change Alliance+ (GCCA+) initiative shares knowledge about the effects of climate change and about appropriate measures to reduce a population's vulnerability. This includes migration and gender equality.

^{4.} Communication COM(2013) 92 final from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions.

^{5.} Regulation (EU) No 233/2014 of the European Parliament and of the Council of 11 March 20145

^{6.} Commission staff working document SWD(2013) 138 on climate change, environmental degradation, and migration

^{7.} The Paris Protocol – A blueprint for tackling global climate change beyond 2020 - EC (2015)

The EU has drawn up a list of best practices, principles and priorities to promote resilience against future crises and disasters⁸. In 2013, the EU published a 2013-2020 action plan to build resilience in crisis-prone countries⁹. Women play a vital role in building resilience in households and communities.

Third, the EU integrates gender issues into its environmental work. Climate change hits women especially hard since they shoulder most of the domestic burden of water collection and food production. But women also have a

pivotal role in climate change adaptation and mitigation, and involving them in climate decision-making and action is crucial for meeting long-term development objectives.

Women also have important reserves of knowledge and skills, and may be better able to adapt to a changing environment, but their knowledge is often an untapped resource. They also face greater difficulties in accessing financial and other resources and are under-represented in decision-making processes. This limits the visibility of their expertise and their contributions.

Climate Change and Displacement

The nexus between climate change, displacement and human rights is one that is attracting increasing attention in the international community. A stronger evidence base is needed, however, to clarify the links and ensure widespread adoption of policy measures to protect people fleeing from natural disasters and climate change impacts that threaten their lives and livelihoods.

The Nansen Initiative is a state-led, bottom-up consultative process intended to build an international protection agenda for these people; the three-year 'Climate Change and Displacement', implemented with the UNHCR and the Norwegian Refugee Council, feeds directly into it.

With an EU contribution of EUR 2 million, the programme aims to build the evidence base on the links between climate change, environmental degradation and migration. Based on the evidence, it will issue guidance on the vulnerabilities and protection needs of displaced persons, and on internal relocation as a climate-related adaptation strategy. This guidance, together with policy-relevant data and risk assessments, will be used to support policy dialogue with and between states, to ensure that people displaced by natural and climate-induced disasters are given the protection they need and deserve.

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Forced migration is not an option. Movement and relocation must happen with dignity and people involved in the process must have the capacity to deal with the changes that come with the process. Building this capacity is essential."

Elisabeth Koteka, Chief of Staff, Office of the Prime Minister. Cook Islands

Chair of the Pacific Regional Consultation

^{8.} The EU Approach to Resilience: Learning from Food Security Crises - EC (2012)

^{9.} Commission staff working document SWD(2013) 227 final, Action Plan for Resilience in Crisis Prone Countries, 2013-2020

Helping countries to **adapt**

The impacts of climate change are unevenly distributed around the planet, with poor people in developing countries being among the most vulnerable. Climate change will affect nearly every aspect of their lives, making adaptation an enormous development challenge. Least developed countries (LDCs) often lack resources to make the needed adaptations and build resilience, so the EU helps them to do this.

2.1. Adaptation in the field

For adaptation climate change issues need to be mainstreamed into national development processes and sector strategies (see section 1.3). Building resilience and limiting risks may also require more specific actions. Under the UNFCCC, countries are encouraged to engage in National Adaptation Planning (NAP) processes. Developing countries assess their vulnerabilities and adapt accordingly, within a broader context of sustainable development. The EU supports the NAP process and adaptation efforts in general through multilateral and bilateral channels and through policy dialogue.

Effective adaptation should target, and involve, the most affected and vulnerable population groups, including women. Communities must build their own resilience, using appropriate technologies while making the most of local and traditional knowledge. They must diversify their livelihoods to cope with current and future climate stress, which means farming sustainably and adopting integrated approaches to manage water, landscapes and natural resources.

Climate adaptation in areas of outstanding natural beauty

The coastlines of Colombia, Madagascar and the Philippines are among the most beautiful in the world. Working with organisations like the WWF, governments have set up national parks to protect these coastal areas, which are inherently fragile and extremely vulnerable to a changing climate.

The communities living in and around these protected areas are overwhelmingly marginalised and poor. They depend on natural resources and ecosystems for their livelihoods and their health. Well-managed protected areas take account of human systems as well as ecosystems, recognising interdependencies and striving to achieve a sustainable balance between the two. Climate change threatens ecosystems and communities. Both need to become more resilient, which means understanding linkages and vulnerabilities, developing effective climate adaptation measures in the protected areas, and mainstreaming climate change into local development plans and processes.

The EU has contributed EUR 2.5 million to the project 'Climate Adaptation in the World's Most Outstanding Natural Places', which aims to guarantee a more sustainable, resilient and climate-ready future for these areas of natural beauty and the people who depend on them.

The EU supports coherent interventions at regional, national and local level. Local people must be empowered to understand, decide and take initiatives. Regional coordination also provides learning opportunities, since neighbouring countries often face similar challenges. Regional organisations have an important role to play in facilitating exchange of experiences and know-how, and ensuring lessons are learned and shared. They can develop regional response strategies and tools, and help find ways for co-managing shared resources such as trans-boundary river basins and aquifers.

The Global Climate Change Alliance (GCCA)¹⁰ is the EU's flagship initiative for climate action. The GCCA reinforces policy dialogue and provides direct support for partner countries to implement their climate strategies. By early 2015, it had allocated over EUR 350 million to more than 50 national projects and nine regional projects, as well as

organising eight international conferences. GCCA actions range from mainstreaming adaptation into a country's national and sector-level development strategies, to disaster risk reduction strategies, agricultural and ecosystem-based adaptation, and reduction of GHG emissions by making forestry more sustainable.

The second phase of the Alliance, the GCCA+, will run from 2014 to 2020, building on the strengths and successes of the GCCA, and introducing some 'pluses' to address new challenges. EU Member States and Non-State Actors, civil society organisations and the private sector, will have a greater role. GCCA+ will remain flexible to accommodate the changing needs of partner countries, in particular the SIDS and LDCs, and the evolving international context, including the UNFCCC Conference of the Parties in Paris (COP21) and the UN Sustainable Development Goals.

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By working with Samaleños to develop sustainable sources of food, energy and water, plus effective ways of adapting to climate change effects, we may help protect the lives and livelihoods of the 96,000 inhabitants of this island paradise."

Jose Ma. Lorenzo Tan

WWF-Philippines Vice-Chair and CEO, speaking
about the Island Garden City of Samal.



2.2. The EU resilience agenda

Given the inextricable links between climate change and natural disasters, climate change adaptation and disaster risk reduction (DRR) strategies are virtually inseparable. Since 2013, the European Union has been promoting

DRR and adaptation as twin drivers of sustainable and resilient development¹¹. This new approach provides an effective risk reduction approach, as well as a road map for humanitarian and development actors working on building resilience in vulnerable developing countries.



GCCA+ Pacific Islands Forum support programme

Small Island Developing States in the Pacific are especially vulnerable to the effects of climate change. Convinced of the need for a regional approach, the Pacific island states joined forces to develop the *Pacific Islands Framework for Action on Climate Change* covering the period 2006 to 2015.

The GCCA+ has been working with partners at the Pacific Centre for Environment and Sustainable Development, University of the South Pacific, to help push this strategy forward. Interventions have focused on Pacific Island communities, involving formal and informal training, as well as practical help so communities can develop and pilot replicable climate change adaptation measures.

Using a robust process of participatory community engagement, project-trained facilitators have helped local communities to develop a range of low-input, high-quality climate change adaptation actions. With the communities selecting and carrying out the actions themselves, knowledge is put into practice, new skills are acquired and ownership and sustainability are assured.

The University's Climate Change Knowledge Centre acts as a repository for vulnerability assessment tools and adaptation planning resources linked to evolving climate models, as well as for knowledge and experience accumulated in the field that can guide other island communities hoping to become more climate-resilient.

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We are working hard to make sure the students have the critical tools and the critical scientific understanding that they need to be able to implement the science on the ground, in communities. Because that is what our goals is really all about.

It's about translating the scientific information into on the ground action."

Dr Elizabeth Holland

Pacific Centre for Environment and Sustainable Development, University of the South Pacific

GCCA+ Climate change resilience in Bangladesh

Bangladesh has made very substantial gains over the last 20 years: increased economic growth, poverty reduction, and self-sufficiency in its main staple, rice. Climate change threatens to undo these achievements, but that is not all. Bangladesh is one the countries most vulnerable to climate change. Much of this densely populated country, including the capital, lies on the flood plain of the Ganges, Brahmaputra and Meghna rivers. Its southern coasts already experience severe storm surges and coastal flooding, arguably a taste of what's to come for other low-lying areas if climate

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Not only did the shelters house people; they were also the safe place for relief activities like precautionary stocking of dry food. These shelters provide a safe haven during killer cyclones, and during non-cyclone times they are used as Primary Schools targeting the ultra-poor, thus providing hope and mobility to the communities."

SM Akbar Hossain

Executive Engineer, Local Government Engineering Department, Bhola

change is left unchecked. As a Least Developed Country, Bangladesh lacks the resources and the adaptive and response capacity needed for a changing climate without the support of the international community.

The Climate Change Resilience Fund is a multi-lateral programme with total funding of over EUR 100 million and an EU contribution of EUR 28.5 million. EU assistance is provided through the GCCA+ both to support national institutions in implementing the Bangladesh Climate Change Strategy and Action Plan and to finance climate change adaptation, mitigation and disaster risk reduction measures. Among these measures are more than 60 new multi-purpose cyclone shelters, and community-based forestry to halt degradation and manage 10 areas of woodland more sustainably. These actions support human development goals, as well as increasing climate resilience in the communities concerned.

The cash received from the catastrophe risk insurance pilot [supported under PCRAFI] makes an important financial contribution for carrying out the government strategy for mitigating natural disasters. It ensures that response efforts to help the people of Ha'apai recover and return to their normal everyday lives can continue without interruption or delay."

Hon. Dr. 'Aisake Valu Eke Minister for Finance and National Planning, Tonga Working with the Secretariat of the Pacific Community, the Indian Ocean Commission, the African Union Commission's Sub-Saharan member- states and the Global Framework for Disaster Risk Reduction (GFDRR), the 22.7 million Euro project 'Multi-risk financing Strategies in ACP' aims at taking informed decisions to mitigate the socio-economic, fiscal and financial impacts of disasters.

A resilience approach recognises the links and increases synergies between development, climate and humanitarian policies. It also addresses underlying drivers of disaster risk, including climate change, uncontrolled urbanisation, and the degradation of ecosystems and natural resources.

The EU intra-ACP envelope supports a number of programmes designed to increase resilience throughout the

world: the ACP-EU Natural Disaster Risk Reduction Programme (NDRR – EUR 80 million to date); the contribution to the Global Climate Change Alliance (GCCA – EUR 40 million to date); Building Resilience and Safety in the Pacific (EUR 20 million); Building Disaster Resilience in Sub-Saharan Africa (EUR 80 million); and Natural Disaster Risk Management in the CARIFORUM region (EUR 20 million).



Making natural disasters less disastrous

Disasters are natural: they have always occurred. With climate change natural disasters are increasingly likely because of extreme weather events or sea level rise, for example. Moreover, facets of modern life - more people living in large cities, urban and industrial centres concentrated in coastal areas or flood plains - mean natural

disasters can cause enormous human and economic losses. While not all disasters are preventable, it is possible both to reduce natural hazards and to lessen the human and economic impact of natural disasters when they do occur.

Healthy ecosystems, managed sustainably, have been shown to mitigate and even prevent disasters. Involving local communities in managing ecosystems also supports livelihoods and builds resilience, meaning they are better equipped to deal with, and recover from, any natural disasters that do arise. These considerations are at the heart of the Sendai Framework for Disaster Risk Reduction, which will guide global efforts on disaster risk reduction over the period 2015-2030, and of the EU-supported EUR 2.5 million project, 'Promoting improved ecosystem management in vulnerable countries for sustainable and disaster-resilient development'.

The project focuses on some of the most fragile countries, often made more vulnerable by prolonged conflict: Afghanistan, the Democratic Republic of the Congo (DRC), South Sudan and Haiti. It aims to increase understanding of the links between ecosystems and natural hazards, and to encourage governments to integrate ecosystem-based disaster risk reduction (Eco-DRR) in national development plans and programmes. Knowl-

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We are very happy to be involved in this project because it [helps] territorial administrators to understand how the environment should be managed to help the population so that they do not suffer the consequences of natural disasters."

Stephane Kalulumia Bimpa
Research and Planning Division, Ministry of Interior, DRC

edge in the form of guidelines, toolkits, training manuals and methodologies will be generated and shared. Just as importantly, pilot actions on the ground will enable authorities and communities in all of the countries to put the theory into practice and begin to build resilience and reduce natural hazards. Their experience, knowhow and innovative approaches will be shared locally, regionally and globally, clearly demonstrating the benefits of disaster-resilient development based on sustainably managed ecosystems, and encouraging others to emulate their success.



Supporting mitigation

3.1. Promoting low emission development

Least developed and lower middle income countries need energy to fuel their social and economic development. Using renewable energy sources will help hold down their greenhouse gas emissions, which are comparatively low today. The European Union supports a range of mitigation efforts, including low emission development strategies and nationally appropriate mitigation actions.

A first step is to analyse the potential for mitigation within an economy together with the associated costs. In this way, the Commission helps countries to design, prepare and submit their Intended Nationally Determined Con-

tributions (INDCs). These major policy documents outline how governments will reduce emissions and help keep global temperature rise below 2°C.



Geothermal Development Facility Latin America

Sustained economic growth has steadily increased demand for electricity in Central and South America; consumption is expected to double by 2030. Low-emission energy sources such as hydropower have been widely used

in the region, but are increasingly challenging to exploit. Geothermal energy provides a viable low-carbon option, but, much like fossil fuels, it needs significant up-front investment in exploration, and few private sector companies are willing to take on the financial risk this entails.

The European Union is one of the strongest promoters of clean energy. The German Development Bank (KfW) is developing innovative financing mechanisms to reduce risk for potential investors in renewable energy production, by using public funds to leverage private sector investment, effectively multiplying the initial investment many times over. KfW is the main driver of the Geothermal Development Facility Latin America, a fund expected to exceed EUR 1 billion, with an EU contribution of at least EUR 5 million.

The facility is a fantastic example of how donors can help to create markets for and leverage substantial financing into renewables by providing tailored grant-based incentives."

Miguel Arias Cañete
EU Commissioner for Energy and Climate Action

The Facility adopts a holistic approach to encouraging geothermal energy in Central and Latin America. A massive cash injection will attract other investors and help overcome barriers to geothermal exploration and exploitation, but finance alone is not enough. The emerging geothermal energy market will need a supportive and predictable regulatory framework to reassure potential investors. And a new generation of engineers and technicians will need skills to build and operate geothermal facilities, adapt technologies to local conditions, and create innovative solutions that can be transferred within the region and further afield.

The Geothermal Development Facility Latin America aims to reduce risks and emissions, certainly, but it is equally focused on building partnerships and creating opportunities from green technology.



Energising villages and livelihoods in Guinea Bissau

Thanks to the service offered by FRES
GB, I started a commercial activity that
consists in recharging mobile phones at a
reasonable price and it is very profitable.
The income allows me to cover different
expenses, including important basic
expenditures for my family."

Joana Maria Cá Satisfied customer and micro-entrepreneur In Guinea Bissau only urban centres have access to electricity, and even that is limited. People living in the suburbs or the countryside use kerosene lamps, batteries and diesel generators. Polluted air in the home affects their health and house fires are common. The lack of electricity makes it harder for children to study, adults to work, and everyone to participate in public life. Energy brings much more than lighting and cooking; it also creates opportunities and more inclusive, better-connected communities.

Solar energy is the obvious solution for regions like Gabù in eastern Guinea Bissau, but installing and maintaining solar systems requires specialist skills, and only local ownership can bring lasting benefits. The FRES project received an EU contribution of EUR 2.5 million to set up a locally-managed company to provide solar electricity services and to provide training to its staff. Fee-for-service charging means it is affordable for customers and a viable long-term business model for the company.

The new solar network boasted 2,000 customers at the end of 2014, served by 5 local energy stores installing and maintaining solar home systems. A number of enterprising individuals have set up micro-businesses reselling energy services. Communities throughout the region are becoming aware of the benefits of clean, renewable energy and the life-changing opportunities it brings.

Sustainable urban transport in Vientiane

Laos, one of East Asia's poorest countries, has seen good economic growth in recent years, most of it centred in Vientiane, the capital. Over 10% of Laotians now live and work here, and all need transport. This has brought challenges: increased traffic congestion and accidents, poor air quality and more greenhouse gas emissions. Overcoming these issues will improve the quality of life as well as enhancing productivity and contributing to poverty reduction.

The Vientiane Sustainable Urban Transport project, supported by the European Investment Bank to the tune of EUR 5 billion, as well as by a number of other regional and international donors, sets out to create public-private partnerships to address mobility challenges. A growing urban population requires higher capacity public transport systems, particularly in the core area of the city. 'Bigger' also needs to be 'better' and more environmentally sustainable, with solutions that are adapted to the local context. A number of pilot projects are envisaged, including a shuttle bus service with more energy-efficient vehicles for central Vientiane, improved parking arrangements, pedestrian areas and street signage, and an agency to manage public and private transport sustainably, with a long-term vision as well as short-term solutions.



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We will use brand new buses that need less energy; there will be good maintenance practices like changing engine oil to reduce pollution... Speed limits can also reduce air and noise pollution... Using clean fuel is another way to reduce environmental pollution."

Comments from a public consultation meeting held at Ban Phokham

Effective climate policy requires reliable data on GHG emissions. When this data is reliably measured, monitored and verified, carbon pricing and other market-based measures can be used more effectively.

European climate action also focuses on cities, supporting urban projects linked to energy use, transport, industrial production and waste management.

The European Union encourages developing countries to adopt low-emission energy sources by promoting dialogue between them and developed countries and through International Cooperative Initiatives (ICI). Discussions cover energy efficiency, renewable energy and energy subsidies, as well as technology transfer and partnerships with development banks and the private sector.

3.2. Making and using clean energy

Developing countries need energy; it provides access to clean water, clean cooking, a decent education and basic health care. It also powers vital agricultural sectors, creates jobs and supports small and medium enterprise. Developing countries need clean energy to boost growth, generate economic opportunity and power sustainable development. Renewable energy supplies may be cheaper and faster to set up than more traditional energy sources. They can also reduce dependence on foreign supplies.

The EU continues to follow the principles laid out in its policy guidelines, Agenda for Change, including support for the goals of the Sustainable Energy for All initiative (SE4ALL).

One new EU initiative designed to meet global objectives is the Electrification Financing Initiative (ElectriFI). The size and timescales of energy projects make them more vulnerable to a variety of risks, and perceptions of high risk discourage private sector investment. ElectriFI helps reduce the levels of actual and perceived risk, stimulating private sector involvement and investment.

Lack of access to energy is a major barrier to poverty reduction, and sustainable energy is central to inclusive and equitable economic growth. The EU is pursuing this agenda through its own spending and also worked towards ensuring its inclusion in the 2030 sustainable development agenda. Increased cost-efficient access to clean energy will help millions to escape the worst impacts of poverty, contributing to a better, fairer world.

Fuelling energy efficiency in Kyrgyzstan

Like many former Soviet republics, Kyrgyzstan long enjoyed abundant supplies of heavily subsidised energy and had little incentive to consider energy efficiency. With next to no oil and gas reserves of its own, the country is dependent on oil imports. Around a third of the population is living below the poverty line and many people struggle to heat their draughty homes in winter. Kyrgyzstan's Energy Strategy points to energy efficiency as a key component in rationalising energy consumption. Simple measures like insulation could drastically reduce heat loss from buildings, but selecting, financing and installing appropriate energy efficiency technologies has proven challenging.

The Kyrgyzstan Sustainable Energy Efficiency Financing Facility (KyrSEFF) has been set up to support the national energy strategy and address these challenges. The Facility will provide low-interest loans to participating financial institutions to be passed on to

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I think the programme is very important for ordinary people on low incomes who cannot insulate their homes at their own expense.

After installing energy saving measures in our house our coal and electricity bills were cut by half.
The house is much cosier and more comfortable too."

Gulsaira Usupova, KyrSEFF programme client

private and business customers who want to invest in energy efficiency measures. It will work with lenders to increase their ability to evaluate energy-related investments and reduce risk. KyrSEFF also makes advanced technologies and specialist training available to local engineers, architects and other professionals, so they are better able to suggest appropriate solutions for their clients, and then to install and maintain them.

Thanks to the project, home- and business-owners benefit from affordable loans, significantly lower utility bills and higher quality service from their suppliers. Scaled up to the national level, this means greater energy security and reductions in greenhouse gas emissions.

Winning on several fronts: multipurpose **approaches**

4.1. Towards sustainable forestry

More than 1.6 billion people depend on forests for their food, medicines, fuel, livelihoods and even cultural traditions. Forests also matter for our climate: simply by growing, forests remove carbon from the atmosphere, making them the second largest carbon sink after oceans. When they are degraded, cut down or burnt, levels of harmful greenhouse gases rise. Cutting down forests accounts for an estimated 15 to 20% of global emissions today.

Tragically, the land on which forest grows is often considered more valuable than the forest itself. In 2005, forests

covered around 30% of the world's land area. However, since 1990 about 13 million hectares of natural forest have been lost every year.

Recognising this challenge, the EU has developed a package of policies to tackle deforestation and forest degradation. It is committed to reducing gross tropical deforestation by at least 50% by 2020 (compared to 2008 levels) and halting global forest cover loss by 2030¹². The 7th EU Environment Action Plan also supports efforts to limit the impacts of European consumption on deforestation. The EU's new forest strategy¹³ strengthens Europe's contribution to sustainable forest management and reducing global deforestation.

GCCA+ Climate change and reforestation in the Congo

Forests cover 67 per cent of the Democratic Republic of the Congo (DRC) and provide income and sustenance to large sections of the population. Forest degradation and deforestation is rife, particularly around Kinshasa and other cities, threatening the livelihoods of some of the poorest and most vulnerable people in the country. In addition, fewer trees mean less carbon dioxide is captured and an important climate change mitigation tool is weakened.

The GCCA+ programme in the DRC has enlisted the support of the Centre for International Forestry Research (CIFOR) to address the issue of forest governance both practically and strategically. In the forests, a number of pilot projects have been launched to restore degraded forest and develop sustainable agroforestry. Management capacity is being enhanced also at the central level, where Ministry of Environment staff and others involved in implementing the DRC's national climate change programme are benefiting from advanced training on climate change adaptation and mitigation, as well as developing new approaches for planning, carrying out and evaluating forestry interventions.



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In 2005, DRC's entire forestry research boasted 6 persons with Masters Degrees. Today, thanks to EC and GCCA support, 121 MSc have been trained and 24 PhD are completed or ongoing, creating a cadre of future leaders in forestry that will help implement a crucial forest-based climate change policy"

Prof Jean-Marie Kahindo Faculty of Science, University of Kisangani

^{12.} COM (2008) 645: Addressing the challenges of deforestation and forest degradation to tackle climate change and biodiversity loss

^{13.} COM(2013) 659: A new EU Forest Strategy: for forests and the forest-based sector



Participatory forest management in Angola

Since I started
beekeeping, I have
learnt how to produce
honey in a safe and
simple way, which is
good for my family and
my health, and in great
demand at the market"

Paulo
president of
Canjombe Beekeepers
Association,
Kwanza Sul Province

According to UNDP, over 58% of rural Angolans live on less than \$1 a day, so It is little wonder small farmers living in forested areas supplement their meagre incomes by making charcoal to sell on to richer city folk. Charcoal production, however, is a major threat to the country's forests and has double repercussions for climate change: burned charcoal emits CO2 and deforestation reduces carbon storage capacity. Over-exploitation is not a viable long-term solution, but how can forests be harvested more sustainably and what alternatives do poor small-farmers have?

PIPDEFA (Programa integrado de protecção e desenvolvimento das florestas costeiras angolanas, loosely translated as 'Integrated programme for protecting and restoring coastal forests in Angola') seeks to answer both of these questions and has received almost EUR 1 million from the EU to help them. PIPDEFA proposes a participatory model of forest management, where people living in and around woodlands are directly involved in developing and then implementing forest management plans. It also bolsters the income of small farmers, and women in particular, by introducing economic activities that are compatible with the local environment, notably bee-keeping and small-scale production of cosmetic oils and a local drink, kissangua. Two botanical guides to tree species found in Miombo and Mopane woodlands have also been produced, another way of demonstrating to local people, as well as to visitors, the wider value of these forests.

Complementing these policies is EU support for global mechanisms such as Reducing Emissions from Deforestation and Forest Degradation (REDD+). The EU provides assistance to partner countries to establish national policies and systems for REDD+. It also links partner countries to global and European partnerships such as the Forest Carbon Partnership Facility, the UN-REDD programme, and the EU REDD+ Facility.

The European Union is on the front line of global efforts to tackle illegal logging. For example, it leads a global coalition to strengthen Forest Law Enforcement, Governance and Trade (FLEGT). FLEGT encourages countries to enter into Voluntary Partnership Agreements (VPAs) whereby national systems are established to guarantee the legality of timber exports to the EU. The EU, its 28 Member States and some 20 timber producing countries now work together to ensure that only legally-harvested timber enters Europe from producer countries.

The EU has also put in place domestic measures to prohibit the illegal timber trade. Some 11 EU countries have dedicated public procurement policies on timber. European companies operating in primary forests are legally required to publish details of all payments made to the governments of producer countries. The 2013 "EU Timber Regulation" obliges European operators to use due diligence to eliminate illegal timber from their supply chains.

Between 2000 and 2014, the EU has spent about EUR 1 billion promoting sustainable forest management through a range of initiatives by partner governments, regional and international organisations, civil society organisations, research institutions and the private sector.

The EU also helps monitor global forest cover, by contributing to the Global Forest Resource Assessment and supporting regional efforts to monitor forests in central Africa through the Observatory for Central African Forests. Finally, the EU helps civil society in timber producing countries to monitor their forests independently.

4.2. The ecosystem-based approach

Healthy, resilient ecosystems are vital for human well-being. From microscopic soil organisms to large marine mammals, and from tiny seeds to vast ancient forests, we depend on an interconnected web of life for our food, textiles, timber and other natural materials. This wealth of biodiversity is fundamental to our most basic needs from the air we breathe to the water we drink. It is also crucial for our planet's climate.

Yet human activity means that the rate of species extinction is between 1,000 and 10,000 times higher than it otherwise would be. Our biodiversity and ecosystems are under threat. This has a direct impact on sustainable

development. Poor rural communities, which account for 70% of the world's total poor, are especially badly affected. They depend directly on biodiversity and ecosystem services for their subsistence.

Protecting biodiversity helps protect communities and their livelihoods from the worst impacts of climate change. This can be seen perhaps most clearly in coastal ecosystems such as wetlands, mangroves, coral reefs and barrier beaches, which provide natural shoreline protection from storms and flooding.

Conversely, tackling climate change has direct benefits for biodiversity. Climate change often exacerbates existing pressures such as pollution, over-exploitation, invasive species and habitat fragmentation.

Páramos: biodiversity and water in the Northern Andes

Páramo is the name given in the South American Andes to ecosystems found at altitudes too high to support forests, but low enough for plants such as giant rosettes, shrubs and grasses to grow, and so below the permanent snow line.

Andean countries, Colombia, Ecuador and Peru, consider the páramos to be strategic ecosystems and their regional policies and strategies, for example for biodiversity and water management, single these ecosystems out for special attention. The Andean Environmental Agenda 2012-2016 calls for stronger social governance for conserving Andean ecosystems, as well as a sub-regional action plan and a robust expert group to focus exclusively on the páramos.

The Páramos programme, which will run from 2015 to 2018 with EUR 5 million in EU contributions, has been designed principally to support biodiversity conservation and protect and manage these fragile ecosystems and their natural resources, water *in primis*. Páramos will work with local institutions and civil society groups in seven páramo areas on local management strategies, innovative mechanisms to finance maintenance of ecosystem services, especially water, and income generation that is in harmony with the local environment. While much of the focus will be local, the seven groups will also form a regional network to learn from each other's experience and develop shared monitoring and decision-support tools. The work of individual Páramos groups will also feed into more robust local and national environment policies in Peru, Ecuador and Colombia that recognise the value of these fragile ecosystems to the country and the region as well as to local communities.

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The páramo for me represents
a source of life, because it provides
the water for the aqueduct in our
village, as well as the drinking water
for people living in the lower parts.
In the higher parts the air is not
polluted and many species of native
plants and wild animals live there."

Resident of Rabanal Páramo





INTEGRE: preserving coastlines and communities in Pacific islands

Pacific islands coastal ecosystems are fragile; ill-considered human activities upset their delicate balance; and climate-induced sea level rise and extreme weather can wreak havoc. Far from major markets, most small Pacific island states offer few economic opportunities to residents and underdevelopment makes these islands feel even more isolated.

The INTEGRE project responds to this sense of isolation as well as to the technical challenges of managing coastal areas sustainably. The four overseas countries and territories (OCTs) of the EU act as a springboard for INTEGRE action, but the project has region-wide ambitions. All small island Pacific states face similar challenges and threats, so it makes sense to agree on and implement common approaches to managing coastal areas. Cooperation networks will extend to other ACP (Africa Caribbean Pacific) countries and will benefit from the EU's long experience in Integrated Coastal Zone Management (ICZM) in and beyond Europe. The EU is supporting the initiative with EUR 12 million in funding.

The I and the Z of ICZM are key: 'integrated' primarily means involving all groups with a stake in the coast, with their often competing demands for access to coastal resources. A plan drawn up by the most qualified technical experts and officials, but without local communities, will fail. Similarly, the coastal 'zone' is not measured in metres from the sea, but determined by all stakeholders based on their competing interests as well as ecosystem dependencies and natural boundaries. As such, it often stretches far inland.

56 At the country level, the project has enabled us to revitalize organic farming, which was no longer a government priority. At site level, the participatory approach taken by the project is also an opportunity to involve local stakeholders in deciding how government land should be developed. It is a new approach for us, but a year on we feel that involving the population has smoothed our relations."

Agriculture department representative
French Polynesia

INTEGRE aims to facilitate the complex, yet vital, process of ICZM, so as to protect Pacific island coastlines and enable their resources to be exploited sustainably with shared responsibility and equitable outcomes. Pilot projects use communication and participatory tools to raise awareness, deepen understanding and ensure everyone's voice is heard, especially the most vulnerable. Technicians, managers and community groups all 'learn by doing'. Bolstering this practical experience there is capacity building to improve coastal governance as well as technical skills.

INTEGRE aims for wider regional impact, working not just with individual states, but bringing the four Pacific OCTs and their small island neighbours around the table for greater cohesion and cooperation. Discussions may begin with coastal matters, but over time they are expected to develop into common approaches to drive greener, more equitable growth in the region.

Protection and sustainable management of ecosystems therefore forms a crucial part of European efforts to combat climate change. The EU promotes ecosystem-based approaches, supporting climate change mitigation and adaptation by conserving and restoring biodiversity. Such approaches preserve carbon stocks, boost resilience, reduce ecosystem vulnerability and support community adaptation to climate change. Ecosystem-based approaches also regulate water flow and storage, improve biodiversity conservation, boost livelihood opportunities and provide health and recreational benefits. They are cost-effective and accessible to poor and rural communities.

The EU Biodiversity Strategy to 2020 explains how the EU will reach its target of halting biodiversity loss and ecosystem degradation in the European Union by 2020. It also commits the EU to increasing efforts to prevent global biodiversity loss.

In the financing period 2007-2013, the EU committed an average EUR 210 million per year to support biodiversity-related actions in developing countries, 40% of which was also relevant for climate change, and over a third for climate change adaptation.

Within the 2014-2020 financial framework, the EU has launched the Biodiversity for Life (B4Life) flagship initiative. B4Life aims to strengthen the linkages between biodiversity conservation and poverty eradication. This dual focus serves to boost growth, support green economies and address climate change issues.

4.3. Farming and climate change

Agriculture is a major economic sector in many developing countries, contributing to food and nutrition security, employment, inclusive growth and ultimately poverty reduction. This is why the EU places particular emphasis on agriculture, a sector where adding value also contributes to increased incomes and greater numbers of decent jobs.

Agriculture is particularly vulnerable to the impacts of climate change, however. Higher temperatures, changing weather patterns and deforestation all place additional stress on crops and animals, and floods and droughts can be disastrous. Sea level rise, tidal surges and soil salinity reduce the amount of land available for farming.

Combating desertification and climate change in the Sahel and West Africa

Encroaching deserts and land degradation caused by human activity and climate change pose an increasing threat to countries in West Africa and the Sahel. Resulting productivity losses make it harder to meet Millennium Development Goal (MDG) food security and poverty reduction targets.

The EU is providing almost EUR 10 million to support the 'Regional programme for sustainable land management and climate change adaptation in Sahel and West Africa (PRGDT)'. The programme aims to restore over 15,000 hectares (the size of 20,000 soccer pitches) of degraded land, leading to productivity gains of about 15% in agriculture, forestry and pastoral farming.

As well as these practical interventions, PRGDT seeks to push sustainable land management and climate change adaptation, vital for achieving the MDGs, to the top of the political agenda in Sahel countries and members of the Economic Community of West African States (ECOWAS). By increasing understanding about the impacts of climate change and about effective adaptation strategies, PRGDT intends to strengthen the resolve of governments to mainstream desertification, adaptation and sustainable land use into wider development plans and programmes.

Bolstering pan-African and international initiatives, such as the Great Green Wall, PRGDT supports large-scale land restoration and reforestation, adding many more 'bricks' to the green wall that will keep the desert at bay and make degraded land productive once more.

Tropical countries suffer disproportionately from the impacts of climate change, because their high temperatures and rainfall patterns are already close to the threshold values beyond which crops fail or animals die. Many different adaptation measures reduce vulnerability. Some, like changing crops to match climate changes, specifically address the effects of climate change. Others are standard good practice and contribute to wider developmental and sustainability objectives.

Agriculture is also a significant source of greenhouse gas emissions, accounting for an estimated 14% of the global total. Since roughly 70% of all agriculture takes place in developing countries, the sector offers considerable potential for mitigation in these countries. Low cost technologies are available to mitigate agricultural greenhouse gas emissions, and huge potential exists for win-win scenarios that strengthen resilience, reduce net emissions and reduce poverty too.

The EU's Agenda for Change identifies agriculture as a priority sector that supports sustainable development and growth. Indeed, the EU has already taken steps to increase its support for sustainable agriculture. Some 60 countries have opted to receive bilateral EU support for agriculture between 2014 and 2020. Additional support will also be given through the EU's Global Public Goods and Challenges⁵ programme, whose priority themes include food and nutrition security and sustainable agriculture. Overall goals are to improve food security for the poorest and most vulnerable, to help eradicate poverty and hunger for current and future generations, and to reduce malnutrition, thereby reducing child mortality.

To reach these goals, the EU is helping to increase productivity in sustainable agriculture, especially for small-scale farmers, and to reduce food loss and preserve ecosystems. Maintaining healthy soils and restoring degraded land are important challenges that climate-smart agriculture and conservation farming techniques can help overcome. They can also reduce emissions, build resilience, promote adaptation, reduce pressure on forests and lower the costs of farming.

Agricultural GHG emissions can be reduced by improving land management for crops and grazing, for example by tilling the soil, adding nutrients, managing residues, and restoring drained organic soils and degraded land. Smaller reductions are also possible through improved

water and rice management, land use changes such as converting cropland to grassland, and agro-forestry. Better livestock and manure management will also reduce GHG emissions.

4.4. Strengthening knowledge through climate research

Building a base of knowledge and understanding is crucial for the fight against climate change. For decades, the EU has used its Framework Programmes for Research and Technological Development to promote scientific and technological cooperation between Europe and developing countries. This cooperation covers fundamental research areas, such as global and regional climate system modelling, as well as vulnerability, impact and adaptation assessments and identifying options for mitigation and adaptation. Its results have contributed significantly to major international research programmes, including the work of the Intergovernmental Panel on Climate Change.

International cooperation is an integral feature of European research and innovation programmes, which continue to be the most open funding programmes in the world. Developing country researchers and research organisations participate directly in a wide range of EU-funded projects on climate change. The programme also supports specific thematic or geographical initiatives to increase cooperation between Europe and developing countries on shared priorities. One example is AFRICA CALL, launched in 2009, which emphasised water, agriculture, and health - three key priorities for climate change researchers within the Africa-EU strategic partnership.

The new EU research and innovation framework programme, Horizon 2020 (2014-2020), contributes to this roadmap by providing African food supply projections and agricultural risk assessments. Forecasting remains a challenging task, requiring information on environmental and weather conditions, climate-related stresses, crops and livestock. The ultimate goal is to make Africa's agricultural production more predictable.

The European Commission also contributes to climate research in developing countries through its in-house scientific service, the Joint Research Centre (JRC). The JRC's scientific activities with developing countries aim primarily at building capacity, enabling national institutions to

monitor climate change impacts, report on mitigation efforts in line with international legal obligations, and take part in international policy dialogue.

Examples of JRC's work include the new GCCA+ vulner-ability index and the CLIMEcoN project, which explores options to address loss and damage caused by climate change. The Centre also contributes to EUROCLIMA, a

programme that spreads and deepens understanding about the processes of desertification, land degradation and drought.

The JRC also provides scientific evidence and data to inform and assess EU climate and development policies, helping to anticipate and mitigate any potential climate risks.

Monitoring forests to fight climate change

Forests are natural carbon storage vaults; cutting them down or allowing them to degrade increases the amount of CO2 in the atmosphere. Conserving, replanting and sustainably managing forests, on the



other hand, increase our planet's capacity to combat climate change. The United Nations Framework Convention on Climate Change (UNFCCC) discussed forest-related mitigation at its 16^{th} and 17^{th} Conferences of the Parties, noting the need for robust systems to record accurate information on forest cover and health, and clear baselines to measure change over time.

The EU-supported 'Reducing Emissions from Deforestation and Degradation (REDD+)' is responding to these needs by designing monitoring frameworks that, if adopted and used consistently, allow a global picture to emerge of forestry's evolving contribution to climate change mitigation.

I think it's good for the Forest Inventory and Planning Institute and now our department is responsible for monitoring and reporting on REDD+ for Vietnam. We are so pleased that Vietnam can be registered as a member in this research."

Dr Nguyen Phu Hung Director of Department for Science, Technology & International Cooperation, Viet Nam Administration of Forestry

Monitoring tools are worse than useless, however, if the people maintaining them do not know how to use them, or do not see the importance of accurate and consistent data. This is where ReCaREDD (Reporting Capacities for REDD) comes in, with the European Commission's Joint Research Centre leading efforts to build capacity in partner countries to report on forest degradation in a reliable and cost-efficient manner. As well as sharing know-how and tools for monitoring and reporting, ReCaREDD works with national and regional institutions to consider sustainable forestry management techniques and adapt them to suit local contexts. EU support for ReCaREDD amounts to EUR 5 million over the period 2013 to 2017.

Forestry data collected in each country feeds into a global inventory and information system, but it is equally valuable for national decision support systems. The fact that monitoring and reporting tools are transparent and consistent means that data collected can also inform policy at the regional level, offering an effective mechanism for enhanced coherence and cooperation on issues related to forestry management and climate change mitigation.

The EU is increasing climate spending

5.1. Climate finance for 2014 -2020

The European Union, comprising both Member States and institutions, is the world's biggest climate donor and is key to the overall climate finance landscape.

The EU is now ramping up its climate finance in order to help the global community meet its stated goal of mobilising USD 100 billion per year by 2020 for climate action in developing countries.

During the 2014-2020 financial period, the EU will spend at least 20% of its entire budget – as much as EUR 180 billion – on climate-relevant projects and policies, a threefold increase compared with the previous period (2007-2013). This will affect all major policy areas both inside Europe and outside it, where EU support helps partner countries to reduce GHG emissions and adapt to climate change. An estimated EUR 14 billion of the total will target climate-relevant activities in developing countries by 2020.

EU funding is delivered through budget support, grant or procurement contracts, and is allocated along geographic aland thematic lines. The geographically-based instruments are: the Development Cooperation Instrument (DCI) for developing countries in Asia and Latin America; the European Neighbourhood Instrument (ENI) for North Africa, the Middle East and Eastern Europe; the European Development Fund (EDF) for Sub-Saharan Africa, the Caribbean and the Pacific Ocean; and the Partnership Instrument (PI) for other emerging economies.

The 'Global Public Goods and Challenges' programme provides a good example of thematic funding. Approved in 2014, it supports sustainable development and focuses on the environment and climate change, sustainable energy, human development, food and nutrition security and sustainable agriculture, and migration and asylum. It contributes to good governance, and political stability and security. Between 2014 and

2020, this programme has a budget of EUR 5.1 billion, and at least half of it will support climate action and environment-related objectives.

5.2. Leveraging funds for climate action

Blending is a powerful tool for leveraging additional resources and increasing the impact of EU aid, helping developing countries transition towards low emission and climate resilient societies.

Blending combines EU grants with loans or equity from public and private financiers for significant investments in partner countries. The grant attracts additional financing by creating a favourable investment environment and reducing risk for private investors. The EU grant contribution can take different forms depending on the needs of individual investment projects:

- investment grant or interest rate subsidy: reduces the initial investment and overall project cost for the partner country
- technical assistance: ensures project quality, efficiency and sustainability
- risk capital (i.e. equity or quasi-equity): attracts additional financing
- guarantees: unlock financing for development by reducing risk

EU regional blending facilities have now been established in all regions of EU external cooperation. These include the Neighbourhood Investment Facility (NIF), Latin America Investment Facility (LAIF), Asian Investment Facility (AIF), Investment facility for Central Asia (IFCA), Caribbean Investment Facility (CIF), Investment Facility for the Pacific (IFP), and the EU-Africa Infrastructure Trust Fund (ITF).

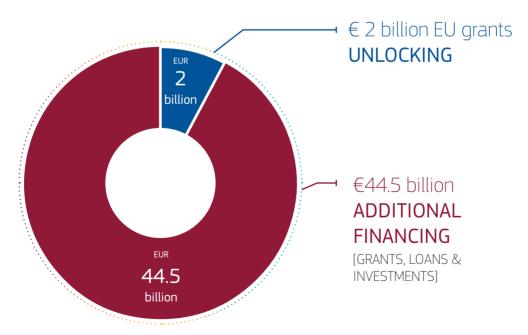
Between 2007 and 2014, the EU issued grants worth more than EUR 2 billion to finance about 200 blended projects, leveraging at least EUR 19 billion from other public financial institutions to achieve an overall investment volume of more than EUR 44 billion. The Commission estimates that 62% of the projects financed by EU blending facilities since 2007 had climate-relevant aims among their main objectives.

The EU expects to increase the level of grants for blending in the period 2014-2020. This means that more than EUR 3 billion in climate-relevant grants are set to leverage total investments worth more than EUR 50 billion (USD 66 billion) with benefits for our climate.

In line with EU policy papers¹⁴, new ways have been found to involve the private sector in development and climate investments. These include strengthening Public Private Partnerships, using risk mitigation instruments for renewables, and providing focused credit lines to financial intermediaries for energy efficiency.

The coming years will see the European Union continue to lead the world in the fight against climate change, using its financial weight to leverage greater private sector investment, making climate central to its own development policies in the EU and in partner countries, and increasing financial support for adaptation, mitigation and greener growth at home and abroad.

Figure 2: Climate Action - Unlocking the potential of the private sector



^{14.} Brussels, 13.5.2014 COM(2014) 263 final "Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions a Stronger Role of the Private Sector in Achieving Inclusive and Sustainable Growth in Developing Countries".

Further reading

GCCA+

www.gcca.eu

Nansen Initiative

www2.nanseninitiative.org

ISLANDS

http://commissionoceanindien.org/activites/islands/le-programme/

EUROCLIMA

http://www.euroclima.org/en/

Climate Adaptation in the World's Most Outstanding Natural Places

http://wwf.panda.org/what_we_do/how_we_work/protected_areas/naturalsolutions/

GCCA+ CARIFORUM support programme

http://www.gcca.eu/intra-acp/gcca-cariforum-support-programme

GCCA+ Pacific Islands Forum support programme

http://gcca.eu/intra-acp/gcca-pacific-islands-forum-support-programme

GCCA+ climate resilience in Bangladesh

http://www.gcca.eu/national-programmes/asia/gcca-bangladesh-climate-change-resilience-fund-bccrf

GCCA+ climate resilience in Ethiopia

http://gcca.eu/national-programmes/africa/gcca-ethiopia

Caribbean Catastrophe Risk Insurance Facility

http://www.ccrif.org/

Improved ecosystem management for sustainable and disaster-resilient development

http://www.unep.org/disastersandconflicts/Introduction/DisasterRiskReduction/UNEPandDisasterRiskReduction

Geothermal Development Facility Latin America

https://www.youtube.com/watch?v=eKulhR-eQmE&feature=youtu.be

Solar energy services in Guinea-Bissau

http://www.fres.nl/fr/hoe-werkt-fres/fres-au-guinee-bissau/83-onderhandelingen-guinee-bissau.html

Vientiane Sustainable Urban Transport

http://www.eib.org/projects/pipeline/2013/20130587.htm

Kyrgyzstan Sustainable Energy Efficiency Financing Facility (KyrSEFF)

http://www.kyrseff.kg/en/

