ISSN 1977-8309

European Commission

Tools and Methods Series
Guidelines Nº 6

Integrating the environment and climate change into EU international cooperation and development

Towards sustainable development

February 2016

Directorate-General for International Cooperation and Development

How to obtain EU publications

Free publications:

- via EU Bookshop (http://bookshop.europa.eu);
- at the European Union's representations or Delegations. You can obtain their contact details on the Internet (http://ec.europa.eu) or by sending a fax to +352 2929-42758.

Priced publications and subscriptions:

- via EU Bookshop (http://bookshop.europa.eu).

Annexes

Annex 1: Sustainable Development Goals and targets relevant for mainstreaming

Annex 2: Terms of reference for a Country Environmental Profile

Annex 3: Environment and Climate Change Screenings

Annex 4: Guidance for integrating environmental and climate-related aspects in identification and formulation studies

Annex 5: Terms of reference for a Strategic Environmental Assessment

Annex 6: Terms of reference for an Environmental Impact Assessment

Annex 7: Monitoring and indicators

Annex 8: Rio and aid to environment markers

Annex 9: Terms of reference for a Climate Risk Assessment

A number of tools accompany these *Guidelines for Integrating the environment and climate change into EU international cooperation and development*. Some of these tools are presented in the following annexes, while others are available on Capacity4Dev, notably climate change sector scripts and draft sector notes.

The annexes are living documents that will be updated and adjusted to take into account new developments and experience gained. The terms of reference for a CEP, an SEA, an EIA and a CRA are designed for comprehensive assessments. In many cases, depending on the specific context and the action to which it relates, a lighter assessment is more appropriate and the terms of reference for these assignments can be simplified.

For more information and help in implementing these guidelines, please contact DEVCO C2 (Environment, ecosystem services, biodiversity and wildlife) and C6 (Sustainable energy and climate change) at the following email address: EuropeAid-C2-MAINSTREAMING@ec.europa.eu.

ANNEX 1

Sustainable Development Goals and targets relevant for mainstreaming

The Sustainable Development Goals are presented below with a selection of those targets most relevant for mainstreaming.

GOAL	TARGET RELEVANT FOR MAINSTREAMING
1. End poverty in all its forms everywhere	1.4 by 2030 ensure that all men and women, particularly the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership, and control over land and other forms of property, inheritance, natural resources, appropriate new technology, and financial services including microfinance
	1.5 by 2030 build the resilience of the poor and those in vulnerable situations, and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters
2. End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	2.3 by 2030 double the agricultural productivity and the incomes of small-scale food producers, particularly women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets, and opportunities for value addition and non-farm employment
	2.4 by 2030 ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality
	2.5 by 2020 maintain genetic diversity of seeds, cultivated plants, farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge as internationally agreed
	2.a increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development, and plant and livestock gene banks to enhance agricultural productive capacity in developing countries, in particular in least developed countries
3. Ensure healthy lives and promote well-being for all at all ages	3.3 by 2030 end the epidemics of AIDS, tuberculosis, malaria, and neglected tropical diseases and combat hepatitis, water-borne diseases, and other communicable diseases
	3.9 by 2030 substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water, and soil pollution and contamination
4. Ensure inclusive and equitable quality education and promote life-long learning opportunities for all	4.7 by 2030 ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development
5. Achieve gender equality and empower all women and girls	5.a undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources in accordance with national laws

GOAL	TARGET RELEVANT FOR MAINSTREAMING
6. Ensure availability and sustainable management of water and sanitation for all	6.1 by 2030, achieve universal and equitable access to safe and affordable drinking water for all
	6.2 by 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations
	6.3 by 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally
	6.4 by 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity, and substantially reduce the number of people suffering from water scarcity
	6.5 by 2030 implement integrated water resources management at all levels, including through transboundary cooperation as appropriate
	6.6 by 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes
	6.a by 2030, expand international cooperation and capacity-building support to developing countries in water and sanitation related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies
	6.b support and strengthen the participation of local communities for improving water and sanitation management
7. Ensure access to affordable, reliable, sustainable and modern energy for all	7.2 increase substantially the share of renewable energy in the global energy mix by 2030
	7.3 double the global rate of improvement in energy efficiency by 2030
	7.a by 2030 enhance international cooperation to facilitate access to clean energy research and technologies, including renewable energy, energy efficiency, and advanced and cleaner fossil fuel technologies, and promote investment in energy infrastructure and clean energy technologies
	7.b by 2030 expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, particularly LDCs and SIDS
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	8.4 improve progressively through 2030 global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation in accordance with the 10-year framework of programmes on sustainable consumption and production with developed countries taking the lead
	8.9 by 2030 devise and implement policies to promote sustainable tourism which creates jobs, promotes local culture and products
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	9.1 develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all
	9.2 promote inclusive and sustainable industrialization, and by 2030 raise significantly industry's share of employment and GDP in line with national circumstances, and double its share in LDCs
	9.4 by 2030 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities
	9.a facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, LDCs, LLDCs and SIDS

GOAL	TARGET RELEVANT FOR MAINSTREAMING
11. Make cities and human settlements inclusive, safe, resilient and sustainable	11.2 by 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
	11.3 by 2030 enhance inclusive and sustainable urbanization and capacities for participatory, integrated and sustainable human settlement planning and management in all countries
	11.4 strengthen efforts to protect and safeguard the world's cultural and natural heritage
	11.5 by 2030 significantly reduce the number of deaths and the number of affected people and substantially decrease the economic losses relative to GDP caused by disasters, including water-related disasters, with the focus on protecting the poor and people in vulnerable situations
	11.6 by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management
	11.7 by 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities
	11.a support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning
	11.b by 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, develop and implement in line with the forthcoming Hyogo Framework holistic disaster risk management at all levels
	11.c support least developed countries, including through financial and technical assistance, for sustainable and resilient buildings utilizing local materials
12. Ensure sustainable consumption and production patterns	12.1 implement the 10-Year Framework of Programmes on sustainable consumption and production (10YFP), all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries
	12.2 by 2030 achieve sustainable management and efficient use of natural resources
	12.3 by 2030 halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains including post-harvest losses
	12.4 by 2020 achieve environmentally sound management of chemicals and all wastes throughout their life cycle in accordance with agreed international frameworks and significantly reduce their release to air, water and soil to minimize their adverse impacts on human health and the environment
	12.5 by 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse
	12.6 encourage companies, especially large and trans-national companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle
	12.7 promote public procurement practices that are sustainable in accordance with national policies and priorities
	12.8 by 2030 ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature
	12.a support developing countries to strengthen their scientific and technological capacities to move towards more sustainable patterns of consumption and production
	12.b develop and implement tools to monitor sustainable development impacts for sustainable tourism which creates jobs, promotes local culture and products

GOAL	TARGET RELEVANT FOR MAINSTREAMING
12. Ensure sustainable consumption and production patterns	12.c rationalize inefficient fossil fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities
13. Take urgent action to combat climate change and its impacts	13.1 strengthen resilience and adaptive capacity to climate related hazards and natural disasters in all countries
	13.2 integrate climate change measures into national policies, strategies, and planning
	13.3 improve education, awareness raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning
	13.a implement the commitment undertaken by developed country Parties to the UNFCCC to a goal of mobilizing jointly USD100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible
	13.b Promote mechanisms for raising capacities for effective climate change related planning and management, in LDCs and SIDS, including focusing on women, youth, local and marginalized communities
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development	14.1 by 2025, prevent and significantly reduce marine pollution of all kinds, particularly from land-based activities, including marine debris and nutrient pollution
	14.2 by 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans
	14.3 minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
	14.4 by 2020, effectively regulate harvesting, and end overfishing, illegal, unreported and unregulated (IUU) fishing and destructive fishing practices and implement science-based management plans, to restore fish stocks in the shortest time feasible at least to levels that can produce maximum sustainable yield as determined by their biological characteristics
	14.5 by 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on best available scientific information
	14.6 by 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, and eliminate subsidies that contribute to IUU fishing, and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation
	14.7 by 2030 increase the economic benefits to SIDS and LDCs from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism
	14.a increase scientific knowledge, develop research capacities and transfer marine technology taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular SIDS and LDCs
	14.b provide access of small-scale artisanal fishers to marine resources and markets
	14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLO, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future we Want.

GOAL	TARGET RELEVANT FOR MAINSTREAMING
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	15.1 by 2020 ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements
	15.2 by 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and substantially increase afforestation and reforestation globally
	15.3 by 2030, combat desertification, and restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation neutral world
	15.4 by 2030 ensure the conservation of mountain ecosystems, including their biodiversity, to enhance their capacity to provide benefits which are essential for sustainable development
	15.5 take urgent and significant action to reduce degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species
	15.6 promote fair and equitable sharing of the benefits arising from the utilization of genetic resources, and promote appropriate access to genetic resources
	15.7 take urgent action to end poaching and trafficking of protected species of flora and fauna, and address both demand and supply of illegal wildlife products
	15.8 by 2020 introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems, and control or eradicate the priority species
	15.9 by 2020, integrate ecosystems and biodiversity values into national and local planning, development processes and poverty reduction strategies, and accounts
	15.a mobilize and significantly increase from all sources financial resources to conserve and sustainably use biodiversity and ecosystems
	15.b mobilize significantly resources from all sources and at all levels to finance sustainable forest management, and provide adequate incentives to developing countries to advance sustainable forest management, including for conservation and reforestation
	15.c enhance global support to efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities
16. Achieve peaceful and inclusive societies, rule of law, effective and capable institutions	16.6 develop effective, accountable and transparent institutions at all levels
	16.7 ensure responsive, inclusive, participatory and representative decision-making at all levels
	16.8 broaden and strengthen the participation of developing countries in the institutions of global governance
	16.10 ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements
	16.b promote and enforce non-discriminatory laws and policies for sustainable development

GOAL	TARGET RELEVANT FOR MAINSTREAMING
17. Strengthen means of implementation and revitalise the global partnership for sustainable development	17.3 mobilize additional financial resources for developing countries from multiple sources
	17.7 promote development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed
	17.9 enhance international support for implementing effective and targeted capacity building in developing countries to support national plans to implement all sustainable development goals, including through North-South, South-South, and triangular cooperation
	17.14 enhance policy coherence for sustainable development
	17.15 respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development
	17.16 enhance the global partnership for sustainable development complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technologies and financial resources to support the achievement of sustainable development goals in all countries, particularly developing countries
	17.17 encourage and promote effective public, public-private, and civil society partnerships, building on the experience and resourcing strategies of partnerships
	17.19 by 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP, and support statistical capacity building in developing countries

ANNEX 2

Terms of reference for a Country Environmental Profile

As part of the programming cycle, preferably before the programming starts, the EU Delegation prepares an analysis of the country environmental and climate change context and of past and present EU cooperation in relation with environment and climate change (including Mainstreaming). The analysis, often known as the Country Environment Profile (CEP), covers the key environmental and climate-related challenges and opportunities, the way they are addressed in the National Development Plan and other policies, and the implications for future EU cooperation and policy dialogue. The assessment informs the evaluation of the national policy documents on which the programming will be based, the policy dialogue, the preparation of the EU response (the Multiannual Indicative Programme), its implementation and its mid-term review.

This annex presents terms of reference for a comprehensive country environmental and climate change analysis. These ToR have to be adapted to the needs of the EU delegation based on the availability of other similar analyses and on the scope of the analysis.

Three possible approaches are:

1. there are no equivalent recent analyses available, or the sources of information are not reliable – in this case it is recommended to prepare a complete CEP based on these ToR;
2. there are equivalent recent analyses available which can inform the integration of environment and climate change in programming – in this case, the analysis can focus on completing any missing relevant information required under these ToR (including an overview of integration of environment and climate change into EU development cooperation under past and current programmes and projects), and analysing the information available to draw recommendations for the better integration of environment and climate change in EU programming;
3. a joint country environmental and climate change analysis, CEP (or equivalent document) is prepared together with other donors, in which case the document should cover all key aspects as per these ToR, including (especially) the analysis and recommendations for the better integration of environment and climate change in programming.

Explanations or sections to be completed according to individual circumstances are given in italics. To aid the preparation of ToRs for a CEP and management of the process, a guide is available citing examples of CEPs that are considered to demonstrate good practice for a number of criteria

ToR for the preparation of the Country Environmental Profile of (*name of the country*)

1. BACKGROUND

Give a brief overview of the country, its current socio-political situation, EU cooperation experience on the major environmental concerns and responses by the government and/or other donors, the objectives and rationale for integrating the environment and climate change in the EU country analysis and programming documents and the current timetable with respect to the multi-annual programming process.

2. OBJECTIVE

The main objective of the Country Environmental Profile is to identify and assess environmental and climate change issues to be considered during the preparation of a country programme, which will directly or indirectly influence EU cooperation with the country. The Country Environmental Profile will provide decision makers in the partner country and in the EU with clear information on the key environmental and climate change challenges and opportunities, including the implementation of the new Sustainable Development Agenda 2030 and the transition to a green economy. It will cover the current policy, regulatory and institutional framework and the strategies and programmes (including those of the EU and other donors) to address them. The analysis aims to inform the preparation of the EU cooperation programme, to guide the integration of environmental and climate change concerns and objectives in the policies and programmes supported by the EU and to establish the necessary environment and climate change safeguards for all cooperation activities undertaken in the country. The Profile will describe the key linkages between the environment, including climate change, and poverty reduction. It will constitute an important source of baseline information and contribute to focusing political dialogue and cooperation with the country on key areas of concern including sustainable development as well as raising awareness among policy makers.

3. RESULTS

The profile will deliver the following results:

- an assessment of the state of the environment and key environmental factors and trends, including those related to climate change, influencing the country's sustainable development and stability;
- an assessment of the main links between the state of the environment, climate change and human development in its multiple dimensions (income, consumption, health, security, vulnerability, ...);
- an assessment of national environmental and climate change policy and legislation/regulations, institutions and capacities, and the involvement of civil society in environmental and climate change matters (including areas relevant for the transition to a green economy);
- an assessment of available analyses on the potential impacts of increasing climate variability and climate change on different key sectors and the strategies and processes in place or under development to respond to them;
- an assessment of the integration of environmental and climate change concerns in development policy and sectors (including an overview of existing institutional arrangements for mainstreaming at sector level);
- an overview of past and ongoing international (including EU) cooperation in environment and climate change as an area for cooperation and environmental and climate change integration;

- recommendations and, as far as possible, guidelines or criteria for mainstreaming environmental and climate change (adaptation and mitigation) concerns in cooperation areas. These recommendations should support the preparation of the country programming and include guidance or criteria to be used for environmental and climate change integration in subsequent phases of the cycle of operations.

4. ISSUES TO BE ASSESSED

The following issues should be analysed using existing sources of information and key stakeholders' perspectives. It is not expected that the preparation of the Profile will involve the collection of original data.

The sub-headings below are the same as the recommended profile format.

4.1. STATE OF THE ENVIRONMENT/CLIMATE CHANGE, TRENDS AND PRESSURES

This chapter should identify the **state** and **trends** of key environmental resources or components in the country, including (as relevant), but not necessarily limited to:

THEMES	ASPECTS
1. Land	• Soil erosion and degradation • Desertification • Land use, arable land, losses due to urbanisation or infrastructure building
2. Water	• Water regime • Groundwater • Water quality
3. Air quality	• Urban air quality • Indoor air quality
4. Forest, vegetation, ecosystems	• Forest cover, and forest cover change • Pastureland • State of particular ecosystems (e.g. savannahs, mangroves, coral reefs)
5. Biodiversity, wildlife	• Local status of globally threatened species/habitats • Alien invasive species • Fish stocks • Species with special value
6. Mineral resources and geology	• Mineral resources • Geological risks (seismic, volcanic and related risks)
7. Landscape	• Aesthetic and cultural value of landscape
8. Living conditions in human settlements	• Air and water quality • Sanitation • Slums • Environmental health • Vulnerability to disasters
9. Climate trends	• Temperature • Precipitation • Frequency of extreme weather events, natural climate-related disasters

Expected impacts of climate change should be described, focusing on key impacts affecting national and sectoral development, taking into account direct and indirect impacts. An overview should be provided of climate vulnerability for key development sectors, including an indication of the social groups that are particularly vulnerable to climate change due to their particular exposure, sensitivity or adaptive capacities.

This section will also highlight the effects of climate change in exacerbating existing environmental pressures and the linkages between environmental degradation (ecosystem services) and vulnerability, with a focus on the poorest and most exposed social groups.

Existing national or sub-regional studies on the expected effects of climate change should be considered, including proposed responses, which may include technical, policy and institutional components.

The overall implications of climate change for focal areas of cooperation should be assessed, including any safeguards or need for additional analyses to ensure that investments are adapted to increasing climate variability and predicted climate change effects.

Pressures on the environment and on climate vulnerability explaining the main negative trends should be identified, as well as pressures contributing to global environmental problems and to the atmospheric concentration of greenhouse gases (GHG), using the following table as a guiding checklist.

PRESSURE ON ENVIRONMENT AND/OR CLIMATE VULNERABILITY	POSSIBLE ASPECTS TO CONSIDER
1. Mining, extraction of hydrocarbons	• Extraction, processing and transport of minerals and hydrocarbons, and the resulting pollution and waste
2. Water use and management	• Water extraction (surface and groundwater) • Wastewater discharges, water treatment • Water use
3. Land use and management	• Land use planning including strategic environmental implications; land use change and related GHG emissions, large-scale land conversion.
4. Forest exploitation, hunting, fisheries, biodiversity	• Deforestation and forest degradation and related GHG emissions • Forest product extraction; illegal logging • Forest and fisheries management practices • Hunting and fishing activities, poaching • Wildlife trafficking • Use of non-timber forest products • Fires • Introduction of alien species
5. Livestock	• Overgrazing • Rangeland management, use of fire, water management • Livestock waste and pollution management
6. Agriculture	• Expansion of agricultural land • Shifting cultivation • Intensification • Irrigation and water use • Pest control • Agricultural practices, soil management • Agricultural waste and pollution management

PRESSURE ON ENVIRONMENT AND/OR CLIMATE VULNERABILITY	POSSIBLE ASPECTS TO CONSIDER
7. Energy supply and use	• Sources of energy • Supply- and generation-related waste and emissions • Energy consumption and associated emissions • Energy efficiency
8. GHG emissions	• Emissions of main GHG and sources
9. Urbanisation, infrastructure and industry	• Urban growth and sprawl, urban planning • Dams, roads, ports, other major infrastructure • Polluting industries, tourism
10. Transport	• Transport of goods • Transport of people
11. Waste disposal and management	• Waste production • Waste management • Public behaviour and practices • Hazardous waste management

As far as possible, the driving forces influencing these pressures should be identified, such as economic and fiscal incentives (including those affecting the transition to a green economy), demographic pressure, growing demand for commodities, unsustainable production systems, governance of natural resources, access rights to natural resources and land tenure systems.

Trends in the state of the environment and climate should be analysed with regard to their social and economic impact, including:

- impact on the economy;
- decline in production or productivity (e.g. agriculture, forestry, fisheries);
- threats to human health;
- human exposure to environmental disasters (e.g. floods, drought, landslides);
- conflicts and security issues;
- impact on poverty, differentiated impact on women and men, impact on vulnerable groups (including children and indigenous peoples);
- sustainability of resource use;
- cultural values.

The concluding paragraphs of this section should summarise the main problems identified, described in terms of situations or trends that are undesirable due to their current socio-economic consequences (e.g. falling productivity, health problems, natural risks, social crises, conflicts), their future consequences (e.g. decline in natural resources, cumulative pollution) or their contribution to global environmental problems. The main links between the environment, climate change and human development (in its multiple dimensions: income, consumption, health, security, vulnerability ...) should be highlighted, possibly in the form of a matrix or 'problem tree'.

As appropriate, the consultant should refer to environmental and climate change indicators that could be used for monitoring changes in key parameters in the country. To the extent that data are available, trends in relation with the sustainable development goals, targets and indicators should be provided; trends in additional indicators

related to country-specific environmental issues can also be provided, as available, to highlight those that are significant.

If appropriate, the information could be organised according to eco-geographical subdivisions with the scale (regional, national, local) of the issues indicated.

4.2. ENVIRONMENTAL AND CLIMATE CHANGE POLICY, REGULATORY AND INSTITUTIONAL FRAMEWORK

A brief description and review should be provided of the main government responses to deal with key environmental and climate change issues and promote sustainable development. This section should analyse strengths and weaknesses and cover the following aspects.

ASPECTS	EXAMPLES OF ISSUES TO CONSIDER
1. Policies[1]	• Existence of national policies, strategies and action plans for the environment, including possible national strategy for sustainable development, national climate change strategy, national environmental action plan, National Adaptation Plan (NAP), low carbon-, green economy- or green growth strategies • Policy responses to global issues, sustainability issues (depletion of natural resources), and specific environmental and climate change issues identified above • Consistency between policies • Policies on gender and environment • Important measures taken by the government to address environmental climate vulnerability concerns and types of policy instruments used for implementation • Effectiveness in achieving targets
2. Regulatory framework, including Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) legislation	• Ratification status and implementation of Multilateral Environmental Agreements such as those concerning climate change, biodiversity and desertification (with reference to any official plans, programmes, communications or reports issued in the context of these conventions) • Adequacy of environmental legislation, including on land tenure and land reform, access rights to natural resources, management of natural resources, requirements for environmental assessment such as for EIA and SEA, pollution control, development control • Provision and procedures for public participation in environmental decision-making • Effectiveness of legislation enforcement • Use of other (non-legislative) instruments, e.g. 'green budgeting', environmental fiscal reform and market-based mechanisms, voluntary schemes (e.g. environmental management systems, environmental labelling, voluntary industry–government agreements) • Potential impact of non-environmental legislation
3. Institutions with environmental and climate change responsibilities	• Identity and quality of institutions involved in policy-making, legislation, planning, environmental protection, monitoring and enforcement • Level of coordination and decentralisation • Strength and capacities of individual institutions • Influence on other institutions • Good governance practices • Capabilities, means, functioning of environmental services • Major NGOs, institutes or other organisations involved in environmental/climate change management or policy

ASPECTS	EXAMPLES OF ISSUES TO CONSIDER
4. Public participation	• Transparency and access to environmental information • Role of NGOs and civil society in environmental decision-making • Effectiveness of participation • Participation by women and traditionally less represented groups • Access to justice in environmental matters
5. Environmental services and infrastructure	• Protected areas: number, areas, relevance, effectiveness of protection • Sanitation and waste treatment infrastructure • Disaster risk reduction systems • Emergency response mechanisms
6. Environmental and climate resilience monitoring system	• Relevance of selected indicators, particularly those linked to the SDG targets • Measurement of the indicators: periodicity, reliability • Integration in the general development indicators

(1) Note that climate-related policies and strategies may be briefly described here but are also covered in more detail in section 4.3.

4.3. INTEGRATION OF ENVIRONMENTAL AND CLIMATE CHANGE CONCERNS INTO KEY POLICIES AND SECTORS

The analysis should examine the integration of environment and climate change in the national development policy and in sector policies, particularly those that might be identified for EU support, taking into account the focal areas in the current programming document as well as any pre-identified option for future cooperation.

This section should examine whether Strategic Environmental Assessments (or similar assessments) are available for the national development strategy or poverty reduction strategy and for the sectors of interest. If such SEAs exist, they should be briefly described including the main recommendations. The main legislation, institutional arrangements and measures that address environmental issues in the sector, especially those identified in section 4.1 above, should be examined.

4.4. EU COOPERATION WITH THE COUNTRY FROM AN ENVIRONMENTAL AND CLIMATE CHANGE PERSPECTIVE

This section should briefly review the past and current experience with development cooperation interventions related to environment, natural resource management , climate change and the green economy, as well as the steps taken to integrate the environment into other cooperation areas (e.g. SEA or EIA studies conducted in the context of EU-funded programmes/projects). Where information is available, the environmental impacts or potential risks of past or ongoing cooperation should be identified for the benefit of future programmes. The relevant findings and conclusions of existing evaluations/reviews should be summarised.

4.5. COOPERATION FUNDED BY OTHER DONORS FROM AN ENVIRONMENTAL AND CLIMATE CHANGE PERSPECTIVE

This section should review the past and current involvement of other donors (in particular EU Member States, but other significant donors should also be included) and their experience in the country, and include a list of recent and planned projects/programmes with an environmental, climate change and/or green economy focus or anticipated impact. Coordination mechanisms between donors and the EU with respect to the environment, climate change and green economy should be assessed.

5. CONCLUSIONS AND RECOMMENDATIONS

The key environmental and climate change aspects in the country (state, trends and pressures), and the policy, regulatory and institutional opportunities and challenges should be identified as clearly as possible, indicating how these affect national and sectoral development, including vulnerability. These key aspects may be presented in a matrix, comparing environmental/climate change concerns and the main sectors or policies.

Based on a comprehensive assessment of available information and on consultations with stakeholders, conclusions and recommendations should be formulated on how the partner country and the EU can best address identified environmental/climate change challenges, enhance natural capital and promote the green economy in the programming and implementation of EU cooperation, taking into account current programmes and any pre-identified option for future cooperation. Conclusions and recommendations should feed into the country analysis, response strategy and possibly the identification of focal cooperation sectors[1]. They should address (but not necessarily be limited to) the following aspects:

- Rationale and possibilities for considering the environment or climate change as an area for cooperation, and/or (more frequently) the need to integrate environmental objectives, safeguards and complementary actions in other areas of cooperation, in order to address environmental and climate change constraints and opportunities as appropriate, including opportunities to contribute to the transition towards a green economy. Measures may include, for example, proposals for institutional strengthening and capacity building (including the enhancement of the regulatory framework and enforcement capacities) particularly in relation to environmentally- and climatically-sensitive sector programmes and budget support programmes. Opportunities may include supporting sustainable and resource efficient production systems or low-carbon development plans and programmes;

- Recommendations to ensure that projects and programmes are adapted to increasing climate variability and the anticipated effects of climate change, and can thus deliver sustained developmental benefits. Information gaps preventing this work from being accomplished should be identified;

- Opportunities for coordination on environmental/climate change issues with other donors, seeking to achieve complementarities and synergies in order to more effectively deliver development objectives;

- Proposals for environment- and climate change-related indicators to be used in the Multiannual Indicative Programme or to be considered during the formulation of cooperation actions. Wherever possible, indicators from the country results frameworks and indicators related to the Sustainable Development Goals should be used, taking account of the availability of data and actual capacity to monitor their evolution. The report should mention whether the proposed indicators are included in the performance assessment framework of national (e.g. national development plan or poverty reduction strategy) or sectoral strategies/programmes.

Individual recommendations should be clearly articulated and linked to the issues to be addressed and grouped according to the sector or institutional stakeholder concerned. The relative priority of the recommendations and an indication of the challenges to their implementation should be given.

Any constraints to preparing the profile resulting from limited information should be described.

6. WORK PLAN

The work plan should include but not necessarily be limited to the following activities:

- Consultations with EC country desk officers and other relevant officials, EU Delegation, the national competent environmental and climate change authorities and a selection of national and local authorities,

[1] Taking into account that other factors intervene in the choice of cooperation sectors, including past cooperation areas and the 'division of labour' between development partners in the context of the Paris Declaration.

key international donors, plus key national and international civil society actors operating in the environmental, climate change and green economy areas;

- Review of key documents and reports, including (include here a list of key documents already identified by the EU Delegation) EU programming document for the country; evaluation reports; existing environmental assessments of EU-funded projects and/or sector programmes relevant national documents (e.g. state of the environment reports); previous Country Environmental Profiles and/or Country Environmental Analysis or similar analytical reports; the current (particularly those related to potential future focal sectors); environmental and climate change literature; environmental and climate change policies, legislation and regulations; environmental and climate change monitoring data; and environmental/climate change performance indicators;

- Field visits to sites of key environmental/climate change concern and (if possible) the organisation of a national workshop attended by national authorities, development partners, experts and representatives of civil society with the aim of clarifying and validating key environmental, climate change and green economy concerns;

- On the basis of the outline and time schedule given in these Terms of Reference, a detailed work plan should be proposed.

7. EXPERTISE REQUIRED

The proposed mission shall be conducted by a team of (typically two) experts who should have the following profile:

- Expert level I or level II with at least 10 years' experience in environmental issues including institutional aspects, international environmental policies and management, environmental assessment techniques, climate change and experience in rapidly assessing information and developing recommendations. He/she would be the team leader;

- Expert level II with 10 years' experience and with an environment or climate change background complementary to the team leader.

In addition:

- Previous working experience in the country or the region is requested for at least one team member;

- Excellent analytical and synthesis skills;

- Experience in undertaking environmental and climate change analyses and preparation of development programmes would be an asset;

- Familiarity with Commission guidance on programming, country strategies, project cycle management, policy mix and integration of environmental and climate change issues into other policy areas is desirable;

- Experience on green economy policy would be an asset;

- Experience of participatory planning processes and gender issues would be an advantage.

The experts should have excellent communication skills in *(specify)* and *(specify)* (Knowledge of *(specify)* would be an asset.) *(Specify language)* will be the working language; the final report must be presented in *(specify language)*.

8. REPORTING

The results of the study should be presented based on the outline presented in Section 10 of these ToR. The draft profile, in (*number*) hard copies (double-sided printing on certified or recycled paper) and electronic version (Microsoft Word), should be presented to (*specify*) by (*date*) at the latest. Within (*number*) weeks, comments on the draft report will be received from the relevant authorities and the EU. The consultants will take account of these comments in preparing the final report (maximum 45 pages excluding appendices). The final report in (*language*) and (*number*) copies (double-sided printing on certified or recycled paper) is to be submitted by (*date*).

9. INDICATIVE PLAN OF ACTIVITIES AND MAN-DAYS REQUIREMENTS

	Expert I	Expert II
Desk analysis, including briefing to the team leader in (*place*)	5	2
Field phase including travel and possible workshop	15-20	15-20
Report finalisation (draft)	3	2
Debriefing in (*place*) – not later than (*date*)	1	
Final report (*date*)	1	1
Total days	25-30	20-25

10. REPORT FORMAT FOR A COUNTRY ENVIRONMENTAL PROFILE

Maximum length (excluding appendices): 45 pages.

The following text appears on the inside front cover of the report:

> This report is financed by the European Union and is presented by (*name of consultant*) for (*national institution*) and the European Commission. It does not necessarily reflect the opinion of (*national institution*) or the European Commission.

Structure of the report:

1. Summary

(The summary should succinctly and clearly present the key issues described in the profile following the order of headings 2 to 6 given below. The summary should not exceed 6 pages).

2. State of the environment/climate change, trends and pressures
3. Environmental and climate change policy, regulatory and institutional framework
4. Integration of environmental and climate change concerns into key policies and sectors
5. EU and other donor cooperation with the country from an environmental, climate change and green economy perspective
6. Conclusions and recommendations

(Comprising the main issues presented in sections 2 to 6 above (excluding section 7) in no more than 4 pages).

7. Technical appendices

    a. Relevant maps (e.g. environmental variables, climate projections)
    b. Reference list of environmental and climate change policy documents, statements and action plans
    c. Reference list of environmental and climate change legislation and regulations
    d. Other relevant technical information

8. Other appendices

    a. Study methodology/work plan (1–2 pages)
    b. Consultants' itinerary (1–2 pages)
    c. List of persons/organisations consulted with their affiliation and contact details
    d. List of workshop participants (if organised)
    e. List of documentation consulted
    f. Curriculum vitae of the consultants (1 page per person)
    g. Terms of Reference

ANNEX 3

Environment and climate change screening

The environmental and climate change-related screening is designed to support, during the action preparation phase, the preliminary assessment of environmental and climate aspects related to the action and to determine the steps to be taken during formulation to address those aspects. It helps determine if a given EU international cooperation and development action is likely to have a significant adverse impact on the environment or is at significant risk from climate change. In such case a more detailed analysis of its environmental and/or climate change implications may be required in the form of either a Strategic Environmental Assessment (SEA), an Environmental Impact Assessment (EIA) and/or a Climate Risk Assessment (CRA).

This annex provides the screening template for SEA (Part A), for EIA (Part B) and for CRA (Part C), together with the summary of the environmental and climate change screening to be submitted to the QSG (Part D). The Appendices provide sources of information on adaptation and climate change impacts (Appendix A) and examples of adaptation measures (Appendix B).

The Summary of the Environmental and Climate-related Screening Outcomes (Part D) must be completed at the end of the identification phase, annexed to the Initial Action Document and submitted to QSG1 (as part of the questionnaire 'Assessment of cross-cutting issues'). Any possible update or amendment to the answers, particularly to the concluding questions, should be annexed to the full Action Document in QSG2.

Do I need to screen for SEA, EIA and/or CRA?

The first step is to determine the relevant instrument, based on the nature of the action (budget support or project).

SEA screening is the appropriate tool for environmental integration if:

- Sector budget support will be provided in the form of a Sector Reform Contract (SRC); or
- In case of a project, the project will provide support to the sector at a strategic level. Support is considered to be at a strategic level when: support is provided to the development/revision of the sector's policy, regulatory and/or institutional framework, and/or foresees the implementation (or sets the framework for the implementation of) multiple projects that may have significant cumulative impacts on the environment (e.g. multiple infrastructure projects or multiple projects that require land use change or intensive use of natural resources).

EIA and CRA screenings are required for all projects.

EIA is never relevant to budget support programmes; however, both SEA and EIA may be relevant to projects. In the latter, this occurs because a project may include a combination of strategic level support and other types of interventions/ investments with potentially direct impacts on the environment.

PART A. SEA SCREENING

SEA screening is used to identify the need and relevance of carrying out a detailed assessment of the environmental implications associated to a government's sector policy, plan or programme (*strategic document*) with the objective of enhancing the environmental performance of the sector strategy and of the EU programme/project that will support its implementation.

It is recommended that the SEA screening and, more importantly, the SEA study are prepared in close coordination with the partner government and other donors involved in the sector. Joint SEAs should be promoted whenever possible.

An SEA will allow the identification of opportunities for the sector policy/programme/strategy to:

- Give an adequate response to environmental and climate change challenges that impinge on sector performance;
- Avoid or minimise adverse environmental impacts associated to its implementation; and
- Integrate opportunities for the sector to contribute to low carbon development and/or the green economy and enhanced environmental sustainability.

The SEA screening consists of a screening list and a questionnaire.

When should I screen for SEA?

An SEA allows identifying opportunities to enhance a sector's environmental performance. For this reason, it is highly recommended that SEA screening takes place during **programming**. This way we ensure that the potential environmental implications of the whole sector support are jointly taken into account.

If SEA screening did not take place during programming, or if it is advisable to repeat the process (e.g. due to new developments, uninformed prior screening), SEA screening should be carried out during **identification**. In this

case, it is important to take into account not only the potential environmental implications of the programme/project under consideration, but also those of other programmes/projects offering support to the same sector.

An SEA is required in the following cases:

1. When budget support will be provided to environmentally sensitive sectors (see list below);
2. When the project is providing strategic level support to an environmentally sensitive sector, or the project is supporting the implementation of a large part of the national sector strategy;
3. In the case of non-environmentally sensitive sectors, for:
    a. budget support programmes that will be supporting sector strategies likely to result in significant adverse impacts on the environment or whose effectiveness and sustainability may be affected by adverse environmental trends, as determined by the SEA screening questionnaire (below);
    b. projects providing strategic level support, or supporting the implementation of a large part of the national sector strategy.

(*If a recent SEA of the government's sector strategy has already been prepared (either by the Government, the EU or another donor), and the scope of the analysis and results are considered relevant and of satisfactory quality, the exercise can be limited to reviewing the findings of the SEA and integrating them into the EU's support programme/projects;*

If one of the activities of a project consists in developing/revising a sector policy/strategy in an environmentally sensitive sector, then an SEA may be included as part of that specific activity to support the policy-making/planning process, and reflected in the corresponding Action Document. The SEA would then be prepared during implementation).

SEA screening list of environmentally sensitive sectors

The following sectors of cooperation are considered as 'environmentally sensitive':

- Agriculture, rural development and food security;
- Energy;
- Water and sanitation;
- Infrastructure;
- Transport;
- Private sector development;
- Natural resources management (including forestry, fisheries and waste management).

SEA screening questionnaire

For non-environmentally sensitive sectors, an SEA is, in principle, not required. However, particularities of the sector in the country/region of concern, as well as of the sector policy/programme/strategy to be supported, may indicate the need for preparing an SEA.

Positive replies to any of the following questions would indicate the need for preparing an SEA:

1. Does the state of the environment have a significant adverse influence on the performance of the sector (e.g. significant school drop-out rates associated to depletion of natural resources, significant incidence of water or air pollution on health);

2. Does the achievement of the programme/strategy objectives directly and significantly depend on the availability of scarce natural resources?;

3. Is the implementation of the sector programme/strategy likely to result in large-scale land use change?;

4. Is the implementation of the sector programme/strategy likely to include a large number of Category A or B projects that could interact to produce significant cumulative environmental impacts? (e.g. roads, water impoundments, energy production facilities);

5. Is the implementation of the sector programme/strategy likely to promote large-scale use of environmentally damaging substances? (e.g. large scale use of insecticides for mosquito control, use of herbicides for water weed control).

PART B. EIA SCREENING

An EIA is required for all projects, or individual interventions within a project, that are likely to have a significant environmental impact on the environment, as determined by the screening process.

An EIA is required for:

- Any intervention which requires an EIA according to national regulations or to standards of co-donors;
- Any Category A intervention;
- Any Category B intervention that is likely to have a significant impact on the environment based on the criteria defined below.

Category A interventions that always require an EIA

1. Construction of lines for long-distance railway traffic and of airports with a basic runway length of 2,100 metres or more;

2. Construction of motorways and express roads;

3. Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road or realigned and/or widened section of road would be 10 km or more in a continuous length;

4. Inland waterways and ports for inland-waterway traffic, which permit the passage of vessels of over 1,350 tonnes;

5. Trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1,350 tonnes;

6. Thermal power stations and other combustion installations with a heat output of 300 MW or more;

7. Large-scale industrial installations;

8. Waste disposal installations for the incineration, chemical treatment or landfill of hazardous waste;

9. Waste disposal installations for the incineration or chemical treatment of non-hazardous waste with a capacity exceeding 100 tonnes per day;

10. Groundwater abstraction or artificial groundwater recharge schemes where the annual volume of water abstracted or recharged is equivalent to or exceeds 10 million cubic metres;

11. Works for the transfer of water resources between river basins where:

    a. that transfer aims at preventing possible shortages of water and where the amount of water transferred exceeds 100 million cubic metres/year;

    b. the multi-annual average flow of the basin of abstraction exceeds 2,000 million cubic metres/year and where the amount of water transferred exceeds 5% of that flow;

    In both cases transfers of piped drinking water are excluded.

12. Waste water treatment plants with a capacity exceeding 150,000 population equivalent;

13. Dams and other installations designed for the holding back or permanent storage of water, where a new or additional amount of water held back or stored exceeds 10 million cubic metres;

14. Pipelines with a diameter of more than 800 mm and a length of more than 40 km:

    a. For the transport of gas, oil, chemicals;

    b. For the transport of carbon dioxide (CO_2) streams for the purposes of geological storage, including associated booster stations;

15. Installations for the intensive rearing of poultry or pigs with more than:

    a. 85,000 places for broilers, 60,000 places for hens;

    b. 3,000 places for production pigs (over 30 kg); or

    c. 900 places for sows;

    d. Construction of overhead electrical power lines with a voltage of 220 kV or more and a length of more than 15 km;

    e. Installations for storage of petroleum, petrochemical, or chemical products with a capacity of 200,000 tonnes or more;

16. Any change to or extension of interventions listed in this screening list where such a change or extension in itself meets the thresholds, if any, set in this list.

Category B interventions that may require an EIA based on selection criteria

1. Agriculture, sylviculture and aquaculture:

    a. Projects for the restructuring of rural land holdings;

    b. Projects for the use of uncultivated land or semi-natural areas for intensive agricultural purposes;

    c. Water management projects for agriculture, including irrigation and land drainage projects;

    d. Initial afforestation and deforestation for the purposes of conversion to another type of land use;

    e. Intensive livestock installations (non-Category A interventions);

    f. Intensive fish farming;

    g. Reclamation of land from the sea;

2. Energy industry:

a. Industrial installations for the production of electricity, steam and hot water (non- Category A interventions);
b. Industrial installations for carrying gas, steam and hot water; transmission of electrical energy by overhead cables (non-Category A projects);
c. Surface storage of natural gas;
d. Underground storage of combustible gases;
e. Surface storage of fossil fuels;
f. Industrial briquetting of coal and lignite;
g. Installations for hydroelectric energy production;
h. Installations for the harnessing of wind power for energy production (wind farms);

3. Chemical industry (non-Category A interventions):

a. Treatment of intermediate products and production of chemicals;
b. Production of pesticides and pharmaceutical products, paint and varnishes, elastomers and peroxides;
c. Storage facilities for petroleum, petrochemical and chemical products;

4. Food industry:

a. Manufacture of vegetable and animal oils and fats;
b. Packing and canning of animal and vegetable products;
c. Manufacture of dairy products;
d. Brewing and malting;
e. Confectionery and syrup manufacture;
f. Installations for the slaughter of animals;
g. Industrial starch manufacturing installations;
h. Fish-meal and fish-oil factories;
i. Sugar factories;

5. Infrastructure projects:

a. Industrial estate development projects;
b. Urban development projects, including the construction of shopping centres and car parks;
c. Construction of railways and intermodal transhipment facilities, and of intermodal terminals (non-Category A interventions);
d. Construction of airfields (non-Category A interventions);
e. Construction of roads, harbours and port installations, including fishing harbours (non-Category A interventions);
f. Inland-waterway construction (non-Category A), canalisation and flood-relief works;
g. Dams and other installations designed to hold water or store it on a long-term basis (non-Category A interventions);
h. Tramways, elevated and underground railways, suspended lines or similar lines of a particular type, used exclusively or mainly for passenger transport;
i. Installations of long-distance aqueducts;

j. Coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works;

k. Groundwater abstraction and artificial groundwater recharge schemes (non-Category A);

l. Works for the transfer of water resources between river basins (non-Category A);

6. Other projects:

   a. Installations for the disposal of waste (non-Category A interventions);

   b. Waste-water treatment plants (non-Category A interventions);

   c. Sludge-deposition sites;

   d. Storage of scrap iron, including scrap vehicles;

7. Tourism and leisure:

   a. Marinas;

   b. Holiday villages and hotel complexes outside urban areas and associated developments;

   c. Permanent campsites and caravan sites;

8. Any change or extension of Category A interventions, or interventions under this list, already authorised, executed or in the process of being executed, which may have significant adverse effects on the environment (change or extension not included in the Category A interventions);

9. Category A interventions, undertaken exclusively or mainly for the development and testing of new methods or products and not used for more than two years.

Category C interventions for which an EIA is not required

1. Institutional support;
2. Training and capacity development;
3. Awareness raising activities;
4. Development of services;
5. Grants and scholarships;
6. Development/review of policy, regulations, standards;
7. Procurement of equipment and material;
8. Organisation of events, communication, networking;
9. Cash transfers, micro-credits, public works programmes (except those targeting Category A or B interventions);
10. Small-scale constructions (e.g. warehouses, medical clinics, schools);
11. Energy conservation (including improved stoves) and energy efficiency (except when it implies Category A or B interventions);
12. Water conservation (except Category A or B interventions);
13. Maintenance of infrastructure;
14. Reforestation and agroforestry (except Category B interventions);
15. Household-level biogas systems;
16. Climate-proofing of infrastructure (except when it implies Category A or B interventions);

17. Vector control;
18. Small renewable energy installations (e.g. solar PV) (except Category B interventions);
19. Monitoring and evaluation, statistics;
20. Land cadastre.

Selection criteria to determine if a Category B intervention requires an EIA

For Category B interventions, the criteria listed below should be taken into account to determine how likely it is for the project to have significant adverse impacts on the environment. Some guidance on aspects to look out for in reviewing the criteria is also given.

CRITERIA	ADDITIONAL GUIDANCE QUESTIONS
1. Characteristics of interventions The characteristics of projects must be considered, with particular regard to:	
a. The size and design of the whole intervention; b. Cumulation with other existing and/or approved interventions; c. The use of natural resources, in particular land, soil, water and biodiversity; d. The production of waste; e. Pollution and nuisances; f. The risk of major accidents and/or disasters which are relevant to the intervention concerned, including those caused by climate change, in accordance to scientific knowledge; g. The risks to human health (for example due to water contamination or air pollution).	• Is the intervention likely to require (during or after implementation) significant amounts of water, wood, materials or other natural resources? (Note that the availability, productivity or regeneration of these resources may be threatened by the effects of climate change); • Is the intervention likely to result in the production of significant quantities of waste, especially of hazardous wastes?; • Is the intervention likely to produce significant volumes of liquid effluents or air pollutants, including greenhouse gases? Are the quantities and concentrations of these emissions likely to exceed national and international environmental standards?; • Is the intervention likely to affect important water bodies or significantly affect water regimes? (e.g. due to intensive water extraction, polluting effluents, removal of vegetation that would increase sediment load of water bodies); • Is the intervention likely to require significant accommodation or service amenities to support the workforce (during or after construction)?; • Is the intervention likely to require significant use of fertilisers, pesticides or other chemicals?; • Is the intervention likely to include the introduction of genetically modified organisms or alien species?; • Is the intervention likely to attract or displace a significant population and economic activities?; • Is the intervention likely to promote new settlements? (e.g. associated to the construction of roads); • Is the intervention likely to cause important soil erosion or degradation, considering its activities and its location on steep slopes or vulnerable soils? (Note that this could lead to increased local vulnerability to the possible combined effects of climate change and other pressures); • Is the intervention likely to significantly affect particular ecosystems, such as natural forests, wetlands, coral reefs, mangroves? (Note that this may lead to weakening ecosystems resilience to the effects of climate variability and change); • Are there other foreseen interventions in the area that are likely to affect the same environmental and socio-economic variables likely to be impacted by the intervention?; • Will the intervention constitute a risk for the surrounding environment and population? (e.g. risk of explosion, risk of accidental release of polluting or hazardous substances).

CRITERIA	ADDITIONAL GUIDANCE QUESTIONS
2. Location of interventions The environmental sensitivity of geographical areas likely to be affected by interventions must be considered, with particular regard to:	
a. The existing and approved land use; b. The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground; c. The absorption capacity of the natural environment, paying particular attention to the following areas: i. wetlands, riparian areas, river mouths; ii. coastal zones and the marine environment; iii. mountain and forest areas; iv. nature reserves and parks; v. areas classified or protected under national legislation; vi. areas in which there has already been a failure to meet the environmental quality standards, laid down in legislation and relevant to the intervention, or in which it is considered that there is such a failure; vii. densely populated areas; viii. landscapes and sites of historical, cultural or archaeological significance.	• Is the intervention located inside or close to a protected area or other areas classified as vulnerable, and is it likely to affect its integrity and quality directly or indirectly? (e.g. roads can facilitate access to valuable natural resources and can facilitate poaching; lineal projects such as roads or power lines can cut biological corridors, effluent discharges and run off of polluting substances such as pesticides and fertilisers can affect water quality and ecosystems downstream); • Is the intervention compatible with existing and approved land uses?; • Is the intervention likely to require the acquisition or conversion of significant areas of land that are important for ecosystem services? (e.g. for soil and water conservation, habitats, flood regulation, natural sea defences, recreation); • Will the intervention be located in a site where it can significantly affect surface waters or groundwater (in quantity and/or quality)?; • Will the intervention be located in a densely populated area and likely to produce significant nuisances such as air pollution, noise, vibration and odours?; • Will the intervention be located in or close to a site of high cultural or scenic value?

CRITERIA	ADDITIONAL GUIDANCE QUESTIONS
3. Type and characteristics of the potential impact The likely significant effects of interventions on the environment must be considered in relation to points 1 and 2 above, with regard to the impact of the intervention on the following factors: a. Population and human health; b. Biodiversity; c. Land, soil, water, air and climate; d. Material assets, cultural heritage and landscape; e. The interaction between the factors above; taking into account:	
	a. The magnitude and spatial extent of the impact (e.g. geographical area and size of the population likely to be affected); b. The nature of the impact; c. The transboundary nature of the impact; d. The intensity and complexity of the impact; e. The probability of the impact; f. The expected onset, duration, frequency and reversibility of the impact; g. The accumulation of the impact with the impact of other existing and/or approved interventions; h. The possibility of effectively reducing the impact.

The above questionnaire should give an overall idea of the expected environmental impact of the project and thus the need for and relevance of preparing an EIA.

PART C. CRA SCREENING

The purpose of a climate screening exercise is to identify potential climate change risks that may affect the achievement of the project objectives. The findings of the screening will help identify if a more detailed Climate Risk Assessment (CRA) is necessary.

Please go through the screening questionnaire below.

	PROJECT EXPOSURE		
1	**Will the project include activities focusing on one of the following areas of cooperation?** If yes, select the relevant one(s):	Yes	No
	• Environment and sustainable management of natural resources, including forestry and biodiversity		
	• Infrastructure and transport, including urban development and waste management		
	• Water and energy, including supply and management		
	• Rural development, territorial planning, agriculture and food security		
	• Disaster risk management		
	• Health		

2	If at least one YES, given their nature and location(s), would the project activities be potentially affected by natural hazards associated to climate change?	Yes	Only partly	No
	• Drought			
	• Floods (including outburst floods)			
	• Storms, cyclones, hurricanes			
	• Other extreme weather events (e.g. heat waves, cold spells, storm surges)			
	• Saltwater intrusion			
	• Shifts in the main climatic patterns (e.g. changes in the mean temperature, shifting seasons, monsoon, etc.)			

This table should be filled using information on climate vulnerabilities and possible scenarios at country and regional level, and for which sources are available in Appendix A. They provide a description of climate change hazards and constitute inputs that can support an initial assessment[1].

Interpreting the initial answers

If the reply to question 1 is No, or if all replies to Question 2 are No, and the Identification team estimates that risk related to climate change is limited, then your project is at low or no risk from climate change and a Climate Risk Assessment (CRA) is not necessary. Please address any climate change concerns that may have been identified through this screening process under the formulation studies.

In all other cases, the project Identification team may consider the project potentially at risk from climate change, depending on the degree of exposure of its individual components.

Therefore, **questions 3 to 5 below should be answered** to allow an initial appreciation of existing potential impacts and capacities for risk management. The answers will be helpful when preparing the summary of the climate screening outcomes.

(1) Generic guidance is also available that illustrates the implications of extreme climate variability and change on individual areas of cooperation

	POTENTIAL IMPACTS			
3	**Would the following expected climate change impacts adversely affect the attainment of the project's expected results?** **If yes, select the relevant one(s):**	Yes	Only partly	No
	• Impacts on ecosystems and biodiversity: e.g. loss of habitats, disturbances in ecological conditions of animal and plant species, loss of forests, wildfires, disease and pest outbreaks, spreading of invasive species, ocean acidification, coral ecosystems			
	• Impacts on land resources, e.g. landslides, acceleration in desertification and soil erosion processes			
	• Impacts on coastal areas, e.g. sea level rise, increased coastal erosion resulting in loss of land (notably on islands), and sea surges			
	• Impacts on freshwater resources: e.g. reduced availability of water, changes in river flows, melting glaciers, salinity/chemical intrusions, rapid and early snowmelt in spring and summer, decrease in water quality, glacial melt			
	• Impacts on agriculture and fisheries: e.g. decreases in fish stock, crop productivity, forestry production, in the productivity of livestock breeding activities and fish farming			
	• Other impacts affecting local communities and notably, vulnerable groups: e.g. increased prevalence of diseases, population displacement, damage to infrastructure			

	RISK MITIGATION CAPACITY			
	Project preparation and available tools			
4	**Do the proposed project background documents explicitly address climate risks?**	Yes	Only partly	No
	For example: • Problem analysis explicitly demonstrates awareness of climate risks and their potential level of negative impact, throughout the project's life-span; • The documents make reference to national/regional measures strengthening resilience and mitigating risks and there is a high level of confidence that they will be put in practice in the project; • Disaster prevention and preparedness plans (early warning system, monitoring and analysis) are established in the area of intervention and are operational; • Adaptation projects are underway (e.g. National Adaptation Plans); • Project description foresees specific measures to strengthen resilience and reduce vulnerability including by improving knowledge related to climate risks (e.g. capacity building/training/awareness raising, stakeholder engagement), and notably targeting vulnerable groups; • Project design explicitly takes into account or sets aside financial resources to support climate risk management or adaptation measures (e.g. adequate dimensioning of infrastructure, explicit use of best environmental practices or of best available techniques).	Please explain, if needed		

	RISK MITIGATION CAPACITY			
5	**Is there evidence that the implementing partners have the necessary capacity to monitor and to address climate risks?**	Yes	Only partly	No
	For example, implementing partners: • Have updated information in the area of climate risk management, disaster risk prevention and preparedness; • Have established policies and/or plans to deal with climate risks; • Make use of or have committed resources on implementing those policies and plans (including information gathering, risk management, stakeholder engagement), notably towards vulnerable groups; • Have established institutional/organisational arrangements to deal with climate change, and built staff capacities in climate risk management, disaster risk prevention and preparedness; • Ensure there is access to information and analyses on effective risk management.	Please explain, if needed		

Analysis of the outcomes and follow-up in the formulation phase

A majority of "No" or "Only Partly" answers to questions 3-5 indicate aspects to be addressed/further assessed in the formulation phase and possible additional measures required, with emphasis on *no regret*[2] measures and measures to address the causes of vulnerability and to strengthen capacities to deal with climate risks. Appendix B to this annex contains examples of types of adaptation measures in relation to main areas of cooperation[3].

In case a significant level of risk remains, requiring further investigation, the Identification team may:

1. Use further guidance to enhance the risk assessment

   (*A number of methods and tools are being developed and tested within the development community which may help project managers making more informed project decisions; a sample of them is presented in Appendix B to this annex, notably the ADAPT Tool available online: http://climatescreeningtools.worldbank.org/start-screening*

   *Alternatively, **support from the Thematic Units in DEVCO** in charge of Environment (C2) and Climate Change (C6) can be sought*).

2. Engage in the launch of a Climate Risk Assessment

   (A template for Terms of Reference is available in Annex 9 of the present guidelines).

Both options are particularly useful to identify the most appropriate adaptation measures, particularly in connection with long-lived investments in infrastructure or land use planning decisions. The option of abandoning high-risk projects may also be considered at this stage if the risk management /adaptation options are not deemed feasible.

(2) '*No regret*' or '*low regret*' measures are measures that turn out to be of benefit no matter how or whether the predicted climate change impacts materialise.

(3) *Information notes ('sector scripts') on climate change and development* are also available, which illustrate the implications of climate change on individual areas of cooperation. They suggest policy, institutional and technical options that can support *adaptation* and *mitigation* objectives. They concern: agriculture and rural development; education; energy supply; health; infrastructure (including transport); waste management; trade and investment; water supply and sanitation; biodiversity and ecosystems.

PART D. SUMMARY OF ENVIRONMENTAL AND CLIMATE RELATED SCREENING OUTCOMES FOR PROJECT MODALITY AND BUDGET SUPPORT

(Part to be filled at the identification stage)

Action in support of a sector policy/programme

Outcome of SEA Screening (Strategic Environmental Assessment) *(tick as appropriate)*
☐ An SEA will be undertaken; ☐ Key environmental and climate-related aspects will be addressed during formulation; ☐ No further action required.
Explain briefly on which basis this decision was reached. If no further action is required (third option), justify clearly why. If further assessment is to be carried out during formulation (first 2 options above), briefly describe the main aspects that will need to be the subject of such assessment.

Action under project modality, not sector-based

1. Outcome of EIA Screening (Environmental Impact Assessment) *(tick as appropriate)*
☐ Category A project: EIA will be undertaken; ☐ Category B project for which an EIA will be undertaken; ☐ Category B project not requiring an EIA, but for which environmental aspects will be addressed during formulation; ☐ Category C project: No need for further assessment.
Explain on which basis this decision was reached. If option "C" seems appropriate, justify clearly why. If further assessment is to be carried out during formulation (category A and B), briefly describe the main aspects that will need to be the subject of such assessment. Note that these aspects may if relevant include climate change mitigation (i.e. options for reducing greenhouse gas emissions or enhancing carbon sequestration).

2. Outcome of Climate Risk Screening *(tick as appropriate)*
☐ Project at risk: ☐ Further assessment will be conducted during formulation; ☐ Aspects will be addressed as relevant as part of the EIA study (if an EIA is required); ☐ Consideration will be given to undertaking a detailed climate risk assessment; ☐ No or Low risk: No further consideration of climate-related risks needed.
Explain on which basis this decision was reached – noting that the focus of climate risk screening is to identify to which extent the project is potentially vulnerable to climate-related risks, not whether the project will contribute to significant greenhouse gas emissions. If option "No or Low risk" seems appropriate, justify clearly why. If further assessment is to be carried out during formulation, briefly describe the main aspects that will need to be the subject of such assessment.

For all actions: concluding questions

(These questions have to be answered during the identification phase and the replies presented at QSG1; the answers have to be amended, as appropriate, during the formulation phase and presented at QSG2)

1. What are the main issues and/or opportunities regarding environment, biodiversity and climate change in the sector of intervention?

2. What are the proposed measures to address or seize them?

Contribution of the action to the financing related to climate change and biodiversity
1. Will the action contribute to the EU commitment to address climate change and to allocate at least 20 % of its spending to climate change-related action (this requires a Rio marker 1 or 2 for climate change adaptation and/or mitigation)? Yes / No 2. Will the action contribute to the commitment to double financial resources allocated to support efforts by developing states towards meeting the internationally-agreed biodiversity objectives (this requires a Rio marker 1 or 2 for biodiversity)? Yes/No As a reminder, three elements are in principle needed to secure a Rio marker: • Rio convention theme discussed as a relevant issue for the intervention in the background analysis. • Explicit intent to address the theme expressed at the level of outcomes and/or outputs. • Activities and/or performance/disbursement criteria addressing identified issues in relation to the considered theme.
If the action will not contribute to climate change nor biodiversity financing, justify briefly why.

Appendix A: Basic sources of information on climate change impacts and adaptation

Sources of information on climate vulnerabilities and possible scenarios are accessible on several websites. They provide a description of climate change hazards and constitute basic scientific inputs that can support a rapid screening exercise.

1. Intergovernmental Panel on Climate Change (IPCC), WMO-UNEP

The 2014 Fifth Assessment Report (AR5) of the IPCC contains a synthesis report and several working groups reports (WG). They are available on line at: http://www.ipcc.ch. The Assessment Reports include three publications, on The Physical Science Basis; Impacts, Adaptation and Vulnerability, and Mitigation of Climate Change, as well as a Synthesis Report.

2. National reports

Under the UNFCCC, all developing countries are required to submit National Communications that include a climate vulnerability and adaptation section; they are available at:

http://unfccc.int/national_reports/non-annex_i_natcom/submitted_natcom/items/653.php

All Least Developed Countries are required to produce a National Adaptation Programme of Action (NAPA); the reports are available at:

http://unfccc.int/cooperation_support/least_developed_countries_portal/items/4751.php

National Adaptation Plans (NAP) are intended to help countries conduct comprehensive medium- and long-term climate adaptation planning. They are the product of a flexible process that builds on each country's existing adaptation activities and helps integrate climate change into national decision-making. The Parties to the UNFCCC established the NAP process in 2011 in Durban, outlining four flexible planning elements[4]. Then, in 2012, a UNFCCC experts group[5] developed a detailed set of NAP technical guidelines[6] to assist developing countries.

3. International agencies

The information contained in IPCC reports and national documents provides a preliminary orientation concerning possible regional and national impacts that should be refined with local investigations at project level. A climate change rapid screening should also consider information from sources that are readily available to, and interpretable by EU Delegation staff. For example, reports from national meteorological services, research bodies or key academic papers that can provide good information. In addition, several sources available on line can also provide climate information. For instance:

- The UNDP Country Climate Profiles present climate data (observations and projections) for 52 countries. Each country report contains a set of maps and diagrams illustrating the observed and projected climates of that country as country average time series as well as maps depicting changes on a 2.5° grid and summary tables of data. A narrative part summarises the data and places it in the context of the country's general climate: http://www.geog.ox.ac.uk/research/climate/projects/undp-cp/;
- The Climate Change Country Profiles/Adaptation Learning Mechanism platform (UNDP) provides summaries of initiatives by country; it also includes details about other adaption programmes/projects. Available on line at: http://www.adaptationlearning.net;

[4] http://unfccc.int/files/adaptation/application/pdf/leg_four_elements_nap_expo_presentation_2013.pdf

[5] https://unfccc.int/essential_background/convention/convention_bodies/constituted_bodies/items/2582.php

[6] http://unfccc.int/adaptation/workstreams/national_adaptation_programmes_of_action/items/7279.php

- The Climate change data portal for development practitioners and policy makers (World Bank) is intended to provide readily accessible climate and climate-related data. It is available on line at: http://sdwebx.worldbank.org/climateportal/

- The ADAPT screening tool helps practitioners carry out their risk analysis at the planning and design stage through a risk classification system, and helps them identify knowledge gaps and options to minimize these risks, by sector, sub-sector and down to the level of activities. It is notably designed for the following sectors or topics: agriculture, coastal flood protection, energy, roads, water; but has also a questionnaire for other sectors. It also guides project designers to appropriate resources. https://climatescreeningtools.worldbank.org.

Appendix B: Examples of adaptation measures

Adaptation activities can be classified along several dimensions[7]. Below you will find concrete examples of adaptation measures in sectors most likely to be affected by climate change in least developed countries and in SIDS. The *Information notes on climate change and development: EC Cooperation: responding to climate change*[8] provide further guidance and examples on possible adaptation measures, alongside options for greenhouse gases emission reductions, that can bring about development benefits.

	Fostering behavioural change	Technological and engineering solutions	Risk management and vulnerability reduction strategies	Research
Fisheries	Diversifying sources of income	Downscaling fleet size and fishing effort	Improving mapping and monitoring of fish stocks; adopting ecosystem based approach to fisheries management	Stepping up research on sustainable aquaculture
Coastal zones and marine ecosystems	Promoting settlements and economic activities in less exposed areas	Building dykes, sea defences and barriers	Promoting the development of early warning systems; coastal afforestation, restoration of mangroves	Establishing baselines of mangroves status and trends using standardized methods, in order to better understand the effects of sea rising on mangroves and reefs
Disaster risk reduction, disaster management	Raising awareness on how to respond to warning signals, evacuation,...	Constructing shelters	Promoting the development of early warning systems	Improving monitoring and weather forecasts
Health	Improving malaria prevention in newly exposed population	Improving the protection of health infrastructure against extreme weather events	Developing information systems on climate change related disasters; promoting a healthy environment to reduce breeding grounds for vectors	Strengthening and developing long-range epidemic forecasting systems
Infrastructure	Raising the awareness of infrastructure managers, both public and private, about climate-related risks and adaptation options	Enhancing resilience in urban, rural and coastal infrastructure (flood protection dykes, dams, small-scale hydraulic infrastructure)	Adopting appropriate engineering standards and building norms, making new infrastructure more resilient to adverse weather conditions and natural disasters	Monitoring trends in migrations and population resettlements, so as to anticipate future needs at the time of planning investments in infrastructure

(7) In *Weathering the Storm: Options for Framing Adaptation and Development*, the World Resources Institute (2007) for instance classified adaptation along a continuum from activities that address vulnerability – which overlap almost completely with traditional development practice – to highly specialized activities exclusively targeting distinct climate change impacts. The UNFCCC, on the other hand, identifies six categories of adaptation options: behavioural change; technological options; risk management and reduction strategies; promotion of adaptive management strategies; financial schemes; and the promotion of ecosystem management practices.

(8) The information notes cover the following sectors: agriculture and rural development; education; energy supply; health; infrastructure (including transport); solid waste management; trade and investment; water supply and sanitation; biodiversity and ecosystems.

	Fostering behavioural change	Technological and engineering solutions	Risk management and vulnerability reduction strategies	Research
Water supply and sanitation	Rainwater harvesting, promoting water saving techniques	Adopting new technology for safe water in coastal communities to combat salinity due to sea level rise	Protecting groundwater recharge areas (e.g. by promoting the kind of vegetation that can maximise water retention and infiltration)	Improving storage capacity by constructing reservoirs at community level
Agriculture[1]	Promoting water conservation or soil conservation practices	Promoting new irrigation technologies	Improving the use of weather forecasts for farmers; insurance to cope with climate risks; creating or strengthening national centres for the conservation and use of diversity in food plant species	Promoting research on drought, flood and salinity-tolerant varieties of crops
Energy supply and use	Promoting the use of improved stoves, energy conservation and renewable energies	Promoting the use of improved stoves and renewable energies; introducing new technologies for improving energy efficiency, for the use of firewood and for making charcoal	Promoting better use of weather information and forecasts, as well as information on climate change related disasters; sustainable forest management and biomass production / use	Supporting R&D of low-carbon, sustainable energy technologies

[1] Both agriculture and energy supply and use offer significant opportunities for promoting low-carbon development paths while increasing adaptive capacity.

ANNEX 4

Guidance for integrating environmental and climate-related aspects in identification and formulation studies

This annex provides guidance on addressing environmental and climate-related issues during the identification and formulation of an action, with a specific focus on actions that do not require a **specific** environmental or climate risk study such as an environmental impact assessment, a strategic environmental assessment or a climate risk assessment.

AT THE IDENTIFICATION STAGE

Key tasks to be performed include:

- Undertaking environmental and climate-related screening;
- Conducting preliminary investigation of key environmental and climate-related issues, opportunities and risks (time allowing);
- Summarising the outcomes of the screening (*and if relevant preliminary investigation*) process (for submission to QSG1).

1. Environmental and climate-related screening

Environmental and climate-related screening should be undertaken as soon as broad options regarding the focus of the action and the likely aid modality (project approach or budget support) have been determined. If necessary, screening can be refined and updated as more detailed information about the action's objectives, expected results and implementation modalities becomes available – but if possible, it is recommended not to wait until the end of the identification stage to undertake the initial screening, and also to make this exercise an integral part of the terms of reference of the experts in charge of supporting identification work (with a corresponding allocation of resources). Indeed, screening at an early stage allows conducting preliminary investigation of key environmental and climate-related issues, opportunities and risks during the identification phase, which enhances opportunities for integrating them in project design.

The choice of aid modality determines the screening process to be applied – either screening for strategic environmental assessment, which is a relevant tool for programme-based approaches or projects that provide strategic level support or screening for environmental impact assessment and climate risk assessment, which are relevant tools for individual project approaches (see Annex 3).

In most cases, the choice of broad aid modality and key support options is already made at the identification stage, so that the adequate screening process can be applied upfront. If it is not the case and by the end of identification, it is still not entirely clear which screening process should apply, it is recommended to conduct initial screening based on the most likely scenario or possibly based on both approaches – and then to refine or adjust screening in the early stages of formulation, when key technical options have been determined.

Whichever screening process is applied, it is strongly recommended to engage the national and/or local environmental authorities, so that they are aware of the envisaged action, support technical screening against national regulations and procedures (which also play a role in determining the outcomes of the screening process, in particular with regard to the need for environmental impact assessment), and contribute to the identification of key aspects to be addressed during formulation.

2. Preliminary investigation of key issues, opportunities and risks

Screening supports the identification of key environmental and climate-related issues, opportunities[(1)] and risks to be considered in the design of the action. If the screening process can be conducted early during the identification phase rather than at the end of it, preliminary investigation of these key aspects can be conducted as part of identification work. Preliminary investigation work beyond mere screening offers the following advantages:

(1) For example, with regard to sustainable management of environment and natural resources, sustainable livelihoods, climate resilience, low-emission development, green economy and green jobs.

- Environment- and climate-related issues, opportunities and risks are more meaningfully addressed in the later design of the action[2];
- If the outcome of the screening process indicates that a *specific* environmental or climate risk study is needed, then investigation work can lead to the preparation of more relevant and focused terms of reference for the study;
- If the outcome of the screening process indicates that no *additional* environmental or climate risk study is needed but key environmental and/or climate-related aspects should be addressed during formulation, then the investigation work can lead to better integration of the relevant aspects in the terms of reference of the formulation or technical feasibility study.

3. Summary of environmental and climate-related screening outcomes

The outcomes of the screening (and if relevant the preliminary investigation) process must be reported in the "Summary of environmental and climate-related screening outcomes" in the "Template for the assessment of cross-cutting issues" (for submission to QSG1). Whichever assessment tool is being considered, there are three broad options:

- A specific study (strategic environmental assessment, environmental impact assessment or climate risk assessment) will be undertaken;
- No *additional* study will be undertaken, but further assessment of key aspects will be conducted during formulation;
- No further assessment will be undertaken.

A short justification for the selected option should be provided, in particular if the conclusion is that no further assessment is required. If further assessment is planned (either through a dedicated study or as part of formulation work), the key aspects to be addressed should be briefly described.

Besides information on the outcomes of the screening process:

- Answers must be provided to two "concluding questions" concerning the main issues and/or opportunities regarding environment, biodiversity and climate change in the sector of intervention, and proposed measures to address or seize them;
- Information must be given also on whether the action is expected to contribute to:
  - The EU commitment to allocate at least 20% of its spending to climate change-related action: this requires a Rio marker 1 or 2, i.e. "significant objective" or "main objective", for climate change adaptation and/or mitigation;
  - The EU commitment to double financial resources allocated to support efforts by developing states towards meeting the internationally agreed biodiversity objectives: this requires a Rio marker 1 or 2, i.e. "significant objective" or "main objective", for biological diversity.

Annex 8 provides information on how Rio markers are attributed and what it takes to secure one.

[2] For example, in the sector and policy assessment, the stakeholder analysis, the problem analysis and identification of priority areas for support, the identification of risks, the analysis of lessons learned, the identification of possible synergies and complementarity with other actions, the understanding of cross-cutting issues, the formulation of objectives and expected results, and generally the design of the intervention logic.

In practice, experience has shown that relatively few actions require a dedicated environmental or climate-related study – but the bulk of actions would gain from more systematic and thorough consideration of environmental and climate-related issues, opportunities and risks during formulation. For some actions these aspects are of little relevance, but in most cases they have at least some relevance and should not be dismissed without further investigation. Besides supporting improved sustainability of development interventions, more careful investigation of environmental and climate-related aspects, resulting if appropriate in the integration of explicit environmental sustainability and climate resilience objectives, activities and measures, supports the implementation of EU commitments with regard to climate- and biodiversity-relevant funding.

AT THE FORMULATION STAGE

Key tasks to be performed include:

- Conducting more in-depth investigation of key environmental and climate-related issues, opportunities and risks and identifying possible response options and measures;
- Integrating environmental and climate-related opportunities and risk mitigation measures in detailed project design;
- Updating the outcomes of the screening and assessment process (for submission to QSG2).

1. More in-depth investigation of key issues, opportunities and risks

If the outcomes of the screening process conducted at the identification stage indicates some further assessment of environmental and climate-related aspects is needed, there are two main possible scenarios:

a. *A dedicated study is conducted during the formulation phase*

In such a case, the environmental or climate-related study is generally the subject of a specific contract, distinct from the contract for the formulation or technical feasibility study:

- Strategic environmental assessment (see draft ToR in Annex 5) typically addresses environmental as well as climate-related (adaptation and mitigation) risks and opportunities;
- Environmental impact assessment is traditionally focused on preventing or mitigating the adverse impacts of a project on the environment, but terms of reference can be enhanced to encompass environmental and climate-related risks, constraints and opportunities (see draft ToR in Annex 6)[3];
- Climate risk assessment (see draft ToR in Annex 9) is focused on the identification and mitigation of climate risks and vulnerabilities. If environmental aspects other than climate-related risks need to be considered, this should be done as part of the general formulation study.

Note that occasionally, for a variety of reasons including lack of time and/or adequate resources during the formulation phase, it is decided to undertake an environmental or climate risk study *after* the formulation phase, either during the technical preparation period that precedes the signature of the financing agreement/contract or during project implementation. In such cases, an initial assessment of key environmental and climate-related aspects (less detailed than the one to be conducted at a later stage) should still be undertaken in the context of the formulation study, as described in the next point. This is needed to ensure that:

- Environmental and climate-related issues, opportunities and risks are sufficiently understood to ensure upfront integration in the intervention logic and the action's design, including the formulation of objec-

[3] If for any reason this extension of the scope of the EIA is not feasible or desirable, the latter aspects (i.e. risks, constraints and opportunities) can be included in the scope of the general formulation study, while the EIA addresses environmental impacts.

tives and expected results, the planning of activities and the logical framework (or detailed disbursement criteria, for budget support programmes);

- Aspects that require specific attention are adequately identified and understood, supporting the preparation of more relevant and focused terms of reference for the study;
- The action's design is flexible enough (e.g. from the perspective of activities to be conducted, the allocation of technical and financial resources and the monitoring framework) to allow the integration of the conclusions and recommendations of the study into project activities at the implementation stage.

b. *Key environmental and climate-related aspects are assessed as part of the formulation study*

If no dedicated study is conducted during formulation, the assessment of key environmental and climate-related aspects (as identified in the context of the screening process and giving due consideration to opportunities rather than just risk mitigation) needs to be made an integral part of the formulation or technical feasibility study. In this scenario, and assuming external expertise is hired to support the formulation process, a single contract covers the assessment of technical and environmental aspects. Model terms of reference for the assessment of key environmental and climate-related aspects (to be integrated in the overall ToR for identification and formulation support) are proposed at the end of this annex.

It should be noted that this approach requires the integration of environment- and climate-related competences in the requirements for expert profiles, as well as the allocation of resources matching the expected workload associated with this component of formulation work – which should be proportional to its importance for the intervention's impact and sustainability. Careful identification, prior to the start of formulation work, of key aspects (including opportunities) to be assessed and integrated in project design is recommended both to control the marginal cost and time needed to address environmental and climate-related opportunities and risks and to ensure focus on essential aspects.

2. Integration of opportunities and risk mitigation measures in project design

Whether environmental and climate-related aspects are assessed through a dedicated study or as part of the wider formulation study, it is important that the resulting findings and recommendations, including those related to opportunities, are available in time to influence the action's design (overall intervention logic, refining of the 'analytical' sections of the action document[4], definition of objectives and expected results, description of planned activities, choice of implementing modalities and partners, budget, logical framework and/or detailed disbursement criteria). The timing of the environmental and climate-related assessment thus needs to be carefully articulated with the rest of the formulation work to allow such integration, if needed on the basis of iterative interactions between environmental and other technical experts.

3. Summary of environmental and climate-related screening outcomes

In view of submission to QSG2, the "Summary of environmental and climate-related screening outcomes" (*which is part of the "Template for the assessment of cross-cutting issues"*) must be updated to reflect the outcomes of assessment work conducted during formulation. At this stage, the update is likely to concern primarily the "concluding questions" and the possible contribution of the action to climate- and/or biodiversity-related financial objectives through the allocation of Rio markers.

[4] These are the sections on sector context, policy assessment, stakeholder analysis, priority areas for support / problem analysis, risks and assumptions, lessons learned, complementarity and cross-cutting issues.

Model terms of reference for the assessment of key environmental and climate-related aspects in identification and formulation studies

(Elements outlined below should be integrated as appropriate (with adjustments as needed to ensure overall consistency and relevance to specific needs and circumstances) in the ToR for technical support to identification and formulation work).

1. CONTEXT / BACKGROUND INFORMATION

Insert a brief overview of what is already known about key likely environmental and climate-related issues, opportunities and risks in the sector of intervention. Relevant information may be available from the multiannual indicative programme, the country environmental and climate change analysis (or any similar document), national policy and strategy documents, sector assessment reports, reports from past interventions including lessons learned, and more. References to key documents may be provided here or in an annex to the ToR.

2. OBJECTIVES

With specific regard to the integration of environmental and climate-related aspects, the expert(s) will support:

- The identification and assessment of key environmental and climate-related issues, opportunities and risks that are relevant to the planned intervention;
- The identification and assessment of practical options and measures to prevent or mitigate significant negative environmental impacts (including greenhouse gas emissions if relevant), optimise positive ones, foster sustainable management of natural resources, and promote resilience to climate change and climate-related risks;
- The prioritisation of such options and measures and their integration in the design of the action;
- The assessment of whether the intervention, taking account of its nature, the national and/or local context and key priorities and objectives, has the potential to contribute specifically to biodiversity-, desertification- and/or climate-relevant objectives;
- If this potential is established, support the adjustments in the text of the action document, the logical framework and any other relevant technical annex that may be needed to justify the attribution of one or more Rio markers as either significant or main objective of the intervention.

3. DESCRIPTION OF THE ASSIGNMENT

3.1. IDENTIFICATION PHASE

To support the integration of environmental and climate-related aspects, the expert(s) will:

- As soon as broad options regarding the focus of the action and the likely aid modality (project approach or budget support) have been determined, apply the appropriate environment and climate risk screening process, according to Annex 3 of these guidelines;
- On this basis:

  - Determine whether a *specific* study (strategic environmental assessment, environmental impact assessment or climate risk assessment) needs to be undertaken (outcome a), and if so whether it is feasible to conduct it during the formulation phase; or no dedicated study is needed but further assessment of key environmental and climate-related aspects should be conducted as part of formulation work (outcome b); or no further assessment needs to be undertaken at all (outcome c);

  - In the case of outcome a or b, identify the key environmental and climate-related aspects that will need to be addressed during formulation;

- Time allowing, i.e. if the screening process can be conducted early during the identification phase rather than at the end of it, and resources allowing, conduct preliminary investigation of key environmental and climate-related issues, opportunities (e.g. with regard to sustainable management of environment and natural resources, sustainable livelihoods, climate resilience, low-emission development, green economy and green jobs) and risks;

- Reflect initial findings on environmental and climate-related aspects as appropriate considering their relevance and significance, in the initial action document[5], the draft logical framework, and any other relevant technical annex to the action document;

- Assess whether the intervention, taking account of its nature, the national and/or local context and key priorities and objectives, has the potential to contribute specifically to biodiversity-, desertification- and/or climate-relevant objectives – and thereby to EU commitments to increase the amount of funding dedicated to these issues[6];

- Support the selection of appropriate values for the "aid to environment" and Rio markers (either not targeted, significant objective or main objective) in line with the guidance provided in Annex 8, and if any of these markers is selected as a significant or main objective of the intervention, help ensure that the text of the initial action document, the draft logical framework and any other relevant technical annex meets the criteria for securing the proposed marker(s);

- Summarise the outcomes of the environment and climate risk screening process in the "Template for the assessment of cross-cutting issues"; (see Annex 3 to these ToR);

- (*If relevant (outcome a), support the Contracting Authority in drafting terms of reference for the required specific study (strategic environmental assessment, environmental impact assessment or climate risk assessment)) (Note: this can only be requested if a specific resource allocation and time allowance are provided – otherwise the expert(s) should not be expected to provide such support. An alternative option is to request support from the Environment and Climate Change Mainstreaming Facility, contact: EuropeAid-C2-MAINSTREAMING@ec.europa.eu).*

In budget support programmes, particular attention should be paid, in the preliminary assessment of the policy and institutional frameworks, to the level of integration of environmental and climate-related issues in the supported policies and strategies, as well as the adequacy of the institutional and legal/regulatory frameworks and of sector budget resources to address related challenges, opportunities and risks.

(5) Possible entry points include sections on sector context, policy assessment, stakeholder analysis, priority areas for support / problem analysis, risks and assumptions, lessons learned, complementarity and cross-cutting issues, objectives and expected results and (if already developed at the identification stage) indicative activities and intervention logic

(6) Specific commitments have been made in relation to biodiversity and climate change – but of course any contribution to combating desertification and land degradation is also much valued

3.2. FORMULATION PHASE

If the environmental and climate risk screening results in outcome a (dedicated environmental or climate risk study to be undertaken during the formulation phase), and assuming study results are available in time for integration with other formulation work, the expert(s) will:

- Analyse the study's findings and recommendations;
- Adjust the action's design (overall intervention logic, refining of the 'analytical' sections of the action document[7], definition of objectives and expected results, description of planned activities, choice of implementing modalities and partners, budget, logical framework and/or detailed disbursement criteria, as appropriate) to integrate the relevant findings and recommendations of the study.

(If the Contracting Authority wishes to get some technical support from the formulation team during the implementation of the environmental or climate risk study, e.g. for commenting on the draft scoping and final reports, this can be specified in the ToR but can only be requested if a specific resource allocation is provided for this work. An alternative option is to request support from the Environment and Climate Change Mainstreaming Facility, contact: EuropeAid-C2-MAINSTREAMING@ec.europa.eu).

If the environmental and climate risk screening results in outcome b (assessment of key environmental and climate-related aspects to be conducted as part of formulation work), or in outcome a (dedicated environmental and/or climate study to be undertaken) but for any reason the study cannot take place during the formulation phase, the expert(s) will:

- Conduct a more in-depth assessment of key environmental and climate-related aspects as identified in the context of the screening process (including aspects related to the institutional and legal/regulatory framework, institutional capacities, and connections with poverty alleviation and livelihoods), from the double perspective of understanding issues, opportunities and risks and identifying practical response options and measures that could be integrated to enhance the overall sustainability of the planned intervention. This work should be based on a list of aspects to be agreed with the Contracting Authority prior to the start of the formulation assignment, and conducted to a level of detail matching the time and resources allocated to this specific exercise;
- Integrate key findings of this assessment in the action's design (overall intervention logic, refining of the 'analytical' sections of the action document, definition of objectives and expected results, description of planned activities, choice of implementing modalities and partners, budget, logical framework and/or detailed disbursement criteria, as appropriate).

In all projects and programmes, it is recommended to give due attention to opportunities (e.g. with regard to sustainable management of environment and natural resources, sustainable livelihoods, climate resilience, low-emission development, green economy and green jobs), rather than just focusing on risk mitigation.

In budget support programmes, particular attention should be paid, in the detailed assessment of the policy and institutional frameworks, to the level of integration of environmental and climate-related issues in the supported policies and strategies, as well as the adequacy of the institutional, legal/regulatory and monitoring frameworks and of sector budget resources to address related challenges, opportunities and risks. If environmental and/or climate-related aspects are found to be particularly relevant for the sustainability of the supported policy, strategy or programme, it is essential to reflect these aspects in the programme's monitoring framework and in the choice of disbursement criteria. If the assessment of the policy, institutional, legal/regulatory and/or monitoring frameworks reveals gaps or weaknesses in the capacity to address environmental and/or climate-related issues, it is also recommended to dedicate some of the "complementary support" resources to addressing the identified weaknesses.

[7] These are the sections on sector context, policy assessment, stakeholder analysis, priority areas for support / problem analysis, risks and assumptions, lessons learned, complementarity and cross-cutting issues.

If the environmental and climate risk screening results in outcome c (no further assessment needed), no further work on environmental and climate-related aspects will be required (apart from advising on values for the environment and Rio markers, see paragraph below).

Whatever the outcome of the environment and climate risk screening, the expert(s) will support the final selection of appropriate values for the "aid to environment" and Rio markers (either not targeted, significant objective or main objective), in line with the guidance provided in Annex 8, and if relevant with QSG1 comments on these markers. If any of them is selected as a significant or main objective of the intervention, the expert(s) will help ensure that the text of the action document, the logical framework (or detailed disbursement criteria, for budget support programmes) and any other relevant technical annex meet the criteria for securing the proposed marker(s).

4. EXPECTED OUTPUTS

4.1. IDENTIFICATION PHASE

- An initial action document and, as relevant, a draft logical framework and any other relevant technical annex adequately reflecting key environmental and climate-related issues, opportunities and risks – including the selection of appropriate values for the "aid to environment" and Rio markers;
- Outcomes of the environment and climate risk screening process meaningfully and comprehensively presented in the "Template for the assessment of cross-cutting issues";
- A short report[8] providing:
  - A summary of the work conducted in relation to the assessment of environmental and climate-related aspects at the identification stage (e.g. review of national legislation and regulations on environmental impact assessment, review of documentary sources, discussions with key national stakeholders and/or development partners) and key findings at this stage;
  - Evidence of how the screening process outcomes were determined, based on the relevant screening list(s) and questionnaire found in Annex 3 of these guidelines as well as the screening list(s) and/or questionnaire(s) associated with national regulations on environmental impact assessment;
- (*If relevant, draft terms of reference for either a strategic environmental assessment, an environmental impact assessment or a climate risk assessment*).

4.2. FORMULATION PHASE

- (*If relevant, comments on the draft scoping and final reports of the strategic environmental assessment, an environmental impact assessment or a climate risk assessment*);
- A quasi-final action document and, as relevant, a logical framework (or detailed disbursement criteria, for budget support programmes) and any other relevant technical annex adequately reflecting key environmental and climate-related issues, opportunities and risks and practical responses – including the selection of appropriate values for the "aid to environment" and Rio markers;
- Outcomes of the environment and climate risk screening process meaningfully and comprehensively updated in the "Template for the assessment of cross-cutting issues";

[8] This can be a chapter in the identification mission report.

- If any specific work has been conducted in relation to the assessment of environmental and climate-related aspects at the formulation stage, a short report[9] providing:
  - A summary of this work (e.g. review of national legislation and regulations on environmental impact assessment, review of dedicated environmental or climate risk study, review of additional documentary sources, discussions with key national stakeholders and/or development partners, workshops, field missions);
  - Key conclusions and recommendations for the integration of environmental and climate-related aspects at the implementation phase (as a complement to the information provided in the action document and its annexes, which has to remain concise and may therefore not include all important details).

5. EXPERT PROFILES

Expert profiles and the composition of the expert team should be determined in a flexible manner so that:

- If the experts in charge of the identification and formulation study have adequate skills, they can take care of the assessment of environmental and climate-related aspects;
- Otherwise an environmental or other specialised expert can be called in to contribute specifically on these aspects, either at a distance (if few inputs are expected to be needed) or through participation in the in-country mission.

This notably implies that:

- A provision is made for the travel expenditures of the specialised expert if one is needed[10];
- If no specialised expert is needed, extra working days (compared with a scenario "without environmental assessment") are allocated to the other experts for conducting environmental assessment work.

5.1. GENERAL QUALIFICATIONS

For the assessment of environmental and climate-related aspects, one team member at least should have:

- Master level or post-graduate studies in a relevant field (e.g. environmental sciences, environmental management, environmental economics, natural resource management, climate change sciences, climate change and development) or equivalent professional experience of at least 5 years in a relevant field.

5.2. GENERAL AND SPECIFIC PROFESSIONAL EXPERIENCE

For the assessment of environmental and climate-related aspects, the expert team taken together should have:

- Proven experience in environment and climate change mainstreaming, and/or management of environmental and climate-related aspects, in the sector of activity of the planned intervention or a closely related sector: at least 3 assignments in the context of development or international cooperation.

(9) This can be a chapter in the formulation mission report.

(10) Depending on the expected level of inputs, distance support may be sufficient at the identification phase while in-country support is provided during formulation.

6. RESOURCES

Resources allocated to the assessment of environmental and climate-related aspects must be modulated based on the expected relevance and significance of environmental and climate-related issues, opportunities and risks. Interventions in sectors such as natural resource management, rural development, agriculture and food security, energy, transport and infrastructure, water and sanitation, waste management, territorial planning, urban development, disaster risk reduction, private sector development are expected to require more time and resources than interventions in other sectors; however, a sufficient allocation of time and resources should also be made for environmental and climate-related assessment in interventions in sectors such as education, health, migration, trade, governance, where significant opportunities exist. In all cases, it is recommended to keep the allocation of working days "indicative", to provide some flexibility to reallocate resources across tasks in case of unanticipated developments.

Indicatively, the following resources will be allocated to the assessment of environmental and climate-related aspects:

- At the identification stage: (3 to 15) working days. *(Count 2 extra working days if the experts are expected to contribute to the drafting of terms of reference for a specific environmental or climate study);*
- At the formulation stage:
  - If a dedicated environmental or climate risk study is conducted as a separate assignment during formulation: (4 to 8) working days – to be agreed between the Parties and confirmed by the Contracting Authority prior to the start of formulation work, depending on the extent to which the dedicated study may impact on the action's design (choice and focus of activities, budget, implementing modalities, ...) and therefore require extra work. *(Count 2-3 extra working days if the experts are expected to comment on the study's draft scoping and final reports);*
  - If environmental and climate-related assessment work is conducted as part of formulation work under this assignment: (3 to 15) working days – to be agreed between the Parties and confirmed by the Contracting Authority prior to the start of formulation work, depending on the number of issues to be investigated, the expected depth of assessment work and the time (if any) that could be dedicated to preliminary assessment at the identification stage;
  - If no additional environmental and climate-related assessment work is required during formulation: nil.

7. INDICATIVE CALENDAR

- Insert key activities related to environmental and climate-related assessment in the overall indicative calendar of the assignment, including screening work and possibly preliminary assessment work[11] at the identification stage, assessment work and/or integration of the findings and recommendations of a dedicated study (if any) at the formulation stage;
- Make sure a sufficient provision is made to accommodate environmental and climate-related assessment on top of other requirements – especially if formulation work cannot be finalised until the findings and recommendations of a separate environmental or climate risk study are available;

Keep the calendar indicative so that there is flexibility in re-arranging it by mutual agreement before the start of formulation work, especially when the calendar may be strongly influenced by the outcomes of environmental and climate risk screening.

[11] If broad options for the intervention are already known at the start of the identification assignment, screening can take place early rather than late in the identification phase, making it possible to do some additional preliminary assessment work during identification.

ANNEX 5

Terms of reference for a Strategic Environmental Assessment

A Strategic Environmental Assessment (SEA) is a process for evaluating the environmental implications of a proposed policy, plan or programme. The model Terms of Reference (ToR) provided here are intended for SEAs undertaken in connection with the formulation or revision of a sector or national policy/plan or programme (strategic document) and/or of an EU sector support programme/project. It should be adapted as required depending on the specific context (e.g. the formulation of an EU sector support programme/project may or may not coincide with the formulation or updating of a national sector strategic document) and as a result of the (necessary) consultation with the partner government and development partners willing to support the exercise. Most elements of these ToR will also be relevant for an SEA undertaken during the implementation of an existing strategic document. Indeed, while conceived as an ex ante assessment, SEA can also be of value if undertaken in connection with existing strategic documents, as long as there is political will to use SEA findings to inform and guide further implementation or policy-making (e.g. on the occasion of sector reviews or periodic revisions of the strategic documents).

In most cases, the focus of the SEA would be on assessing the government's strategic document to ensure the EU is providing support to the implementation of a policy, plan or programme that ensures appropriate integration of environmental sustainability and climate change, and on informing the identification and/or formulation of the EU support programme/project. Depending on the scope of the EU support, the assessment may cover a whole sector or be limited to some of the components in the strategic document. In any case, the assessment should also cover the environmental implications of the EU's support programme/project.

Explanations or sections to be completed according to individual circumstances are given in *italics*.

ToR for the Strategic Environmental Assessment of (*name of the sector strategic document*) **in** (*name of the country/region*)

1. BACKGROUND

A Strategic Environmental Assessment (SEA) is required for the preparation of *(name of the sector support programme/project)* and/or as support to *(name of the sector strategic document.)*

The major strategic documents to consider are *(list the main documents and their status or stage of preparation.)*

(Mention other relevant background information, such as key stakeholders, legal requirements, existing Country Environmental Profile or similar analysis.)

(Mention any sector programme alternatives that have been agreed between the EU and the partner government for assessment; if no alternatives have been defined, state this as well.)

(Explain the reasons why an SEA is required and which decisions it is expected to influence.)

2. OBJECTIVES

The objectives of this SEA are to identify, describe and assess:

- The likely significant effects on the environment of implementing the (*name of the sector strategic document and/or EU support programme/project*);
- The most important environmental, natural resource-related and climate change-related constraints bearing on the performance of the sector;
- The opportunities for the (*name of the sector strategic document and/or EU support programme/project*) to contribute to enhancing the state of the environment, building climate resilience of the sector and the population, and promoting low carbon development and the transition to the green economy.

This assessment will then be taken into account in the preparation, review or implementation of the strategy *(delete or change as appropriate)* and in the preparation of the support to be provided by the EU. The SEA will provide decision-makers (in the partner country as well as the EU and other donors) with relevant information to assess the environmental challenges and opportunities (including climate-related ones) with regard to the *(name of the sector strategic document)* and/or the envisaged EU support *(programme/project)*. This information should help ensure that environmental concerns are appropriately integrated in the decision-making and implementation processes.

3. RESULTS

The SEA is composed of two parts: a scoping study and an SEA study. The scoping study will define the key issues that need to be addressed in the SEA study, considering the specific context in which the sector support is being developed and is likely to be implemented. Detailed activities and calendar for the SEA study will be determined on the basis of the conclusions of the scoping study.

The SEA scoping study will provide:

- A description of the sector (*programme/project*) concerned and its alternatives;
- A brief description of the sector's policy, institutional and legal framework, focusing on those related to environment and climate change;

- A brief presentation of the environmental and climate change policies and objectives in the country that are relevant to the sector;
- An identification of key stakeholders and an overview of their interests and concerns with regards to the (*strategic document*);
- An identification of the key interactions between the strategic document and the environment and climate change;
- An indication of the scope of the environmental baseline to be prepared;
- An indication of the main impact identification and evaluation methodologies to be used in the SEA study;
- An indication of the time frames, costs and resources needed to carry out the SEA study (including possible reallocation of time amongst experts).

The SEA study will deliver the following results:

- An environmental assessment of the (*name of the strategic document and/or support programme*), taking into account the environment- and climate change-related risks, constraints and opportunities, and its consistency with partner government's and EU's environmental and climate change policies and objectives;
- Recommendations for the formulation of the support programme/project (including on performance indicators, use of technical assistance and other aid delivery methods) and for the enhancement of the environmental and climate change performance of the sector strategic document.

4. ISSUES TO BE STUDIED

4.1. SCOPING STUDY

4.1.1. Overview of the sector strategic document and its policy, institutional and legal framework

The policy-making and/or planning process for the sector should be described, including alternative options that may be under discussion. If deemed necessary and with adequate justification, additional options should be suggested for consideration in the SEA study. Where a sector strategic document already exists, its main features should be described.

The policy, institutional and legal framework relating to the sector should be described. Particular attention should be paid to institutions and entities responsible for environment and climate change issues relevant to the implementation of the sector strategic document, as well as to the relevant environmental and climate change policy and legislation (including bilateral, regional and international commitments).

National environmental and climate change policy objectives relevant to the sector should be identified.

The links between the policy-making/planning process (i.e. the preparation of the sector strategic document and/or the corresponding EU support programme) and the SEA must be described, i.e. which outputs of the policy-making/planning process should feed into the SEA process and vice-versa. The specific policy-making/planning decisions and processes that should be influenced by the SEA must be identified.

4.1.2. Description of key stakeholders, their interests and concerns

The involvement of stakeholders in the SEA process is a key success factor. Key stakeholders should be identified: key groups and institutions, environmental agencies, climate change related institutions, non-governmental organisations, representatives of the public and others, including those groups potentially affected by the likely environmental impacts of implementing the sector strategic document. Particular attention should be paid to involving typically less represented groups such as women, indigenous peoples and minority groups.

Consultants must review records of any national public consultation process that may have taken place as part of the sector strategic document preparation process, if available. Based on this review and on additional consultations, they should identify key stakeholders' interests, concerns and values with respect to the sector strategic document under consideration and propose a stakeholder engagement strategy[1]. The strategy should provide stakeholders an opportunity to influence decisions. If some of the identified stakeholders are not used to being engaged in similar processes, particularly at the strategic level, and if there are no precedents, it might be important to include an "education" component in the stakeholder engagement process.

Due to the large geographical areas that may be covered by the sector strategic document, stakeholder engagement could focus on key stakeholders, especially targeting directly affected and vulnerable groups as well as key stakeholders that may not have been adequately represented in the sector strategic document preparation.

4.1.3. Description of key aspects to be addressed in the SEA

On the basis of the policy, institutional and legal framework analysis, as well as the consultation of stakeholders, the key environmental and climate change aspects that should be addressed in the SEA study should be identified – i.e. the key sector strategy-environment/climate change interactions that need to be given special consideration and emphasis in light of:

- the potential significant impacts on the environment, significant contributions to greenhouse gas emissions (in relation to national emissions), and increased climate change vulnerability associated to the implementation of the strategic document;
- the key environmental, natural resources and climate change aspects that impinge on sector performance and are not adequately addressed by the strategic document;
- key opportunities for the strategic document to make a significant contribution to environmental sustainability, climate resilience, low carbon development and green economy; and
- the potential conflicts between the sector strategic document and environmental and climate change policy objectives (at national or sub-national level).

Depending on expected impacts on society and the scope of other studies, there is also a need to determine the extent to which social impacts should be assessed[2], notably from the perspective of livelihoods and poverty reduction.

(A stakeholders' workshop will be organised to validate the key issues identified. The identification of key issues will be amended as necessary taking into account the results from the workshop).

4.1.4. Description of the scope of the environmental baseline to be prepared in the SEA study

(1) The stakeholder engagement strategy should be agreed with the partner government and the EU delegation before being implemented in order to avoid unnecessary conflicts or raising of unreasonable expectations.

(2) In this case, impacts on humans should be disaggregated by gender, age or other relevant social criteria.

Also on basis of the information obtained above, the consultants must provide indications on the scope of the environmental baseline required for the SEA study, ensuring that it will be adequate to examine in more detail the key environmental aspects identified above. This will include a proposal on the geographical units that will need to be targeted. All geographical units identified for inclusion in the environmental baseline assessment should be justified.

(The identification of geographical units will be more relevant for more focused programmes, and less so for national-level policies. Thus this section should be amended to reflect the nature of the sector strategic document being assessed).

4.1.5. Recommendations on specific impact identification and evaluation methodologies to be used in the SEA study

Consultants should provide an indication of the impact identification and evaluation methodologies that will be used in the SEA study. Special attention should be given to identifying those environmental interactions that will require quantitative analyses and those for which qualitative analyses should be carried out.

4.1.6. Indication of time frames needed to carry out the SEA study

The consultants must assess the time needed for the completion of the SEA study, based on the results of the scoping study. If at this stage it is considered necessary to extend the initially envisaged time frame for the assignment and/or to integrate other experts with specific skills, this should be proposed for consideration.

(The partner government / the EU could give an indication of the maximum budget allocated to the SEA study).

4.2. SEA STUDY

The SEA study will be based on the results of the scoping phase (following approval of the scoping study report) and include an environmental baseline study, the identification of environmental and climate change constraints and opportunities, the identification and assessment of the potential environmental impacts, an analysis of performance indicators, an appreciation of the institutional capacities to address the environmental and climate change challenges identified, and conclusions and recommendations.

4.2.1. Environmental baseline study

A description and appraisal must be made of the current state of the environment, focusing on those key environmental components identified in the scoping study and necessary to better understand the key issues identified. The trends for, and pressures on, the various environmental components must be identified and a projection made of the state of the environment in the short-, medium- and long-term (as relevant) under the assumption of no implementation of the sector strategic document, taking into account the effects of climate change (to the extent they can be predicted with some reliability). External factors must be taken into account, including the influence of policies and strategic plans from other sectors. If the 'no implementation' scenario is unrealistic, the most probable 'business-as-usual' scenario should be selected. The geographical (or mapping) units to be addressed should be described, if relevant.

4.2.2. Identification and evaluation of environment-related risks, constraints and opportunities

The environmental and climate change factors that can affect (positively or negatively) the relevance, effectiveness, efficiency and sustainability of the sector strategic document, should be identified, described and assessed.

These factors may include the availability of natural resources necessary to achieve the strategy's objectives, as well as the current and projected effects of climate change. This part of the study should consider the environmental issues that can potentially be addressed by the strategic document under assessment. The study should assess if the sector strategic document provides an adequate response to these constraints and opportunities. As relevant, the study should assess whether the sector strategic document, in view of identified vulnerabilities, includes an adequate response in terms of adaptation to climate change – or may, on the contrary, lead to an inadequate response ('maladaptation').

4.2.3. Identification and evaluation of impacts

The potential environmental consequences of implementing the sector strategic document, including the positive or negative contribution to greenhouse gas emissions (if significant relative to national emission levels), must be identified and described for each alternative being studied; their significance should be determined taking into account the characteristics of impacts[3], the views and concerns of stakeholders and the sensitivity of the environment. The potential *cumulative* impacts of the envisaged sector activities should be identified, since they may differ from the sum of individual impacts. Those impacts which are significant should be assessed in detail taking into account:

- the views and concerns of stakeholders;
- consistency with international commitments (bilateral and multilateral environmental agreements);
- socio-economic consequences (especially on vulnerable groups and ethnic minorities);
- compliance with environmental and climate change regulations and standards;
- consistency with environmental and climate change objectives and policies; and
- their implications for sustainable development.

As far as climate change mitigation is concerned, different strategies may lead to different outcomes in terms of greenhouse gas emissions or carbon sequestration. If various alternatives are under consideration and involve significant differences in this regard, these differences should be evaluated in the study.

(More information could be provided on how the methodology presented in the scoping study has been used for impact identification and evaluation).

4.2.4. Identification and evaluation of impacts in terms of vulnerability to climate risks

The direct and indirect impacts of implementing the sector strategic document in terms of increased or reduced vulnerability to climate variability and climate change should be considered as relevant (e.g. the construction of new infrastructure in 'climate-sensitive' areas such as coastal zones may lead to population migration to these areas, thus exposing more people to climate risks; on the contrary, sector-wide measures may contribute to increase the population's resilience to climate change).

4.2.5. Analysis of performance indicators

Performance indicators proposed by the sector strategic document (or already envisaged by the EU for its sector support programme/project) should be assessed from an environmental perspective, i.e. with regard to their usefulness to capture the environmental effects (positive or negative) of implementing the sector strategic document and to monitor the environmental and climate-related constraints bearing on it. Based on this analysis, proposals should be made as appropriate for the improvement of the existing performance assessment

[3] E.g. duration, probability, magnitude, mitigability, reversibility.

framework. Proposals should also be made for the EU support programme/project performance indicators and monitoring system.

4.2.6. Appraisal of the capacities to address environmental and climate-related challenges

The capacity of regulatory institutions to address the identified environmental and climate-related issues, both in terms of adaptation and mitigation, should be appraised.

(Consultants might be requested to incorporate information on budget allocations and medium-term expenditure framework).

4.2.7. Stakeholder engagement

Stakeholders should be engaged throughout the SEA study according to the stakeholder engagement strategy agreed at the scoping phase.

4.2.8. Conclusions and recommendations

This section will summarise the key environmental issues for the sector involved, including policy and institutional constraints, challenges and main recommendations. Recommendations should be made on how to optimise positive impacts and make best use of environment- natural resource- and climate change related opportunities, as well as on how to mitigate adverse effects, adapt to environmental and climate change constraints and manage risks. They should suggest the selection of an alternative (in cases where more than one alternative is envisaged), potential changes in the design of the sector strategic document, implementation and monitoring modalities, or cooperation actions.

In view of the preparation of a support programme/project, recommendations should be made to support the overall assessment of the sector strategic document as well as for the formulation of the EU support programme/project.

Recommendations to enhance the sector strategic document should be distinguished from those for the formulation of the EU support programme/project. The recommendations for enhancing the sector strategic document should be incorporated in the policy dialogue with the partner government.

Recommendations to the EU for the formulation of its sector support programme/project may outline complementary measures to address specific weaknesses in the environmental and climate change institutional, legal and policy framework. They should also include proposals for indicators.

The limitations of the SEA and its assumptions should be presented. The recommendations should take into account the views presented by stakeholders and explain how these were integrated. In the case of concerns that were not integrated in the final recommendations, the reasons thereof should be given.

5. WORK PLAN

The work plan should include, but not necessarily be limited to, the following activities:

Scoping study

- Fact finding/data collection;
- Review of prior public consultations (if relevant and accessible);

- Identification of stakeholders;
- Engagement of stakeholders;
- Analysis/preparation of recommendations and scoping report;
- Stakeholders' workshop to validate key issues (if agreed with the EU).

SEA study

- Fact finding/data collection;
- Field trips;
- Engagement of stakeholders;
- Identification and detailed analysis of the potential environmental impacts, constraints and opportunities;
- Preparation of recommendations to mitigate negative environmental effects, adapt to constraints, optimise positive effects, exploit opportunities, and generally manage and control environmental and climate-related risks;
- Preparation of draft SEA report;
- Preparation of the final SEA report (integrating comments received).

On the basis of this draft proposal and the time schedule outlined in the ToR, the consultants must provide their detailed work plan.

6. EXPERTISE REQUIRED

The team will consist of *(number)* experts: a Team Leader (Category 1), a sector expert (Category 1) and *(complete as necessary, e.g. a socio-economist if social impacts are to be specifically targeted, or a thematic expert)*.

The Team Leader must have, at least, a master's degree in a relevant area, such as environment, climate change or natural resources management with at least 10 years of relevant professional experience. (S)he will have proven experience in the preparation of SEAs, preferably in the context of EU development cooperation. (S)he must have experience as team leader in at least 3 assignments, preferably one of which for an SEA. (S)he must have good knowledge of the EU cycle of operations. Experience in the sector, country and region will be an asset.

The sector expert *(specify sector, or theme)* must have, at least, a master's degree in a relevant area *(specify)* with at least 10 years of relevant professional experience in *(specify subject areas)*. (S)he must have proven experience in *(specify country or region)*. Participation in strategic environmental assessments and knowledge of the EU cycle of operations will be an asset.

All experts must be fluent in *(English, French, Spanish, Portuguese)* and at least one expert must be fluent in *(specify local language, if relevant)*.

(This section is to be adapted and completed based on the required expertise)

For each expert proposed, a *curriculum vitae* must be provided or no more than *(four)* pages, setting out the relevant qualifications and experience.

7. REPORTING

All reports are to be printed double-sided on recycled or certified paper.

The scoping study must be presented in the format given in Appendix 1.

The detailed stakeholder engagement plan must be presented *(two)* weeks after kick-off; *(number)* copies are to be presented to *(names and organisations)* for comments.

The draft scoping report in *(number)* copies is to be presented to *(names and organisations)* for comments by *(date*[4]*)*. Comments should be expected by *(date)*. The consultants will take account of those comments in preparing the final scoping report. *(Number)* copies of the final scoping report in *(language)* are to be submitted by *(date)*.

The EU will provide feedback on the scoping report no later than *(number)* weeks after its delivery, setting the scope for the SEA study. The SEA study will begin no later than *(number)* weeks after this date.

The SEA study should take into account the format proposed in Appendix 2. The report content and structure must be agreed with the EU.

(Depending on the sector and scope of the sector strategy, it is often convenient to organise the report by key issue, whereas in other cases it may be more convenient to organise it in a more linear fashion).

The draft SEA report in *(number)* copies (double-sided printing and recycled or certified paper) is to be presented to *(names and organisations)* for comments by *(date*[5]*)*. Within *(number)* weeks, comments will be received from *(list the authorities)*.

The consultants will take account of these comments in preparing the final report. *(Number)* copies of the final report in *(language)* are to be submitted by *(date)*.

8. PRESENTATION OF THE PROPOSAL

The proposal must include an understanding of the Terms of Reference and a description of the general approach to the SEA in accordance with these ToR, highlighting the following: the proposed methodology for the participation of stakeholders; the proposed approaches for the definition of the environmental baseline; and the proposed methodologies for identification and evaluation of impacts/risks/opportunities.

9. INDICATIVE TIME SCHEDULE AND RESOURCE ALLOCATION

(Insert indicative time schedule and resource allocation (in working days) – keeping in mind that at least 2 missions to the country should be organised, considering the time gap between submission of the scoping report and start of the SEA study).

The tenderer should respond to this time schedule and resource allocation and indicate in their proposal how they intend to organise the work for this purpose.

(4) To be defined depending on the complexity of the SEA, but normally 4 to 6 weeks after inception.

(5) To be defined depending on the complexity of the SEA, but normally between 2 to 4 months after approval of the scoping report.

10. APPENDICES

Appendix 1. Standard format for the SEA scoping report

Maximum length of the main report (without appendices): 25 pages.

The following text appears on the inside front cover of the report:

This report is financed by the European Union and is presented by the (*name of consultant/consortium*) for (*national institution*) and the European Union. It does not necessarily reflect the opinion of (*national institution*) or the European Union.

Structure of the report:

1. Summary
2. Description of the sector strategic document under consideration
3. Overview of the policy, institutional and legal framework
4. Overview of key stakeholders, their interests and concerns
5. Description of key environmental aspects to be addressed in the SEA study
6. Description of the scope of the environmental baseline to be prepared in the SEA study
7. Recommendations on specific impact identification and evaluation methodologies to be used in the SEA study
8. Proposal of time frames and resources needed for the SEA study
9. Appendices
    a. Stakeholders' engagement methodology
    b. List of stakeholders engaged or consulted
    c. List of documents consulted

Appendix 2. Proposed format for the SEA study report

Maximum length of the main report (without appendices): 100 pages.

The following text appears on the inside front cover of the report:

This report is financed by the European Union and is presented by the (*name of consultant/consortium*) for (*national institution*) and the European Union. It does not necessarily reflect the opinion of (*national institution*) or the European Union.

Structure of the report:

1. Summary

Part I: Background

2. Scope and objectives
3. Background
    a. Description of the sector strategic document
    b. Alternatives under consideration
    c. Environmental policy, legal and planning framework for the SEA
    d. Key issues identified
4. Approach and methodology
    a. General approach
    b. Geographical or environmental mapping units
    c. Assumptions, uncertainties and risks
5. Environmental and climate change objectives and indicators relevant to the sector
6. General environmental and climate change baseline

Part II: Analysis of key issues

7. Key Issue 1: ...
    a. Rationale for the selection of the key issue (synthesis)
    b. Baseline (including institutional, policy and legal framework specific to the key issue)
    c. Analysis (including, as relevant, a discussion on how the state of the environment and/or climate change affect sector performance, potential significant impacts on the environment associated to sector strategy implementation, significant opportunities for the sector strategy to contribute to environmental sustainability, low carbon development and the green economy – the analysis should take into account aspects such as the appropriateness of the institutional and regulatory framework, institutional capacities, etc.)
    d. Analysis of alternatives
    e. Recommendations
8. Key Issue 2: ...
    a. Rationale for the selection of the key issue (synthesis)
    b. Baseline (including institutional, policy and legal framework specific to the key issue)
    c. Analysis (including, as relevant, a discussion on how the state of the environment and/or climate change affect sector performance, potential significant impacts on the environment associated to sector strategy implementation, significant opportunities for the sector strategy to contribute to environmental sustainability, low carbon development and the green economy– the analysis should take into account aspects such as the appropriateness of the institutional and regulatory framework, institutional capacities, etc.)
    d. Analysis of alternatives
    e. Recommendations

Part III: Conclusions and recommendations

9. General conclusions
10. Recommendations for formulation of the EU support programme/project
11. Recommendations for enhancement of the sector strategic document

References

Technical appendices

12. Maps and other illustrative information not incorporated into the main report
13. Other technical information, data and analytical results, as required (e.g. flow-charts, matrices)

Other appendices

14. Study methodology/work plan (2-4 pages)
15. Consultants' itinerary (1-2 pages)
16. List of stakeholders consulted with their affiliation and contact details (1-3 pages)
17. List of documentation consulted
18. Curriculum vitae of the consultants
19. Terms of Reference for the SEA

ANNEX 6

Terms of reference for an Environmental Impact Assessment

An Environmental Impact Assessment (EIA) is an analytical process that systematically examines the possible environmental consequences of the implementation of a project[1]. An EIA is carried out for new projects that are likely to have significant adverse impacts on the environment. The EIA is carried out by the project promoter prior to investment and submitted to the relevant regulatory authorities as part of the development consent procedures. The relevant regulatory authorities will grant permission to proceed or reject the project or demand mitigating actions. It is important that the EIA is of high quality and looks at alternatives that can minimise environmental impact and maximise potential benefits. An Environmental Management Plan (EMP) is drawn up and also serves to monitor mitigating actions.

If an EIA is required by the national legislation in the partner country and/or if the environmental and climate change screening (see Annex 3) concludes that an EIA is necessary, an EIA is carried out. In general, the format and terms of reference for the EIA are dictated by the national legislation. However, the EU delegation may decide to incorporate further elements into the corresponding ToR to ensure standards are consistent with those set out under these Guidelines.

The model Terms of Reference described hereafter need to be adapted according to the specific project and specific country. Explanations or sections to be completed according to individual circumstances are given in *italics*. A standard format for the EIA report can be found below (see appendices).

In case an EIA is required, it is important to define how the EIA and other studies will be incorporated in the different steps of the formulation phase. There are four issues to consider:

- A clear definition of the scope of studies to be carried out at formulation stage is necessary to ensure complementarities and to avoid overlap between the EIA and other studies (e.g. 'general' formulation study, financial and economic analysis). Close coordination is therefore required in the preparation of the different ToR for these studies if they are not prepared by the same person;
- Consistency should be maintained during formulation; this means that the same alternatives are considered in the different assessments (e.g. technical, environmental and economic);
- It should be ensured that the studies are based on sufficient technical information and assess realistic options, and that they can have an influence on the selection of project alternatives and on final project design;
- Ideally the EIA should precede the economic analysis, which has to incorporate the costs of impact reduction and adaptation measures and possibly also value some residual environmental externalities and costs associated with potential climate change risks.

[1] Adapted from OECD, https://stats.oecd.org/glossary.

ToR for the Environmental Assessment of (*name of the project*)

1. BACKGROUND

(*National legislation and*) (T)(t)he European Commission require(s) an Environmental Impact Assessment (EIA) to be carried out for the formulation of (*state the name/title of the proposed project*). The EIA must examine the potential impacts the project may have on the environment, as well as options for mitigating and/or optimising these impacts.

(Optional[1]*)* Simultaneously, recognising that the implementation of the project and the achievement of its objectives will also depend on environmental and climate-related risks, constraints and opportunities, it has been decided to also add an assessment of these aspects.

The project is described as follows: (*insert a short description, referring to the current logical framework that should be attached to the document; provide key information, such as objective, rationale for the project, location, duration, technologies to be employed, life-cycle of the project, etc.*)

The following technically feasible alternatives have been identified: (*provide a description of alternatives that might already have been identified – in some cases there will be no alternatives identified. If this is the case, it will be important to consider - if more work is needed at the design stage - to identify alternatives, it might be necessary here to formulate a text that suggests that the EIA consultants to consider alternatives that could minimise the environmental impacts (see 4.1.1*).

Existing information on the project and the environment can be found in (*mention already available studies and information including the results of the identification phase, and indicate where/how these documents may be obtained/consulted).* In addition to this EIA, the following studies are also envisaged (*mention any other studies planned in the formulation phase, including feasibility, economic and financial analyses or social impact assessments*).

(*Mention other pertinent background information, such as potential or known projects envisaged in the same area, key stakeholders, legal requirements and existing SEA in the sector).*

2. OBJECTIVE

The Environmental Impact Assessment will provide decision makers in the partner country and the European Commission with sufficient information to justify, on environmental grounds, the acceptance, modification or rejection of the project for financing and implementation. It will also provide the basis for guiding subsequent actions, which will ensure that the project is carried out taking into account the environmental issues identified.

3. RESULTS

The EIA is undertaken in two stages: first a scoping study and then the EIA study as such. The scoping study will define the issues that need to be addressed in the EIA study, considering the specific context in which the project will be implemented. The activities, calendar and budget for the EIA study will be determined on the basis of the conclusions of the EIA scoping study.

The **EIA scoping study** will deliver the following results:

- An overview of the project, the applicable legislative and institutional framework;

[1] If not included in the scope of the EIA, environmental and climate-related risks, constraints and opportunities must be addressed, as relevant, in the project's general formulation study.

- An indication of the project alternatives and their variants to be studied;
- A description of the key stakeholders and their concerns;
- A stakeholder engagement plan (to be implemented while the EIA study as such is conducted);
- A description of the key environmental aspects and project-environment interactions that should be addressed in the EIA;
- A description of the geographical area to be considered in the environmental baseline and in the identification of impacts;
- Recommendations on specific impact identification and evaluation methodologies to be used in the EIA;
- *(An optional description of the proposed methodology for identifying and assessing environment and climate change-related risks, constraints and opportunities)*;
- An indication of the time frames, costs and resources needed to carry out the EIA study.

The **EIA study** will deliver the following:

- An identification and assessment of the potential significant environmental impacts of the project in its different alternatives;
- Recommendations, including an Environmental Management Plan (EMP), for the implementation of proposed measures to mitigate negative impacts and optimise positive ones;
- *(Optional recommendations on how to adapt project design (if required) to optimise the exploitation of opportunities, manage risks and operate under the constraints imposed by the natural environment, including climate variability, climate change and the availability or scarcity of natural resources).*

4. ISSUES TO BE STUDIED

4.1. EIA SCOPING STUDY

4.1.1 Overview of the project and its alternatives

The consultants must describe the project and major project alternatives, especially those which are significantly different from an environmental perspective (e.g. location alternatives affecting different ecosystems or production alternatives involving sizable differences in GHG emissions and/or carbon fixing). The consultants will also define the constraints to be taken into account in proposing mitigation measures and other changes to the project. They must assess whether variations to the proposed alternatives are worth being studied.

4.1.2 Legislative, institutional and planning framework

A description must be made of the institutional and legislative framework relevant to the project and its EIA, including an indication of the key applicable legislation, planning processes (e.g. land use planning), standards and norms that will have to be addressed in the EIA study. Reference should be made to the Country Environmental Profile or similar analysis and to any existing Strategic Environmental Assessment (if relevant).

4.1.3 Description of the key stakeholders and their concerns

The engagement of stakeholders in the EIA process is a key success factor. The consultants should identify key stakeholders (key groups and institutions, environmental agencies, NGOs, representatives of the public and oth-

ers, including those groups potentially affected by the likely significant environmental impacts of the project). Particular attention should be paid to typically less represented groups such as women, indigenous peoples and minorities. Stakeholders will be engaged in order to identify their concerns and values with respect to the project under consideration. This will contribute to the identification of key project–environment interactions that will need to be addressed in the EIA study. The stakeholder engagement strategy to be employed should be explained in the consultants' proposal and, if necessary, will be revised by the partner government and the Commission before being implemented in order to avoid unnecessary conflicts and raising of expectations. Records must be kept of all consultations and comments received.

4.1.4 Description of the key environmental aspects and project–environment interactions that should be addressed in the EIA

Particular attention should be paid to the (direct or indirect) impacts that are likely to be the most significant, considering the sensitivity of the environment, the pressures resulting from the project and the expectations of the stakeholders. Based on these considerations and on background information on the local environment as well on other environmental assessments (including SEAs), the consultants should identify environmental issues to be specially considered under the following categories:

- Physical environment, including (micro-) climate, climate variability and climate change, air quality, water resources (surface and groundwater), geology, geomorphology, soil quality and risk of natural disasters;
- Biological conditions: biodiversity (including rare, endangered and endemic biodiversity components), and biological resources of cultural, social, or economic importance;
- Socio-economic conditions: consider the aspects that depend on environmental changes (public health; vulnerability to disasters; vulnerability to increasing climate variability and the expected effects of climate change[2]; access to natural resources and associated conflicts), those that can produce environmental impacts, and, more broadly, the socio-economic conditions that might be affected by the project and are not considered in other studies at the formulation stage[3].

Note that project-related emissions of greenhouse gases are unlikely to be considered 'significant' at the global scale. Nevertheless, at the project scale a project or some project alternatives may offer significant opportunities to reduce emissions, store carbon or implement the principle of a 'climate-neutral development path'. If this is the case, the assessment of such opportunities should be included in the scope of the EIA.

4.1.5 Description of the scope of the environmental baseline

On the basis of the information obtained above and on an appreciation of the areas of project influence, the consultants must provide indications on the scope of the environmental baseline needed for the EIA. Distinct geographical units can be proposed according to the type of expected impact (including indirect impacts). All geographical units identified must be justified.

4.1.6 Recommendations on specific impact identification and evaluation methodologies to be used in the EIA

The consultants should provide an indication of the most appropriate impact identification and evaluation methodologies to be used in the EIA. Special attention should be given to those environmental interactions that will merit quantitative analysis and those for which qualitative analyses should be carried out.

(2) The EIA study should assess the extent to which the proposed project may increase or, on the contrary, reduce the population's vulnerability to the effects of climate change.

(3) In this case, impacts on humans should be disaggregated according to sex, age, or other relevant social criteria.

4.1.7 (Optional) Proposed methodology for identifying and assessing environmental and climate-related risks, constraints and opportunities

The consultants should provide an indication of the methodology they plan to use to identify and then assess the risks, constraints and opportunities linked to the biophysical environment in which the project will operate, including the availability or scarcity of natural resources (soils, water, energy, materials etc.), increasing climate variability, and (to the extent they can be predicted) the projected effects of climate change.

4.1.8 Indication of the timeframe, costs and resources needed to carry out the EIA

The consultants must assess the time that is needed for the completion of the EIA study, which should include a definition of the environmental baseline, an analysis of alternatives, the identification of impacts, *(optional)* the identification of risks, constraints and opportunities, their evaluation, and the preparation of recommendations (including definition of mitigation/optimisation measures and the Environmental Management Plan).

Practical considerations must be taken into account, such as allowing for the obtaining of samples in different seasons if required.

A description and estimation of the resources required (in terms of budget, person-days) must be provided, including a break-down of costs. If at this stage it is considered necessary to integrate other experts with specific skills, this should be proposed in the scoping report for consideration by the national government / the EC.

(The government / the EC could give an indication of the maximum budget allocated to the EIA study).

4.2. EIA STUDY

The scope of the EIA study will be agreed with the partner government and the EC in coordination with the other international partners, based on the results of the scoping study.

4.2.1 Environmental baseline study

1. Existing environment

The environmental baseline study includes a description of the initial state of the environment in the selected boundaries of the study area, focusing on those aspects that can be influenced by the project. If appropriate, the consultant should also consider those conditions that could influence the efficiency or sustainability of the project. As far as possible, indicators (e.g. environmental quality indices) should be identified for all key environmental variables to be studied and their state (environmental quality) established as a baseline for impact identification and future monitoring. All indicators must be adequately explained and justified. If location alternatives are considered, the study should focus on the differences in the appropriateness and sensitivity of the environment to the pressures resulting from the project.

2. Expected future situation without the project

The consultants should describe the expected trends and situation of environmental variables on the short- medium- and long-term, assuming that the project will not be implemented. This 'no project' scenario will be considered as a benchmark for predicting the project's environmental impacts. Nevertheless, if the situation without project seems unrealistic, the most probable alternative should be used as a reference. Assumptions used to predict the future situation and trends should be discussed.

4.2.2 Impact identification and evaluation

The consultants will identify and describe the potential significant environmental impacts of the project alternatives, and evaluate them.

Significant potential environmental impacts (direct and indirect) must be identified, making use of impact identification methodologies proposed by the scoping study. Impact identification should take into consideration factors such as the sensitivity of the environment, the legislative framework, the pressures resulting from the project and the expectations of stakeholders. Impact identification must address the environmental aspects listed in Section 4.1.4 above and identified by the scoping study.

The impact identification should address - but not necessarily be limited to- the following aspects of the project:

- project activities (under construction, operation and decommissioning/abandonment);
- associated activities and structures (e.g. base camps during construction);
- location;
- general layout, size;
- time span of the project;
- means, materials and resources required (e.g. energy and water consumption, hazardous materials);
- polluting discharges and emissions;
- noise and vibration;
- production of odours, luminous emissions;
- solid and hazardous waste production;
- land-take requirements;
- presence of workers;
- access and transport;
- if relevant, effects on the population's vulnerability to increasing climate variability and the expected effects of climate change.

(If the partner government / the EC, based on the scoping study, prefer the use of particular methodologies, or would like more attention to be given to specific components, this should be specified and described here).

The state of the environment resulting in the short, medium and long term from project implementation will be described on the basis of the same indicators or criteria as the baseline study. The impact evaluation must be assessed in comparison with the expected state of the environment under the no-project scenario.

The impacts should be described according to their nature and characteristics (e.g. direct and indirect, temporary or permanent, continuous or intermittent, reversible or irreversible, positive or negative, short- medium- or long-term, their magnitude, their mitigability and compensability, their transboundary nature, accumulation and synergies with other impacts). Where appropriate, impacts on humans should be disaggregated by sex, age and other relevant social criteria.

Not all impacts need to be quantified. In some circumstances the attempts at quantification may result in meaningless numbers that are of no value to the decision-making process. It is thus important to recognise when a clear description of the impact characteristics and the reasons behind a certain qualification will be more useful (e.g. to propose mitigation measures and base a decision) than attempts to produce less meaningful quantification.

Impacts should be identified for the construction, operation and decommissioning phases of the project, and all associated developments should be taken into account (e.g. power lines associated with a hydroelectric dam, management/disposal of ashes generated by an incinerator, extraction of materials for construction activities).

4.2.3 Measures and recommendations in relation to impacts

Measures must be proposed to enhance positive effects, to eliminate/mitigate/compensate undesired effects. These measures (generally referred to as mitigation measures) must be technically feasible, economically sound and socially acceptable (i.e. they must take into account the views of the main stakeholders). The consultants must seek ways to optimise such measures, such that one mitigation measure does not reduce the effectiveness of another or, worse yet, cause an undesired significant impact itself.

The measures can have several distinct aims:

- Reducing the extent, scale or time-scale of activities that produce negative impacts in favour of less damaging activities or activities producing positive effects;
- Changes in the effects of an activity, without changing the activity itself (for example, adding anti-pollution filters);
- Strengthening the protection of the receiving environment with respect to project impacts or other hazards;
- Rehabilitating or restoring damaged resources;
- Compensating for damage, e.g. by achieving improvements to resources similar to the ones affected.

The residual impacts (i.e. the final environmental impact after the application of the proposed mitigation measures) must be identified and assessed. Based on this assessment the alternatives must be compared and recommendations made on the best alternative. The comparison of alternatives must be summarised in tabular form.

4.2.4 Environmental Management Plan

The Environmental Management Plan (EMP) is a document that identifies the actions needed to implement the EIA recommendations, including environmental monitoring required during the implementation phase of a project. The EMP should clearly translate the recommendations from the EIA into an operational plan.

The EMP of the project should include:

- A table (logical framework type) showing the objectives, expected results, objectively verifiable indicators, activities (mitigation/optimisation measures), and responsibilities for the implementation of those activities;
- Institutional arrangements for its implementation and for environmental monitoring: responsibilities, role of the environmental authorities, role and participation of stakeholders;
- Suggestions for contracts (environmental clauses: standards, potential requirement to prepare an Environmental Management Plan of the enterprise) and contracting modalities (such as payments linked to results);
- A monitoring and supervision plan (including appropriate indicators, frequency of monitoring, means to gather and analyse the data, reporting system);
- A response plan in case of accidents or unexpected results from the environmental monitoring;
- A proposed schedule for activities (monitoring and mitigation/optimisation measures);
- An indication of means (including personnel, vehicles) and costs of implementing the EMP.

4.2.5 Limitations of the EIA

The consultants should underline all the major limitations, weaknesses and uncertainties of the study. The consultants are required to state any assumptions made in the prediction and assessment of the potential envi-

ronmental impacts and risks, to highlight areas where information is deficient and to make clear how the assessment of significance has been determined, for example the use of established standards, quality objectives, stakeholder views and professional judgement.

4.2.6 Conclusions on environmental impacts

This section will summarise the key results of the EIA, the recommendations (referring to the draft EMP to be attached) and the assessment of the residual impacts. The consultants are also required to provide any information relevant for further economic and financial analyses or for the general formulation study. The limitations of the EIA and its key assumptions should be articulated.

4.2.7 (Optional) Identification and evaluation of environmental and climate-related risks, constraints and opportunities

The consultants will identify and describe the potentially significant risks, constraints and opportunities associated with the environment in which the project will operate, including (but not necessarily limited to) the following aspects:

- Availability – or scarcity – and quality of the natural resources (e.g. water, land, soils, energy, materials, minerals, plant, animal species, ecosystem services) on which project implementation and the achievement of objectives will depend, taking into account existing pressures, current trends and the projected effects of climate change;
- Exposure to climate-related risks (e.g. resulting from increasing climate variability, expected effects of climate change). This will be done by reviewing relevant national, sub-regional and local reports and studies on the effects of climate variability and climate change, including proposed responses to address those effects by project partners and within the project context as relevant. These responses may include technical, policy and institutional components;
- Exposure to other environmental risks or constraints (e.g. biological conditions, pests, invasive species, wildfires, pollution originating from other human activities outside the scope of the project);
- Exposure to natural disasters, semi-natural disasters and technological accidents, including those that may become more severe or more frequent as a result of climate change.

Although the analysis is likely to point out primarily to risks and constraints, the existence of opportunities associated with the natural environment (e.g. availability of abundant natural resources which - if properly used and managed - can improve the project's effectiveness, efficiency or sustainability; positive trends resulting from the projected effects of climate change) should also be investigated.

The main environmental and climate-related risks, constraints and opportunities associated with the project must be identified making use of the methodology proposed by the scoping study. In order to determine which of them are 'significant' and may thus require a change in project design or the adoption of specific adaptation measures, it is suggested to characterise and evaluate risks, constraints and opportunities against the following criteria:

- Relevance: are the identified risks, constraints and opportunities somehow relevant to the problems the project aims to address and to its objectives?;
- Effectiveness: can the identified risks, constraints and opportunities positively influence the achievement of project results and objectives, or on the contrary jeopardise it?;
- Efficiency (i.e. 'value for money' or 'value for resources'): can the identified risks, constraints and opportunities contribute to the production of outputs and results at a 'low' or 'reasonable' cost in terms of resource use, or on the contrary lead to a disappointing 'ratio' between outputs/results produced and resources employed?;

- Sustainability: can the identified risks, constraints and opportunities promote, or on the contrary prevent, the sustainable production of project benefits over the project's planned lifetime, from a financial, economic, environmental and social point of view?;
- Impact: can the identified risks, constraints and opportunities contribute to the generation of positive, or on the contrary negative, overall developmental impacts of the project on the wider society in which it operates?

4.2.8 (Optional) Proposed adaptation and risk management measures

Where significant risks, constraints and/or opportunities have emerged from the above evaluation, the consultants should propose measures and formulate recommendations to improve (if necessary) the integration of these factors into project design. Recommendations will take into account any measure already put in place or considered by project partners, as well as their capacity to undertake such measures. Actions may include:

- Measures to strengthen the project's and project partners' adaptive capacity in the face of increasing climate variability and climate change (e.g. building early warning or emergency preparedness and disaster risk reduction mechanisms, diversification of income sources, improved access to financial services including insurance, development of capacities in these areas);
- Measures to control or manage some identified risks (e.g. choice of project location to reduce exposure to natural disasters);
- Measures to improve the project's ability to operate under identified constraints (e.g. choice of most water-efficient or energy-efficient production options);
- Measures to better exploit some opportunities offered by the natural environment (e.g. use of a locally abundant source of renewable energy).

If the proposed adaptation, optimisation or risk management measures involve an additional cost (compared to the options currently considered), the report should include an estimation of these costs. It should also identify who would be in charge of implementing these measures.

4.2.9 (Optional) Limitations of the risk and constraint assessment

The consultants should underline all the major limitations, weaknesses and uncertainties of this part of the study. They are required to highlight areas where information is deficient and to make clear how the assessment of significance has been determined, for example the use of quality objectives, stakeholder views and professional judgement.

4.2.10 (Optional) Conclusions on environmental and climate-related risks, constraints and opportunities

This section will summarise the key results of the second part of the study, the recommendations and a brief description of the residual risks (i.e. those that cannot be controlled or satisfactorily managed within the limited scope of the project). The consultants are also required to provide any information relevant for further economic and financial analysis or for the general formulation study. The limitations of the risk, constraint and opportunity assessment and its key assumptions should be summarised.

5. WORK PLAN

The work plan should include but not necessarily be limited to the following activities:

EIA scoping study

- Fact finding/data collection;
- Identification and engagement of stakeholders;
- Analysis/preparation of scoping report;

EIA study

- Review of documentation (e.g. CEP, relevant existing SEAs, identification and pre-feasibility reports);
- Review of relevant environmental literature, environmental policy and legislation framework (legislation, regulations and standards);
- Fieldwork and analyses, including engagement of stakeholders;
- Impact identification and evaluation;
- Preparation of mitigation/optimisation measures;
- Preparation of the EMP;
- Preparation of the final EIA report.

On the basis of the proposed work plan and time schedule outlined, the consultants must provide a detailed work plan for the EIA study in their proposal.

6. EXPERTISE REQUIRED

The proposed mission shall be conducted by a team of (*number*) experts, who should have the following profiles:

- Expert level I or level II with at least 10 years' experience in conducting environmental impact assessments. She/He would be the team leader;
- (*Number*) experts level II with at least 5 year's relevant experience (*adjust as appropriate)* and with a technical background in (specify). (*The number of experts and specialities may be revised or adjusted at a later stage on the basis of the results of the scoping study*).

The team is expected to include experts with local or regional knowledge/expertise. The experts should have excellent skills in (*specify*). (*Specify language*) will be the working language; the final report must be presented in *(specify language).*

For each specialist proposed, a *curriculum vitae* must be provided of no more than (*four*) pages setting out their relevant qualifications and experience.

7. REPORTING

7.1. EIA SCOPING STUDY

The scoping study must be presented in the format given in Appendix 1.

The detailed stakeholder engagement strategy must be presented two weeks after kick-off; (*number*) copies are to be presented to (*names and organisations*) for comments.

The draft scoping report in (*number*) copies (double-sided printing) is to be presented to (*names and organisations*) for comments by (*date*). Comments from the concerned authorities and the EC should be expected by (*date*). The consultants will take account of these comments in preparing the final scoping report. (*number*) copies of the final scoping report in (*language*) (double-sided printing) are to be submitted by (*date*).

7.2. EIA STUDY

Feedback on the scoping study will be provided no later than (*number*) weeks after its submission, setting the scope of the EIA study. The EIA study will begin no later than (*number*) weeks after this date.

The EIA report must be presented in the format given in Appendix 2. The underlying analyses are to be presented in appendices to this report.

The draft EIA report in (*number*) copies (double-sided printing) is to be presented to (*names and organisations*) for comments by (*date*). Within (*number*) weeks, comments will received from (*list the authorities*).

The consultants will take account of those comments in preparing the final report (maximum…pages excluding appendices). (*Number*) copies of the final report in (*language*) (double-sided printing) are to be submitted by (*date*).

8. PRESENTATION OF THE PROPOSAL

The proposal must include an understanding of the Terms of Reference and a description of the general approach to the whole EIA in accordance with these ToR, highlighting the following: the proposed methodology for the engagement of stakeholders; the proposed approaches for the definition of the environmental baseline; and the proposed methodologies for impact identification and evaluation (including the description of specific tools proposed).

(According to the contracting modality used, the partner government / the EC should indicate the form in which they wish consultants to make their financial proposal, e.g. break-down by categories of costs, as well as indicate the maximum budget for this contract.)

9. TIME SCHEDULE

(Insert time schedule.)

The consultant should respond to this time schedule and indicate in their proposal how they intend to organise the work for this purpose. The time schedule can be revised according to the results of the scoping study.

10. APPENDICES

Appendix 1. Standard format for the EIA scoping report

Maximum length of the main report (without appendices): 25 pages.

The following text appears on the inside front cover of the report:

> This report is financed by the European Commission and is presented by the (*name of consultant*) for (*national institution*) and the European Commission. It does not necessarily reflect the opinion of (*national institution*) or the European Commission.

Structure of the report

1. Executive summary
2. Description of the project under consideration and its alternatives
3. Applicable environmental legislative and institutional framework
4. Key stakeholders and their concerns
5. Key environmental aspects and project-environment interactions to be addressed in the EIA
6. Scope of the environmental baseline and areas of project influence
7. Recommendations on specific impact identification and evaluation methodologies
8. (Optional) Proposed methodology for identifying and assessing environmental and climate-related risks, constraints and opportunities
9. Timeframe and resources needed to carry out the EIA
10. Technical appendices
    a. Stakeholder engagement methodology
    b. List of stakeholders consulted (including contact details)
    c. Records of stakeholder engagement
    d. List of documents consulted

Appendix 2. Standard format for the EIA report

The following text appears on the inside front cover of the report:

> This report is financed by the European Commission and is presented by the (*name of consultant*) for (*national institution*) and the European Commission. It does not necessarily reflect the opinion of (*national institution*) or the European Commission.

Structure of the report

1. Executive summary

2. Background
    a. Project justification and purpose
    b. Project location
    c. Project description and associated activities
    d. Alternatives
    e. Environmental policy, legislative and institutional framework
3. Approach and methodology

(This chapter must set out the approach and methodology used in the EIA and how the data and information collected has been incorporated in the findings and recommendations).

    a. General approach
    b. Geographical or mapping units
    c. Environmental quality indicators
    d. Assumptions, uncertainties and constraints
4. Environmental baseline study
5. Impact identification and evaluation

(Cumulative effects and interaction between effects could form additional subject headings to ensure that these aspects are not overlooked. Table and diagrams should be used to summarise and clarify findings in this chapter).

6. Mitigation/optimisation measures and residual impacts
7. Conclusions and recommendations on impact mitigation and optimisation
    a. Statement of impact

(This section must include one of the three 'statements of impact' set out below:

- *The alternative(s) (name or number of the concerned alternatives) will not have a significant environmental impact, providing that measures recommended in the EIA are followed through;*
- *The less damaging alternative(s) identified (name, or number) will have some significant environmental impacts, which cannot be feasibly mitigated. Therefore, it is recommended to identify and assess additional alternatives or to check that the expected social and economic benefits are sufficiently high in order to justify the project despite its environmental impact;*
- *Each alternative identified will have a significant and unacceptable environmental impact irrespective of proposed mitigation and monitoring measures. Therefore, it is recommended that the project proposal is comprehensively re-worked and alternatives re-assessed).*

    b. Conclusions and recommendations

(This section must present a clear statement of the conclusions and recommendations on actions to be taken to ensure that environmental issues are adequately addressed in subsequent project preparation, implementation, monitoring and evaluation phases. These conclusions and recommendations must be complete, yet concisely and clearly formulated, so that this section can be incorporated into the project documentation).

8. *(Optional)* Identification and evaluation of environmental and climate-related risks, constraints and opportunities

9. *(Optional*) Proposed adaptation and risk management measures

10. *(Optional)* Conclusions and recommendations on environmental and climate-related risks, constraints and opportunities

11. Technical appendices

    a. Input into the logical framework planning matrix of the proposed project design : intervention logic, indicators, assumptions and preconditions;

    b. Maps of the project area and other illustrative information not incorporated into the main report;

    c. Other technical information and data, as required;

    d. Records of stakeholder engagement;

    e. Draft Environmental Management Plan.

12. Other appendices

    a. Study methodology/work plan (2–4 pages);

    b. Consultants' itinerary (1–2 pages);

    c. List of stakeholders consulted or engaged (1–2 pages);

    d. List of documentation consulted (1–2 pages);

    e. *Curriculum vitae* of the consultants (1 page per person);

    f. ToR.

ANNEX 7

Monitoring and indicators

INTRODUCTION

The purpose of this Annex is to provide guidance on the development of a framework to monitor results and impacts of actions (projects, programmes) on the environment, climate change and biodiversity against objectives. This responds to the demand to strengthen the EU's capacity to monitor and evaluate development results.

Indicators are used to measure the achievement of an objective. Indicators are also helpful in defining in more concrete terms what the objective or target really means, in particular when – in the formulation of an action - allusion is made to less tangible and measurable concepts such as 'biodiversity', 'climate change adaptation' or 'sustainable development'.

In principle, monitoring of results and effects or impacts would be part of the overall framework for measurement of results and performance for a particular policy, programme or action, used by the country or region concerned. An increasing number of countries have result measurement frameworks in place and are now reporting regularly on the state of their environment and sustainability at the national level using indicators, including indicators of greenhouse gas emissions. Partner countries are also increasingly adopting green accounting systems.

Wherever possible, country or regional result measurement frameworks should be used and annexed to the relevant policy, programming or Action Documents. In some cases, Environmental assessments, Country environmental Profiles and Strategic Environmental Assessments can provide the indicators and baseline values required for formulation and decision-making on actions.

However, in many cases, available frameworks do not include specific criteria and indicators for environment, climate change or biodiversity-related effects. In such cases, identification of specific indicators for integration into the cooperation results framework should be promoted. The evolving EU Development and Cooperation Results Framework may provide a starting point for doing so. This framework measures results at various levels, at each of which indicators can be identified.

The following two levels are directly relevant to environmental and climate change mainstreaming:

1. **High-level development objectives.**

A first opportunity or entry point for integration or mainstreaming of environment and climate change exists in the *programming phase*, notably the programming documents (the Multi annual Indicative Programme - MIP). Following the analysis of challenges and opportunities, relevant actions are identified and indicators that capture key environmental and climate change concerns included.

At this (impact) level, the EU is typically one out of several donors and the various actors contribute to a common higher, long-term goal. Indicators at this level may be internationally agreed, for example in relation to the Sustainable Development Goals or the Millennium Development Goals, and draw on data from international statistical systems. DG DEVCO has also developed Sector Notes, which provide lists of indicators that can be used in each sector.

The SDG global targets (see annex 1 of the guidelines) and the related indicators' framework provide a series of possible indicators against which the signatory countries are expected to report (see section 2 below).

Examples of indicators used at this level are *Ratio of area protected to maintain biological diversity to surface area* (MDG indicator 26; data by UNEP-WCMC), or *CO_2 emissions per capita and consumption of ozone-depleting CFCs* (MDG indicator 28; data by UNEP-Ozone Secretariat).

2. Development outputs and outcomes

A second opportunity or entry point for integration or mainstreaming of environment and climate change exists in the *identification and formulation phase*. Action Documents should provide relevant analysis of environmental and climate change concerns and opportunities for relevant action or attention. As soon as environment, climate change or biodiversity are identified as 'significant' or 'main' objectives or important cross-cutting issues, relevant indicators should be included in the results framework. The same applies, mutatis mutandis, in case of budget support or blending operations; in such cases, a discussion on inclusion of relevant indicators in the performance assessment framework, and possibly in the disbursement criteria, should be part of the policy dialogue.

At this (output and outcomes) level, the EU is more directly accountable for results from the actions (projects and programmes) financed, and hence the contribution of these actions to sustainability, environment and climate change or biodiversity objectives needs to be demonstrated. Indicators at this level are directly linked to the expected results and indicators outlined in multi-annual programming documents and, at a lower level, in the Action Documents.

Examples of indicators used at this level are *Length of coast line protected by rehabilitated or planted mangrove stands EU support for Guyana Mangrove Restoration* or *Number of people given access to improved public low-carbon transport systems* (Inter-American Development Bank). Where relevant, the SDG global targets can provide an inspiration for the indicators.

In any case, the indicators selected should be:

- The most aligned to the expected outputs and outcomes;
- Clearly defined;
- With a robust data sources, specific data collection for environment and climate change related objectives may be required;
- Aligned with the EU Results Framework indicators that already exist on Environment, Climate Change and Natural Resources[(1)];
- Aligned with indicators being measured by partner country strategy;
- Aligned with indicators being measured by other donors.

During the implementation phase, if the inclusion of the relevant environment, climate change and biodiversity indicators has not been correctly addressed during formulation, it can be reported during monitoring and evaluation reviews and corrected to contribute to the results reporting and feed back into the programming cycle and the policy dialogue.

GLOBAL-LEVEL INDICATORS

The main policy document for defining the international cooperation objectives (goals), targets and indicators is the UN 2030 Agenda for Sustainable Development, which has come into effect on 1 January 2016 and will guide decision-making over the next 15 years. As it defines Sustainable Development as an overriding objective, many

(1) See Staff Working Document on the EU Results Framework http://ec.europa.eu/europeaid/staff-working-document-launching-eu-international-cooperation-and-development-results-framework_en

of the (17) goals and (169) associated targets contain elements that refer to the environment, to climate resilience, to protection of ecosystems or to sustainable consumption and production, among others.

Indicators are being developed to follow-up and review the targets using a set of global indicators. These will be complemented by indicators at the regional and national levels, which will be developed by member states in addition to the outcomes of work undertaken for the development of the baselines for those targets where national and global baseline data does not yet exist. This framework is expected to address all Sustainable Development Goals and targets and provide quality, accessible, timely and reliable disaggregated data to help with the measurement of progress. Meanwhile, the *'Indicators and a Monitoring Framework for the Sustainable Development Goals - Launching a data revolution for the SDGs' is the* result of a collaborative effort of multiple organisations and individuals over 18 months, and sets out an indicator framework. The updates to this framework can be consulted at http://unsdsn.org/indicators.

This framework is particularly important as it contains indicators that will be measured and reported on at country and international level. Besides ensuring that these indicators are relevant for sustainable development, EU cooperation can be confident the indicators are well aligned with the national and regional monitoring systems and that there is likely to be a substantial commitment to ensuring data availability and quality and regular reporting.

An example of an indicator proposed in this framework, which could be used for mainstreaming of climate change adaptation concerns during formulation of programmes and actions, is presented in the text box below. It includes a definition of the indicator as well as methodological considerations related to data collection and analysis.

Indicator 6 (cross-reference): Losses from natural disasters, by climate and non-climate-related events (in USD and in lives lost)

Rationale and definition: Cities around the world are at growing risk from natural hazards, including extreme climate-related events that are projected to increase in frequency and severity as a result of climate change. Population growth and urbanization will also affect vulnerability and exposure.

This indicator measures losses, both lives lost and economic costs, due to natural disasters, disaggregated by climate and non-climate-related events. Extreme climate-related natural disasters include the following:

- hydro-meteorological events (storms, floods, mass movements (wet)); and
- climatological events (extreme temperature, drought, wildfire).

Non-climate-related natural disasters consist primarily of geophysical events (earthquakes, volcano eruptions, tsunamis, dry mass movements). Other disasters that may be climate or non-climate related include biological events (epidemics, insect infestations, animal stampedes). If in doubt, we propose that the events be categorized as "non-climate related."

Effective adaptation and disaster risk reduction measures are needed to reduce the economic and social impact of natural disasters. Economic loss dimensions include damage at the replacement value of totally or partially destroyed physical assets; losses in the flows of the economy that arise from the temporary absence of the damaged assets; resultant impact on post-disaster macroeconomic performance, with special reference to economic growth/GDP, the balance of payments and fiscal situation of the Government, as per the Damage and Loss Assessment Methodology developed by UNECLAC.

Human losses would be measured by the number of persons deceased or missing as a direct result of the natural disaster, confirmed using official figures. The scale and duration of displacement would also be an important aspect of the human cost.

Disaggregation: This indicator can be disaggregated spatially (incl. urban/rural) and by the age and sex of those killed. Further opportunities for disaggregation are to be reviewed, including the socio-economic profile of those impacted.

Comments and limitations: Some biological disasters (epidemics, insect infestations, animal stampedes) can be climate-related. The indicator would need to specify clearly which of these events are considered climate-related.

Primary data source: Vital registration for the mortality (household surveys if not available), and administrative data (national accounts and statistics) to assess economic damage and loss.

Potential lead agency or agencies: Such an indicator could be reported by UNISDR working with FAO, WHO, the Centre for Research and Epidemiology of Disasters (CRED), and a consortium of reinsurance companies that track this data. The data is widely reported under the Hyogo Framework of Action.

SELECTION OF INDICATORS

Selection of indicators should take the following issues into consideration:

Logical chain - Results identified at level 1 (longer-term development impacts - as described above) should show a link to level 2 (outcomes and/or outputs) in order to be able to tell a coherent story of how the interventions contribute to sustainable progress at the higher level (*refer to EU Project and programme cycle management guidance for further details*). For example, should one of the selected indicators in a MIP be xxx, the related indicator at the level of an Action could be yyy (*the logic being that yyy contributes xxx*). Hence, during preparation of Action documents, it is useful to make reference to results and indicators defined in the MIPs and ensure consistency. Where causal links between the two levels are more difficult to capture and appropriate indicators are not available, providing a qualitative narrative alongside quantitative results reporting is an option to be considered.

Coverage – At the level of MIPs and of Actions in particular, it is important to keep the number of indicators manageable, so as to ensure the agency can effectively collect the data of adequate quality. Since most indicators will focus on the developmental effects, it is common practice to identify one or two indicators only that refer to the relevant Environment and Climate Change result.

Aggregation of results - Ideally, indicators to be included in the results framework can be aggregated across projects and programmes and, to the extent possible, make use of data produced by national statistics authorities. Where they are unavailable, data may be specifically collected by the projects' and programmes' monitoring mechanisms. In both cases, indicators have to be - as much as possible - of a quantitative nature, in order to allow for aggregation. An indicator should also be accompanied by methodological specifications which describe what should and should not be included during calculations for aggregation across projects, programmes, countries or regions. In some cases, use can be made of methodological work already carried out by other donors and by partner countries, who are often concerned with the same cross-cutting issues. The EU Results Framework already has indicators where results can be aggregated across projects and programmes. For Environment, Climate Change and Natural Resources these indicators are:

- Number of hectares of protected areas managed with EU support Number of Micro, Small and Medium Enterprises (MSMEs) applying Sustainable Consumption and Production practices with EU support;
- Number of countries/regions with climate change strategies (a) developed and/or (b) implemented with EU support.

Methodology notes have been created to ensure that there is consistent measurement of results. They can be found at http://capacity4dev.ec.europa.eu/eu-rfi

Baselines and targets – To allow for an assessment of results and effects, it is necessary to ensure that information about the starting point (*the 'baseline information' for a reference point in time*) is available. Based on such information, a target may be set, expressing the level of ambition.

Specific indicators and targets have also been defined to assess the degree of integration of environment and climate change into cooperation portfolios and the amounts of funds allocated to climate change, biodiversity and desertification. They are based on the so-called Rio markers.

The EU has committed to allocate 20 % of its budget 2014-2020 to ***climate-related action***. The increase in climate-relevant spending across the development cooperation portfolio is to be achieved over the 2014-2020 budgetary period, and Rio Markers – which are part of the OECD DAC reporting procedures - are used to track progress. Annex 8 explains the concept and use of the Rio-Markers for environment, climate change and biodiversity spending.

In order to achieve the 20 % objective, all opportunities to integrate climate change concerns in actions and support measures should be seized and, once identified, substantiated in (1) the analysis of the context, (2) in objectives and results and (3) in corresponding activities.

Likewise, the EU has committed, under the UN Convention on Biological Diversity, to contribute to the ***doubling of total biodiversity-related financial resource flows*** to developing countries by 2015, and at least to maintain this level until 2020, and to mobilize domestic financial resources from all sources to reduce the gap between identified needs and available resources at domestic level[(2)]. This requires mainstreaming of biodiversity throughout the EU budget. The European Commission is in the process of developing a baseline value and a methodology to track biodiversity related expenditure in the EU budget, including the international cooperation budget, similar to that developed for climate related expenditure, namely through use of the established OECD 'Rio markers' methodology (Annex 8), though the use of more precise methodologies in policy areas where these are available is not excluded.

Indicators are linked to the set targets and activities. At the level of actions, the decision whether or not to set targets for the indicators varies from action to action, according to the sector, donor and partner country context. While it is preferable to set targets for each of the indicators, this can be a challenging task. In principle, targets should be defined using a bottom-up approach and be driven by the frameworks and demand from partner countries.

(2) Decision adopted by the Conference of the Parties to the Convention on Biological Diversity XII/3. Resource Mobilisation, COP XII, Agenda item 14, Pyeongchang, Republic of Korea, 6-17 October 2014.

"RACER" INDICATORS

RACER stands for "Relevant, Acceptable, Credible, Easy, Robust":

Relevant

The indicator should have a strong correlation with the objective that we want to achieve; this means for instance that broad, composite indexes such as the Ecological Footprint[3] or the Environmental Sustainability Index[4] (ESI) should not be used to monitor the performance of specific sector policies or programmes; or, to give another example, when concerned with following the evolution of fish stocks, we should not monitor the fish catch only, since high fish catches may reflect a high fishing pressure as well as a recovery of fish stocks.

Acceptable

The indicator must be easily understood and should be accepted by all the stakeholders.

Credible

The indicators must be accessible to non-experts, unambiguous and easy to interpret.

Easy

It should be possible to collect the data with available resources, based on the principle of 'proportionate analysis'; when we want to conserve forest biodiversity, for instance, we cannot envisage a census of all species living in the area but we have to identify species or 'objects' (like elephant dung) that are easily detectable; relative census methods should usually be preferred, since they are more cost-effective and usually sufficient to track changes in time.

Robust

The indicators should be sensitive enough to monitor changes therefore, it is important to select the indicators according to the time-lag between the action and the expected change; when we monitor environmental impacts, we should be aware that the change should be noticed before it is already too late to adapt the intervention; for this reason it is important not to rely on (a) old data; (b) indicators that, having been developed for comparing countries (such as the ESI) or situations, are not suitable for monitoring changes; (c) variables influenced by long-term impacts; (d) variables that are deeply affected by uncontrolled short-term changes hiding the expected long-term changes. For sustainable development, a major challenge is to find indicators that point to current progress towards long-term or future improvements: these indicators include indicators of 'capital' or 'stock' (e.g. of natural resources) and, from an economic perspective, the genuine saving rates (adjusted net saving[5]).

SOURCES AND FURTHER READING

1. European Commission. Instructions for the Programming of the 11th European Development Fund (EDF) and the Development Cooperation Instrument (DCI) – 2014-2020. Brussels, May 2012

2. European Commission / Cion doc SWD(2013) 530 final: Paving the way for an EU Development and Cooperation Results Framework.

3. UN. Transforming Our World: The 2030 Agenda For Sustainable Development. (2015)

(3) See: Global Footprint Network (http://www.footprintnetwork.org/) and WWF (www.wwf.org)

(4) See: http://sedac.ciesin.columbia.edu/data/collection/esi/

(5) See: http://go.worldbank.org/EPMTVTZOM0

4. Indicators and a Monitoring Framework for the Sustainable Development Goals -Launching a data revolution for the SDGs. A report to the Secretary-General of the United Nations by the Leadership Council of the Sustainable Development Solutions Network, June 2015.

5. Environmental Mainstreaming and the Use of Indicators in European Commission Strategy Documents for Development Funding. By Jessica Marsden, Brussels, July 2006.

6. Medarova-Bergstrom, K., Kettunen, M., Illes, A., Baldock, D., Rayment, M., and Hart, K. (2014) Tracking Biodiversity Expenditure in the EU Budget, Part I – Guidance on definition and criteria for biodiversity expenditure in the EU budget, Final Report for the European Commission – DG ENV, Institute for European Environmental Policy, London/Brussels

7. European Commission. Towards Sustainable Development: Mainstreaming Environment and Climate Change into Development. Quick Guide to Environment and Climate Mainstreaming (Draft Version) Available from http://capacity4dev.ec.europa.eu/public-environment-climate/document/quick-guide-environment-and-climate-mainstreaming-draft-version.

8. International Institute for Environment and Development. A guide to environmental mainstreaming; Best practice for integrating environmental objectives into development institutions, policies and plans – revealed from a 12-country survey and global review. By Barry Dalal-Clayton and Steve Bass, January 2009.

9. International Institute for Environment and Development (IIED). Profiles of Tools and Tactics for Environmental Mainstreaming No. 10 INDICATORS. A product of the Environmental Mainstreaming Initiative (www.environmental-mainstreaming.org), supported by DFID and Irish Aid (2009).

ANNEX 8

Rio and aid to environment markers

WHAT ARE THE AID TO ENVIRONMENT AND RIO MARKERS?

The OECD Development Assistance Committee distinguishes five environmental markers that aim at tracking activities which target environmental and climate change objectives cutting across a range of sectors. More precisely, the markers were introduced to measure and to monitor financial support (in the form of Official Development assistance (ODA)) provided to developing countries targeting:

1. Environmental management/protection in general (1 'aid to environment' marker);
2. The more specific themes of the 'Rio conventions'[1] (4 'Rio markers'), i.e.
    a. Biodiversity;
    b. Desertification;
    c. Climate change mitigation (i.e. reduction in or capture of greenhouse gas emissions);
    d. Climate change adaptation (including climate risk mitigation and vulnerability reduction).

HOW ARE THESE MARKERS USED FOR ESTIMATING BIODIVERSITY- AND CLIMATE-RELEVANT FUNDING IN EU INTERNATIONAL COOPERATION AND DEVELOPMENT?

Aid to environment and Rio markers were originally intended to track the mainstreaming of environmental considerations into development cooperation rather than providing a quantification of finance. However, the European Commission, like many other donors, uses them as a basis for estimating and reporting on amounts of ODA dedicated to environment and Rio convention themes.

In line with the OECD-DAC's methodology, there are 3 possible scores for the aid to environment and Rio markers. To enable the generation of funding estimates from the statistics extracted from the CRIS database, EuropeAid uses the following approach (applied to interventions embodied in action documents i.e. the 'decision 1' level):

Score	Status of the considered theme	% of budget of the action considered relevant to the theme
0	Not targeted	0%
1	Significant objective	40%
2	Principal (or *main*) objective	100%

This assignment of concrete figures notably provides a basis for estimating how EU development and international cooperation interventions contribute to two important **financial commitments**:

[1] Rio Conventions: Convention on Biological Diversity (CBD); United Nations Convention to Combat Desertification (UNCCD); and United Nations Framework Convention on Climate Change (UNFCCC).

- The EU commitment to allocate at least 20% of the EU budget under the 2014-2020 Multiannual Financial Framework to 'climate-relevant' expenditures (covering both climate change adaptation and mitigation); the same commitment has been integrated in the EDF.
- The commitment made by the EU and others at the 2012 Conference of the Parties of the Convention for Biological Diversity in Hyderabad to contribute to the objective of 'doubling total biodiversity-related international financial resource flows to developing countries by 2015 [compared to a 2006-2010 average] and at least maintaining this level until 2020'.

Note: For estimating an intervention's potential contribution to the '20% target', we consider the amounts associated with climate change mitigation as well as adaptation and retain whichever is highest (rather than adding them up). This removes the risk of double-counting of funding allocations that contribute simultaneously to adaptation and mitigation.

GENERALLY SPEAKING, WHICH CRITERIA ARE REQUIRED TO JUSTIFY A MARKER?

Ideally, the following 3 elements should be combined in the action document to justify a marker:

1. Context - The theme is discussed as a relevant issue for the intervention in the background information (typically the sector context section of the action document);

2. Objectives - An explicit intent to address the theme is expressed, preferably, at the level of the overall objective or specific objective(s) or expected results;

3. Activities - The intervention includes activities that clearly address identified issues in relation to the considered theme.

The existence of indicators relevant to environment or a Rio convention theme in the logical framework further strengthens the case for considering it as a 'significant' or 'main' objective.

Note that:

- The possible contribution of a project to addressing a Rio convention theme in the form of a hypothetical or not-particularly-intended 'side benefit' is not enough to qualify it as a significant objective;
- Vague references to, for example, 'sustainable agriculture' (*sustainable in which regards?*), 'increased resilience' (*to what kind of risks/shocks?*) or 'sustainable energy' are not sufficient to consider that biodiversity protection, combating desertification or climate change adaptation or mitigation is an objective. Sustainability, resilience and other similar concepts should be defined and clearly shown to encompass a specific Rio convention theme that would justify a Rio marker;
- There are cases in which a Rio convention theme is mainstreamed as a cross-cutting issue but not prominent enough to be considered a significant objective – this is perfectly legitimate but in such a case, the intervention should not automatically be considered as contributing to the biodiversity or climate finance target and the Rio marking needs to be defined on a case-by-case basis.

ON WHICH BASIS IS A CHOICE MADE BETWEEN 'SIGNIFICANT' AND 'PRINCIPAL/MAIN' OBJECTIVE?

The OECD-DAC statistical reporting directives specify that an activity can claim the relevant Rio theme to be a 'main objective' when the objective is explicitly stated as fundamental in the design of, or the motivation for the activity. In case a 'significant objective' is claimed, this objective must be explicitly stated but it does not have to be the fundamental driver or motivation for undertaking and designing the activity.

The directive uses the question 'Would this activity have been designed that way or undertaken without this objective?' to establish whether an objective is 'main' or just 'significant':

- If the answer is 'no' (the objective is so central to the action that without it, it would not have been undertaken or designed in that way), the concerned theme (aid to environment or one of the Rio convention theme) is the 'main' objective;
- If the answer is 'yes' (the concerned theme is an important objective but not one of the main reasons for undertaking the action), it is a 'significant' objective.

In any case, it is important that, in the description of activities, the relationship between the activity and the claimed objective is clear and made explicit, especially when a 'main objective' is claimed.

Activities that facilitate mainstreaming can also qualify for a "main score", for example, an activity that is primarily designed to build capacity and develop tools to integrate biodiversity, climate change or land degradation into national and sub-national policies, planning and investment frameworks.

Ultimately, the degree of prominence of environmental or Rio-specific objectives in an intervention determines the choice between 'main' and 'significant' objective. In case of hesitation, the following 'rule of thumb' can be applied – but it should be used carefully, in combination with common sense[(2)]:

- 'Main objective' is selected if aid to environment or the considered Rio convention theme is clearly the main driver/essential goal of the intervention; or it is a major (if not the sole) driver and the majority (i.e. *more than half*) of its components (as defined/organised around specific objectives and/or expected results), expected to account for at least two-third of the budget, make a significant contribution to it. The OECD guidelines state that "the implementation of an activity foreseen under a national action plan or strategy for the implementation of any of the Rio Conventions (e.g. National Biodiversity Strategy and Action Plan under the CDB; NAPAs, NAPs, NAMAs or INDCs under the UNFCCC; and National Action Plans under the UNCCD) automatically qualifies as 'main objective', as the Conventions provide the motivation for the design of the activity".
- 'Significant objective' is selected when:
    - either aid to environment or the considered Rio convention theme is an important objective but clearly not the main or an essential driver of the intervention;
    - or it is one among several equally important objectives, and *only half or less* of the intervention's components (as defined/organised around specific objectives and/or expected results), or components accounting for less than two-third of the budget, make a significant contribution to it.

FOCUS ON THE 'AID TO ENVIRONMENT' MARKER

According to the OECD-DAC's definition, 'an activity should be classified as environment-related if it is intended to produce an improvement (...) in the physical and/or biological environment of the recipient country, area or target

(2) In other words, we want to avoid that the application of a 'quantitative' rule results in a score that does not match the natural conclusion based on the answer to the question 'Is the (aid to environment- or Rio-related) objective fundamental in the design and impact of the activity?'. A conservative approach should notably be used with regard to project components that only partly contribute to the objective.

group concerned; or it includes specific action to integrate environmental concerns with a range of development objectives through institution building and/or capacity development'. This definition is completed by 3 criteria for eligibility:

- The objective is *explicitly* promoted in activity documentation; and
- The activity contains specific measures to protect or enhance the physical and/or biological environment it affects, or to remedy existing environmental damage; or
- The activity contains specific measures to develop or strengthen environmental policies, legislation and administration or other organisations responsible for environmental protection.'

Based on the second eligibility criterion, avoiding negative impact is not sufficient for justifying a marker – for example, undertaking environmental assessment and implementing environmental mitigation measures does not as such qualify the action for a marker; it takes positive action in favour of the environment to do so.

Based on the third eligibility criterion, projects with an institutional and capacity building focus that support improvements in the overall capacity to manage the environment can be marked even if they do not directly contribute to improvements in the field.

The 'aid to environment' marker should notably be selected in the following cases:

- Although the definition does not make a direct reference to 'improved natural resource management', a focus on improved management of natural resources such as water, notably in situations of scarcity / threats to resource sustainability, generally justifies a marker since this is likely to ultimately contribute to improvements in the physical and biological environment;
- Projects that contribute to the implementation of the FLEGT[3] action plan qualify for the aid to environment marker as a 'main objective' even if the specific action's objectives (as formulated in the action document) do not explicitly refer to environmental protection. This is because forest protection and sustainable management is the ultimate driver of the FLEGT initiative.

(*The 'aid to environment' marker may not be lower than the highest-scoring Rio marker, as activities targeting the three Rio conventions are considered to always fall under the definition of the 'aid to environment' policy marker*).

FOCUS ON THE BIODIVERSITY MARKER

According to the OECD-DAC's definition, 'an activity should be classified as biodiversity-related if it *promotes* at least one of the three objectives of the Convention (on Biological Diversity): the conservation of biodiversity, sustainable use of its components (ecosystems, species or genetic resources), or fair and equitable sharing of the benefits of the utilisation of genetic resources' by *contributing to* 3 types of activities that constitute eligibility criteria:

- 'protection or enhancement of ecosystems, species or genetic resources through in-situ or ex-situ conservation, or remediation of existing environmental damage; or
- integration of biodiversity and ecosystem services concerns within recipient countries' development objectives and economic decision making (...); or
- (*support for*) developing countries' efforts to meet their obligations under the Convention'.

Based on the first eligibility criterion, projects that contribute to the protection of specific ecosystems or types of ecosystems (e.g. forests, savannahs, mangroves, wetlands, mountain ecosystems, ...) qualify for a marker even if the words 'biodiversity' or 'biological diversity' are not explicitly used in the description of the action. On the

[3] Forest law enforcement, governance and trade.

other hand, projects that are expected to contribute to environmental protection in general but do not target any specific ecosystem, species or the protection or sustainable use of biodiversity do not qualify.

Based on the second eligibility criterion, projects with an institutional and capacity building focus that support improvements in the overall capacity to protect or sustainably use biodiversity and ecosystems are eligible even if they do not directly contribute to improvements in the field.

A list of activities qualifying for a biodiversity marker can be found below.

FOCUS ON THE DESERTIFICATION MARKER

According to the OECD-DAC's definition, 'an activity should be classified as desertification-related if it *aims at* combating desertification or mitigating the effects of drought in arid, semi-arid and dry sub-humid areas through prevention and/or reduction of land degradation, rehabilitation of partly degraded land, or reclamation of desertified land' by *contributing to* 3 types of activities that constitute eligibility criteria:

- 'protection or enhancement of dryland ecosystems or remediation of existing environmental damage; or
- integration of desertification concerns with recipient countries' development objectives (...); or
- (*support for*) developing countries' efforts to meet their obligations under the Convention (*on Combating Desertification*)'.

An intent to address desertification and/or land degradation, combined with a focus on drylands or at least drought-prone areas[4], is required for this Rio marker.

Based on the second eligibility criterion, projects with an institutional and capacity building focus that support improvements in the overall capacity to combat desertification or manage the effects of drought are eligible even if they do not directly contribute to improvements in the field.

A list of activities qualifying for a desertification marker can be found below.

FOCUS ON THE CLIMATE CHANGE MITIGATION MARKER

According to the OECD-DAC's definition, 'an activity should be classified as climate change mitigation-related if it *contributes to* the objective of stabilisation of greenhouse gas (GHG) concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system by promoting efforts to reduce or limit GHG emissions or to enhance GHG sequestration', by *contributing to* one or more of the four types of activities that constitute eligibility criteria:

- 'the mitigation of climate change by limiting anthropogenic emissions of GHGs, including gases regulated by the Montreal Protocol); or
- the protection and/or enhancement of GHG sinks and reservoirs (i.e. forest, soils, etc.); or
- the integration of climate change concerns with the recipient countries' development objectives institution building, capacity development, strengthening the regulatory and policy framework, or research; or
- the development of countries' efforts to meet their obligations under the (*UN Framework*) Convention (*on Climate Change*)'.

[4] The focus of the convention as initially adopted is desertification, but in recent years its scope has *de facto* been extended to encompass the wider issue of land degradation, which concerns more countries and territories including some that do not technically qualify as 'drylands'. Since this change has not yet been transcribed in the legal definition of the scope of the convention nor in the OECD-DAC definition of the marker, a focus on drylands or at least drought-prone areas should remain a criterion in the attribution of the desertification marker.

In practice, to facilitate transparency, it is important that, in activity descriptions the relation between the activity and the objective is clearly communicated and made explicit. For energy sector interventions with a strong focus on energy efficiency and/or renewable energies, climate change mitigation is systematically considered as targeted (main objective) as this is part of the overarching goals of EU support in these areas – even if for a specific intervention, other objectives (such as improved access to energy or energy independence) are more prominent from the partner's perspective. However, to meet the 'explicit intent' criterion, it is recommended to explicitly mention the contribution to low-emission development somewhere in the action document (e.g. in the section on 'context' or 'cross-cutting issues', if not at the level of objectives or expected results).

(*Climate risk mitigation (mitigation of the risks related to climate) should not be confused with climate change mitigation (defined above): climate risk mitigation is actually one form of climate change adaptation*).

A list of activities qualifying for a climate change mitigation marker can be found below.

FOCUS ON THE CLIMATE CHANGE ADAPTATION MARKER

According to the OECD-DAC definition, 'an activity should be classified as adaptation-related if it *intends to* reduce the vulnerability of *human* or *natural* systems to the current and expected impacts of climate change, including climate variability, by maintaining or increasing resilience, through increased ability to adapt to, or absorb, climate change stresses, shocks and variability and/or by helping reduce exposure to them'. An action qualifies for the adaptation marker if 'the climate change adaptation objective is *explicitly indicated* in the activity documentation' and 'the activity contains specific measures targeting the definition (of adaptation)'.

For this marker, explicit intent to contribute to climate change adaptation is particularly important and always required; this helps ensure that any development activity that one way or another may be taken to contribute to 'adaptive capacity' or 'increased resilience' is not automatically labelled as climate change adaptation. A '3-steps approach' is recommended as best practice, in particular to justify a 'main objective' score:

- Setting out the context of risks, vulnerabilities and impacts related to climate variability and climate change in which the intervention takes place;
- Stating the intent to address climate risks, vulnerabilities and impacts in the project documentation;
- Demonstrating a clear and direct link between the identified risks, vulnerabilities and impacts (as defined in the context description) and the specific project activities.

Note that the climate-proofing of new infrastructure may constitute a borderline case: up to which point it is a 'normal' good practice (not qualifying for the adaptation marker) or a measure to address climate vulnerability as part of an adaptation objective is not always clear. According to the OECD guidelines "climate-proofing transport infrastructure as a requirement in transport policies and strategies can be scored against the adaptation marker if properly justified". For example, the inclusion of climate change considerations in transport planning (e.g. climate proofing of road construction to account for climate change impacts and variability) can qualify for an adaptation score of 1 or 2. The retrofitting of existing infrastructure to make it more climate-resilient in principle reflects an explicit intent to address climate vulnerability, justifying the qualification of adaptation as a significant or possibly a main objective[(5)].

A list of activities qualifying for a climate change adaptation marker can be found below.

FOR MORE INFORMATION ON THE AID TO ENVIRONMENT AND RIO MARKERS

OECD developed guidelines in the 2016 edition of the Converged Statistical Reporting Directives for the Creditor Reporting System (CRS) and the Annual DAC Questionnaire: Annex 17 'Policy markers' and Annex 18 'Rio markers',

(5) Assuming of course the retrofitting measures/investments account for a 'large enough' share of the intervention.

which also include examples of activities qualifying for climate change markers. More information can be found on the OECD website: http://www.oecd.org/dac/stats/rioconventions.htm

Examples of activities qualifying for a biodiversity marker

Examples of activities qualifying for a biodiversity marker:

- Support for the management of protected areas and surrounding 'buffer zones';
- Protection of endangered or vulnerable species and their habitats;
- Protection and sustainable management of biodiversity-rich ecosystems such as forests, savannahs, mangroves, wetlands, mountain ecosystems, etc.;
- Water resource protection and rehabilitation, watershed management aimed at protecting ecosystem services and the biodiversity that depends on them;
- Combating desertification and land degradation with a view to protecting or enhancing biodiversity;
- Sustainable farming practices aimed at protecting biodiversity in agricultural ecosystems;
- Promotion of agro-biodiversity;
- Sustainable trade in valuable plant or animal species and derived products;
- Promotion of sustainable marine, coastal and inland fishing;
- Development of ecotourism as a way of promoting the protection and sustainable management of biodiversity and biodiversity-rich ecosystems;
- Preparation of national biodiversity plans, strategies and programmes;
- Research, capacity building, training and awareness raising in relation to biodiversity.

Examples of activities qualifying for a desertification marker

Examples of activities qualifying for a desertification marker:

- Rehabilitation of land, vegetation cover, forests and/or water resources with a view to halting or reversing desertification or land degradation;
- Development and implementation of methods for conserving water, vegetation and soil in dry areas;
- Sustainable irrigation for crops and livestock with a view to reducing pressure on land threatened by desertification;
- Preparation of strategies and action programmes to combat desertification and mitigate the effects of drought;
- Development of drought early warning systems, strengthening of drought preparedness and management;
- Research, capacity building, training and awareness raising in relation to combating desertification and land degradation in dry or drought-prone areas.

Examples of activities qualifying for a climate change mitigation marker

Examples of activities qualifying for a climate change mitigation marker:

- Development of renewable energy sources;
- Development or rehabilitation of energy infrastructure to promote fuel switching (e.g. from coal or oil to gas, which although being a fossil fuel emits less carbon per unit of energy generated);
- Enforcement of fuel efficiency standards;
- Support for improvements in energy efficiency (in all sectors including power and heat generation and distribution, transport, construction, agriculture, industry, mining, business, domestic uses including cooking and heating, public sector infrastructure, etc.);
- Implementation of waste-to-energy systems involving biogas production or methane recovery and the use of the resulting gas as a source of energy;
- Development of public transport, non-motorised transport, traffic management systems, multimodal transport systems including railways and waterways, aimed at or contributing to reducing greenhouse gas emissions from the transport sector;
- Adoption of farming practices that reduce greenhouse gas emissions (e.g. through more rational use of fertilisers, manure management with biodigestors) or increase carbon sequestration in agricultural systems (e.g. agroforestry, agroecological techniques, sustainable rangeland management);
- Sustainable intensification of agriculture with a view to reducing encroachment on forests and other natural carbon sinks (e.g. peatlands, wetlands);
- Sustainable forest management, afforestation and reforestation, watershed management, protection and rehabilitation of mangroves and peatlands, rehabilitation of degraded land and areas affected by drought and desertification, aimed at or contributing to protecting or enhancing carbon sequestration in biomass and soils;
- Promotion of energy efficiency and other environmental standards expected to reduce greenhouse gas emissions in private sector development and trade-related assistance programmes;
- Urban planning, adoption of zoning and building regulations aimed at reducing the use of energy and the carbon intensity of transport systems in cities and other human settlements;
- Territorial planning, securing of land and land use rights aimed at avoiding land use changes likely to result in increased greenhouse gas emissions;
- Development of low-carbon or low-emission development strategies and action plans;
- Preparation of national inventories of greenhouse gases;
- Support for the definition and implementation of intended nationally determined contributions (INDCs);
- Research, capacity building, training and awareness raising in relation to climate change mitigation and techniques that support it.

Examples of activities qualifying for a climate change adaptation marker

Examples of activities qualifying for an adaptation marker:

- Sustainable natural resource management with a view to increasing the resilience of ecosystems and ecosystem services in the face of climate change;
- Ecosystem-based adaptation (e.g. mangrove rehabilitation aimed at reducing coastal flooding and the damage caused by storms and sea surges, wetland restoration and management to enhance the continuity of water supply in drought-prone areas);
- Watershed management involving forest protection or reforestation with a view to reducing the incidence and severity of floods resulting from heavy rainfall episodes;
- Promotion of water efficiency, conservation and harvesting in areas subject to increased water stress as a result of climate change;
- Development or enhancement of climate-resilient water supply infrastructure;
- Promotion of climate-resilient agricultural practices (e.g. use of heat-, drought- or salt-resistant crop varieties, adaptation of the agricultural calendar, development of supplementary irrigation in rainfed farming systems, adoption of farming techniques supporting water and soil conservation, etc.);
- Crop and livelihood diversification with a view to enhancing food and nutrition security in rural areas affected by droughts, floods and other effects of climate change;
- Promotion of sustainable fishing practices supporting the monitoring of adaptation to changes in the composition, range and size of fish stocks in the context of climate change;
- Strengthening of food safety regulations, development of refrigeration and other food conservation systems in areas affected by higher temperatures;
- Development or enhancement of systems for monitoring climate-related diseases (e.g. malaria) and drinking water quality in areas affected by higher temperatures, droughts, floods or rising sea level;
- Strengthening of health services with a view to reducing morbidity and mortality in the face of a changing climate;
- Retrofitting of existing infrastructure and planning of new infrastructure in support of climate change adaptation (e.g. all-weather roads, climate-resilient energy, communication and industrial infrastructure, flood protection infrastructure);
- Territorial planning, adoption of zoning and building regulations aimed at reducing exposure or sensitivity to climate-related disasters such as floods, drought-induced wildfires, storms, sea surges, etc.;
- Development of insurance mechanisms to compensate farmers and other economic actors affected by climate variability and climate change impacts;
- Strengthening of social protection systems with a view to reducing vulnerability to climate-related shocks;
- Meteorological and hydrological observation and forecasting, development of early warning systems and strengthening of preparedness and response mechanisms for climate-related disasters such as floods, droughts, storms, etc.;
- Climate change impact monitoring, climate vulnerability assessment, economic assessment of climate change impacts and adaptation options as a foundation for identifying and prioritising climate change adaptation measures;
- Development of climate change adaptation strategies and action plans (at the national or local level, in specific industries, for specific types of businesses such as small and medium-sized enterprises, etc.);
- Research, capacity building, training and awareness raising in relation to climate change adaptation.

ANNEX 9

Terms of reference for a Climate Risk Assessment

These model ToR need to be adapted according to the specific project and its context. To respond to a variety of circumstances, this model includes a range of suggestions and options. **Actual ToRs derived from this model are likely to be shorter (max. 10 pages).**

Explanations or sections to be completed according to individual circumstances are given in *italics*. Complementary and explanatory information is placed in text boxes).

When a CRA is required, it is important to define how the CRA and other studies will be incorporated in the formulation phase. There are four issues to consider:

- A clear **definition of the scope** of studies to be carried out at formulation is necessary to ensure complementarity and avoid overlap between the CRA and other studies (e.g. 'general' formulation study; financial and economic analysis; other climate, environmental or vulnerability studies). Close coordination is therefore required in the preparation of the different ToR for these studies. Where possible the different studies should be integrated in a single process;

- In order **to ensure consistency** during the formulation phase, the same alternatives should be considered when engaging in different assessments (e.g. technical, environmental and economic);

- It should be ensured that the studies are based on sufficient technical information and assess **realistic options**, and that they can have an influence on the selection of project alternatives and on final project design through **appropriate measures**;

- Ideally **the CRA should precede the economic analysis**, which has to incorporate the costs of impact reduction and adaptation measures and possibly also value some residual environmental externalities and costs associated with potential climate change risks.

ToR for the Climate Risk Assessment of (*name of the project*)

1. BACKGROUND

The (*name of the institution in the partner country) and the* European Commission require a Climate Risk Assessment (CRA) to be carried out for the formulation of (*state the name/title of the proposed project*). The CRA must examine:

- Climate-related risks to the successful realisation of the project's intended outputs and outcomes;
- Risks that the project will increase the vulnerability of human populations and/or natural systems to climate change and variability;
- Risks that the project will contribute to maladaptation;
- Measures to reduce climate-related risks and to adapt to climate change, to be described in a Climate Risk Management Plan (CRMP);
- Opportunities for promoting wider resilience and adaptation to climate change, and encouraging low-carbon development;
- *(Other points to be examined e.g. the need for improved environmental and climate related information).*

The project is described as follows: (*insert a short description, referring to the current logical framework, (to be attached); provide key information, such as objective, rationale for the project, location, duration, key beneficiaries, technologies and practices to be employed, life-cycle of the project, etc.*)

(*If relevant*) The following alternatives have been identified: (*provide a description of any alternatives already identified*).

Existing information on the project, the environment and climate (including current climate conditions and trends, as well as future climate projections) can be found in (*mention any available studies and information including the results of the identification phase, and indicate where/how these documents may be obtained/consulted).* In addition to this CRA, the following studies are also envisaged (*mention any other studies planned in the formulation phase, including feasibility, economic and financial analyses or social and/or environmental impact assessments*).

(*Mention other pertinent background information, such as potential or known projects envisaged in the same area, key stakeholders, legal requirements and existing SEA in the sector).*

2. OBJECTIVE

The CRA will provide decision makers in the (*partner country and European Commission,*) with sufficient information to justify, on the grounds of project sustainability and viability under climate change, the acceptance, modification or rejection of the project for financing and implementation. It will also provide the basis for guiding subsequent actions, which will ensure that the project is carried out taking into account any climate-related risks and adaptation needs and options.

3. PROCESS

The CRA is undertaken in two stages: firstly a **scoping study** which defines the scope of the CRA, and secondly the **CRA study** itself.

The **CRA scoping study** will summarise the project, identify key stakeholders, and describe the hazards, vulnerabilities and resulting risks to be assessed in the CRA study, based on information on current and future hazards and risks already available in key sources of climate information such as IPCC reports, NAPAs/NAPs, National Communications to the UNFCCC and other sources (see Appendix I, Annex 3). The scoping study will also specify what approaches, tools and methods are to be employed to assess key aspects of risk and vulnerability and key knowledge gaps. The types of risk reduction or adaptation measures to be assessed may be broadly identified during the scoping study, and monitoring and evaluation (M&E) mechanisms proposed. The scoping study may further define the limitations of the CRA based on a further investigation of data availability and the availability of other key resources (e.g. access to climate data and projections or impact models).

The **CRA study** will analyse climate risks to the project resulting from current climate conditions and trends, as well as future, long-term climate projections. It should address:

- climate change-related risks to project outputs, including risks to the successful implementation of a project or its components. For example, the implementation of a project may be disrupted by the occurrence of climate extremes that are more frequent or severe than anticipated, or the integrity of infrastructure may be at risk from increased recurrence or magnitude of extreme weather events expected under climate change;
- climate change-related risks to project outcomes. An example is increased poverty due to climate-related crop losses or higher food prices, offsetting other poverty reduction measures, or increased water stress due to lower rainfall and higher temperatures, that offset gains due to improved water use efficiency;
- the adaptation deficit to current climate variability and change, which lead communities to be vulnerable to climate risk.

The **CRA scoping study** will provide:

- An overview of the project, including the timescales associated with project implementation and intended outcomes. A description of any project alternatives;
- An overview of the relevant policy, legislative and institutional frameworks (if they exist);
- A description of the geographical, environmental and climatic contexts within which the project will be implemented, including a summary of readily available information on potential future climate trends and climate change as far as this is relevant to the timescales associated with the project;
- A description of the key stakeholders likely to be affected by the project, with specific reference to the specific climate-related risks;
- A stakeholder engagement plan (if found relevant);
- A summary of the key current and expected future climate hazards relevant in the context of the project, and of the associated potential climate-related risks/implications for the project, that should be addressed in the CRA, insofar as these can be identified on the basis of the best available information;
- A summary of key issues relating to vulnerability and adaptive capacity as relevant in the project context as far as possible on the basis of existing information;
- A description of key knowledge/information gaps relating to current and future climate hazards, recent and potential future climate change impacts;
- Recommendations on the methodology for identification and assessment of specific climate-related risks, constraints and opportunities (including treatment of uncertainty) and the basis for the choice of methodologies to be used in the CRA to assess risks and vulnerabilities;
- Recommendations regarding any risk reduction or adaptation measures that might be identified and investigated further in the CRA, based on the work of the scoping study;
- An indication of the time frames, costs and resources needed to carry out the CRA study.

The **CRA study** will provide:

- An identification and assessment of the potential climate-related risks to project implementation and the successful realisation of the project's intended benefits;
- An identification and assessment of the potential risks that the project implementation will increase the vulnerability of human populations and natural systems to climate variability and change, and to contribute to maladaptation;
- Recommendations, including a Climate Risk Management Plan (CRMP) for the implementation of proposed measures to reduce climate-related risks and adapt to climate change. The CRMP may identify and prioritise a number of alternative risk reduction/adaptation measures, detailing the pros and cons (e.g. costs, impacts) of each. The CRMP should also include a framework for monitoring and evaluating the performance/success of the proposed measures;
- Recommendations on how to adapt the project design (*if required*) to optimise the exploitation of opportunities arising from climate change (*if any*), to promote wider climate resilience, adaptation and adaptive capacity (e.g. outside the immediate context of necessary measures to reduce risks associated with the project), and to promote low-carbon development.

4.1. CRA SCOPING STUDY

4.1.1 Overview of the project (and its alternatives)

A description of the project and of its components.

(When feasible, describe any major project alternatives, with a focus on alternatives that are significantly different from the perspective of exposure and vulnerability to climate-related risks. If the project is subject to an environmental impact assessment (EIA), consistency must be sought between the alternatives studied under both instruments).

4.1.2 Legislative, institutional and planning framework

A description must be made of any institutional and legislative frameworks relevant to the project and its CRA[1], including an indication of the key applicable legislation, planning processes (e.g. land use planning), standards and norms that will have to be addressed in the CRA study. Reference should be made to the relevant documentation such as the Country Environmental Profile, National Adaptation Plans of Action/National Adaptation Plan (NAPAs/NAPs) or other national adaptation plans/strategies, National Communications to the UNFCCC, any relevant Strategic Environmental Assessments.

4.1.3 Description of the key stakeholders and their concerns

In a CRA, the engagement of vulnerable groups, most likely to be exposed to the climate-related risks to be investigated, and those that are particularly vulnerable to climate change, is especially important (e.g. people who depend on climate-sensitive livelihoods such as pastoralists and smallholders, or those living in areas of high exposure). An effort should be made to involve a wide range of possible relevant interest groups (including local authorities, local and regional NGOs, women, and indigenous peoples) in defining issues to be addressed in the CRA.

[1] Whereas legislation relating to environmental impact assessment is generally well developed, legislation relating to CRA is likely to be rare and/or poorly developed. However, in certain contexts there may be some relevant legislation, for example relating to set-back from the shoreline for new construction in certain small island states that have already begun to address risks associated with storm surges, erosion and sea-level rise, in the context of adaptation to climate change.

The engagement of stakeholders in the CRA process is a key success factor. Project stakeholders (key groups and institutions intended as beneficiaries of the project or project partners, and any groups potentially affected by any adverse - e.g. environmental or displacement - impacts of the project) will be identified.

Particular attention should be paid to typically less represented groups such as women, indigenous peoples and minorities.

Stakeholders will be engaged by the consultant in order to identify their concerns with respect to existing and anticipated climate-related risks and vulnerabilities, their perceptions of how these may be affected by the project, and their views about how these risks and vulnerabilities might affect the project results and impacts. This will contribute to the identification of key potential risks, project-climate interactions, and potential risk reduction or adaptation measures that will need to be addressed in the CRA study. The stakeholder engagement strategy to be employed should be explained in the proposal and, if necessary, will be revised by *the EC and the partner government* before being implemented.

4.1.4 Description of the key climate-related risks and project–climate interactions that should be addressed in the CRA

(*Particular attention should be paid to the climate-related risks to, or associated with, the project that are likely to be the most significant, considering the sensitivity of the project and any related / supported activities to climate hazards likely to be encountered over the relevant timescale, the vulnerability of key stakeholders to climate change and variability, the project's potential impacts on vulnerability, and the expectations of the stakeholders*).

Based on contextual information on current and potential future climate hazards, the consultants should identify climate-related risks to be specially considered under the following categories:

- Risks to the successful or timely implementation of the project;
- Risks to the successful realisation of the intended project benefits over timescales that may be significantly longer than the lifetime of the project itself;
- Risks that the project may increase the vulnerability of certain groups;
- Risks that the project may increase the vulnerability of natural systems or resources;
- Risks that the project will contribute to maladaptation, increasing dependency on resources threatened by climate change.

4.1.5 Summary of existing baseline information and scope of any expansion of baseline information

The scoping study should summarise the information currently available, as relevant to the project, relating to (i) current climatic and environmental conditions, (ii) potential future climatic conditions, (iii) relevant current and future climate hazards, impacts, vulnerabilities and related risks. Key information gaps in these areas should be identified, and the extent to which these information gaps may be filled by further study during the CRA study should be specified, as should the nature of any additional information on these baseline issues that will be generated during the CRA study.

4.1.6 Recommendations on the assessment methodologies to be used in the CRA

An indication of the most appropriate tools and methods for carrying out the CRA study should be provided, for example model-based impacts or sensitivity studies, participatory vulnerability assessments, scenario planning, indicator-based mapping exercises, or other methods such as expert review. The limitations of such tools and methods should be specified, for example with regard to the spatial resolution of climate model output, the degree of confidence in downscaling studies, the extent to which key indicators capture the most important dimensions of vulnerability, and so on. The ways in which uncertainty will be addressed should be specified, for example

by using multiple models or simulations, a range of different scenarios, or a range of different assumptions about the future evolution of vulnerability.

4.1.7 Indication of the timeframe, costs and resources needed to carry out the CRA

The temporal and spatial extent of the CRA study should be specified, including the identification of any geographical areas, communities/populations, institutions, natural systems, sectors or systems/infrastructure to be studied.

(*The way in which risks are to be evaluated will be crucial in determining the timescale of the CRA; a CRA based solely on expert review is likely to be relatively short (for example 20-30 days), whereas a CRA involving downscaling and/or the development of computer models to investigate impacts may take many months and perhaps up to 2 or 3 years for large projects. Where modelling is not employed, other practical considerations must be taken into account, such as allowing time for the collection of data (e.g. in the form of household surveys / interviews to assess elements of vulnerability)*).

A description and estimation of the resources required (in terms of budget, person-days, technical facilities/resources) must be provided, including a break-down of costs. If at this stage it is considered necessary to integrate other experts with specific skills (e.g. social scientists for vulnerability assessments), this should be proposed in the scoping report for consideration by the EC.

(*The EC could give an indication of the maximum budget allocated to the CRA study.*)

4.2. CRA STUDY

The scope of the CRA study will be agreed with the Commission in coordination with the partner government and other international partners, on the basis of the results of the scoping study.

4.2.1 Climate risk baseline study

1. Existing climate risk context

This should describe the following existing conditions, *as far as these are relevant in the project context*:

- The geographical and environmental context of the project (e.g. location), and the current climatic conditions pertaining in the area(s) associated with the project. This should include a description of the main climate hazards and their impacts currently experienced in these areas (e.g. heavy rainfall and flooding, drought and food insecurity or interruption to hydro-power, storms or storm surges and mortality/displacement/destruction of property and infrastructure);
- The existing vulnerability context in which hazards are translated into impacts, i.e. which populations, areas, groups, systems or sectors are most affected by climate hazards, and what are the drivers (e.g. social, economic, geographic, policy, etc.) of their vulnerability?;
- The level(s) of adaptive capacity in the relevant groups, populations, systems, sectors, institutions. What options are there for effective responses to manage and reduce existing risks, and what are the constraints that prevent action to reduce risk being taken?

2. Expected future climate risk context

This should seek to examine how conditions might evolve in the future, with respect to:

- The potential future evolution of climate hazards (both sudden-onset and slow-onset). The characterisation of future climate hazards may be based on data from global and regional climate models, down-

scaling studies, and/or impact models (e.g. of water resources, crop yields, coastal systems, ecosystems, etc.) Alternatively this characterisation may employ expert judgment, past analogues (e.g. of extreme events/conditions), statistical techniques (e.g. to examine the impacts of changing means and variability of the occurrence of extremes using historical data as a baseline);

- The potential future evolution of vulnerability, based on plausible assumptions about how the drivers of vulnerability may change in conjunction with changing economic, demographic, environmental and other conditions;
- The potential future evolution of adaptive capacity, based on changes in access to resources and opportunities, and in constraints on adaptation actions.

4.2.2 Climate-related risk identification and evaluation

Identification and description of the potential climate-related risks associated with the project (*and any alternatives*), and evaluation, based on combined considerations of the relevant climate hazards and relevant aspects of vulnerability and adaptive capacity.

The identification of risks should address the following (summarised above in 4.1.4):

- Risks to the successful or timely implementation of the project, for example associated with climatic extremes which may be intensifying, and which may damage project infrastructure or otherwise disrupt implementation;
- Risks to the successful and sustained realisation of the intended project benefits over timescales that may be significantly longer than the lifetime of the project itself, for example resulting from climate change effects that undermine or offset the project benefits (e.g. impacts on poverty) or that reduce the available of key resources (water, productive land, etc.) on which the realisation of benefits depends;
- Risks that the project may increase the vulnerability of certain groups, for example by reducing their access to key resources, constraining their options for coping with or responding to climate hazards and their effects, and compromising their capacity to adapt to climate change;
- Risks that the project may increase the vulnerability of natural systems or resources, amplifying the adverse effects of climate change on these systems/resources, and accelerating environmental degradation;
- Risks that the project will contribute to maladaptation, increasing dependency on resources threatened by climate change or contributing to development trajectories that might be unsustainable under future climatic conditions.

Risks should be described for different elements of the project, and for different stakeholders/groups participating in or affected by the project. Where risks are associated with the potential adverse impacts of the project (e.g. on vulnerability or maladaptation), project and no-project cases should be compared, considering the various project alternatives and including considerations of uncertainty for each case.

(*The timescales associated with different risks should be specified, as should the degree of confidence in the identification of risks. There may be significant uncertainty regarding some risks, for example those foreseen in the medium to long term, after project completion, which are associated with the uncertain evolution of climate hazards as well as vulnerability. The extent to which risks are associated with particular assumptions about the evolution of future conditions should also be specified, with the CRA study clearly describing how uncertainties about risk are linked with uncertainties about future climate (and socio-economic) scenarios.*

Indirect risks should also be addressed. These might arise from climate changes and their impacts outside the areas associated with project activities, which result in changes in the "global" context of the project that affect project outcomes and impacts (e.g. trade relations, commodity prices, etc.)

Some attempt should be made to assess the significance of different types of risk, for example by ranking risks according to criteria such as likelihood and potential to undermine intended project benefits. Quantitative analyses

and descriptions of risks and the impacts associated with them should be presented where feasible (e.g. in terms of timescales, probabilities, potential damages or losses), although it must be recognised that such an approach will not always be possible, and that precision (e.g. in modelled impacts) does not necessarily indicate accuracy (e.g. if just one model or simulation is used, and/or ranges of uncertainty are not considered)).

4.2.3 Identification and evaluation of opportunities and benefits

(While the emphasis of a CRA is on identifying potential risks and measures to reduce these risks, a CRA study also provides a context in which opportunities may be identified for promoting climate resilience and adaptation, and, if appropriate, low-carbon development. These may include opportunities for piloting new climate resilient practices, technologies or crops; for awareness raising, communication and training; for the promotion of risk spreading measures such as livelihood diversification and including the development of weather-related insurance; for gathering data and information on climate-sensitive systems; for linking with other relevant initiatives to promote resilience and adaptation; for improving policy dialogues. Low-carbon development can be promoted through the use of renewable energy sources and micro-generation, and the selection of project alternatives with lower carbon footprints, where such choices do not have significant negative impacts on the project or on development at large).

Consultants should consider where opportunities or "entry points" for new climate resilient practices or low carbon development exist in the context of the project.

4.2.4 Measures and recommendations in relation to climate-related risks and opportunities

Measures must be proposed to reduce the climate-related risks identified above and, if appropriate, to ensure that any opportunities are exploited effectively. These risk reduction or adaptation measures must be technically feasible, economically sound and socially acceptable (i.e. they must take into account the views of the main stakeholders). The consultants must seek ways to optimise such measures, such that one measure does not reduce the effectiveness of another or, worse yet, cause an undesired significant impact itself. Where the timescales associated with the project are long, different measures might be required at different times, and consideration should be given to how shorter term measures interact with longer term measures. In all circumstances, measures to reduce risks and adapt to climate change in the shorter term must be compatible with any longer term adaptation needs, and it should be ensured that measures to deliver adaptation or reduce risks in the shorter term do not increase vulnerability or contribute to maladaptation in the longer term.

Risk reduction / adaptation measures can have several distinct aims:

- Measures to reduce physical exposure of any project infrastructure to climate hazards and their related impacts (e.g. sudden-onset climate-related hazards and disasters, slow-onset hazards such as sea-level rise);
- Measures to improve the project's ability to operate under identified constraints that may change over the course of the project's lifetime or on timescales over which continued project benefits are anticipated (e.g. choice of most water-efficient or energy-efficient production options, avoiding locating of water-intensive activities in areas where climate change is likely to increase existing water stress);
- Generalised reduction of the vulnerability of key stakeholders in the context of existing and emerging risks associated with climate variability and extremes, in order to ensure project success (e.g. where the focus is on the near term and/or there is high uncertainty about future changes);
- Countering any potential increases in vulnerability resulting from the project among certain groups or of specific systems (e.g. ecosystems, natural resources, landscape systems);
- Targeted measures to address specific impacts of climate change identified during the CRA study (e.g. where there is high confidence in projections of climate change and associated impacts relating to specific aspects of the project such as infrastructure);

- Enhancing of adaptive capacity through measures to increase access to key resources, raise awareness, deliver training on adaptation issues, to ensure that project implementation and the delivery of longer term benefits account for and address climate change issues;
- Development of specific risk reduction / adaptation strategies and frameworks within measures may be identified, implemented and revised over time;
- Significant redesign of the project where it is concluded that the project or elements of the project may contribute to maladaptation.

Residual risks remaining after the application of the proposed risk reduction / adaptation measures must be identified and assessed. Based on this assessment the alternatives must be compared and recommendations made on the best alternative (with attention to uncertainties and the implications of these uncertainties for the identification of the best alternative). The comparison of alternatives must be summarised in tabular form.

If the proposed risk reduction / adaptation measures involve an additional cost (compared to the options currently considered), the CRA should include an estimation of these costs. It should also identify who would be in charge of implementing these measures.

In exceptional circumstances it may be concluded that a project is associated with so many risks, or risks that are so severe, that its prospects for success are extremely small. In such cases it may be recommended that a project does not go ahead, or that it is replaced with one or more alternative projects that can deliver comparable benefits.

4.2.6 Climate Risk Management Plan

The Climate Risk Management Plan (CRMP) is a document that identifies the actions needed to implement the recommendations of the CRA study. The CRMP should clearly translate the recommendations from the CRA into an operational plan.

The CRMP of the project should include:

- A table (logical framework type) showing the objectives, expected results, objectively verifiable indicators, activities (mitigation/optimisation measures), and responsibilities for the implementation of those activities;
- Institutional arrangements for its implementation: responsibilities, role of the key actors, participation of stakeholders;
- Suggestions for contracts (environmental clauses: standards, potential requirement to prepare CRMP of the company) and contracting modalities (such as payments linked to results);
- A monitoring and supervision plan, which outlines how risk reduction and adaptation will be measured/tracked, and which identifies appropriate indicators (e.g. of vulnerability, adaptive capacity, impact of measures in terms of development outcomes) and establishes frequency of monitoring, means to gather and analyse data, reporting systems;
- A response plan in case of unexpected results from the monitoring (e.g. unintended consequences, evidence that measures are not having intended impacts);
- A proposed schedule for activities;
- An indication of means (including personnel, technical resources, other requirements) and costs of implementing the CRMP.

4.2.5 Limitations of the CRA

The major limitations, weaknesses and uncertainties of the CRA should be explicitly underlined. Areas should be highlighted where significant knowledge and information gaps remain, and where uncertainties cannot realistically be quantified. Where projections and assessments are based on limited data, a small number of models, simulations or scenarios, this should be highlighted, and any deficiencies in representing a reasonable range of possible future scenarios should be identified. Any apparent contradictions between model results and observations should be noted. All assumptions made in the prediction and assessment of the potential climate-related risks should be detailed.

4.2.6 Conclusions on climate-related risks

This section will summarise the key results of the CRA, the recommendations (referring to the CRMP) and an assessment of the residual risks. Any additional information relevant for further economic and financial analyses or for the general formulation study should be provided. The limitations of the CRA and its key assumptions should be articulated.

5. WORK PLAN

The work plan should include but not necessarily be limited to the following activities:

CRA scoping study

- Fact finding/data collection - clarification of ToRs[(2)];
- Identification and engagement of stakeholders;
- Analysis/preparation of scoping report;

CRA study

- Review of documentation (e.g. CEP, NAPAs, NAPs, National Communications, relevant existing SEAs, identification and pre-feasibility reports, climate relevant data);
- Review of relevant literature, policy and legislation framework (if these exist);
- Fieldwork, data gathering and analysis, including engagement of stakeholders;
- Risk identification and evaluation;
- Formulation of climate risk reduction / adaptation measures;
- Preparation of the CRMP;
- Preparation of the final CRA report.

On the basis of the proposed work plan and time schedule outlined, a detailed work plan for the CRA study must be provided in the proposal.

(2) As CRA is an emerging area of practice, with which development practitioners are generally unfamiliar, clarification of the ToRs may involve significant revision of the ToRs, particularly with regard to methodologies to be employed and the limitations of the CRA.

6. EXPERTISE REQUIRED

The proposed mission shall be conducted by a team of (*number*) experts, who should have the following profiles:

- Expert level I or level II with at least 10 years' experience in climate change, with specific expertise in one or more of the following areas: impacts, vulnerability, risk assessment, adaptation and climate change integration/mainstreaming. She/he would be the team leader;
- (*Number*) experts level II with (*5*) (*10*) years' experience and with a technical background in (*specify*). (*The number of experts and specialities may be revised or adjusted at a later stage on the basis of the results of the scoping study*).

The team is expected to include experts with local or regional knowledge/expertise. The experts should have excellent skills in (*specify*). (*Specify language*) will be the working language; *the final report must be presented in (specify language).*

For each specialist proposed, a *curriculum vitae* must be provided of no more than (*four*) pages setting out their relevant qualifications and experience.

7. REPORTING

7.1. CRA scoping study

The scoping study must be presented in the format given in Appendix 1.

The detailed stakeholder engagement strategy must be presented two weeks after project initiation; (*number*) copies are to be presented to (*names and organisations*) for comments.

The draft scoping report in (*number*) copies is to be presented to (*names and organisations*) for comments by (*date*). Comments from the concerned authorities and the Commission should be expected by (*date*). These comments will be taken into account in preparing the final scoping report. (*number*) copies of the final scoping report in (*language*) (double-sided printing) are to be submitted by (*date*).

All hard copies must be printed double-sided on recycled or FSC-certified paper.

7.2. CRA study

Feedback on the scoping study will be provided no later than (*number*) weeks after its submission, setting the scope of the CRA study. The CRA study will begin no later than (*number*) weeks after this date.

The CRA report must be presented in the format given in Appendix 2. The underlying analyses are to be presented in appendices to this report.

The draft CRA report in (*number*) copies (double-sided printing on recycled or FSC-certified paper) is to be presented to (*names and organisations*) for comments by (*date*). Within (*number*) weeks, comments will be received from (*list the authorities*).

These comments will be taken into account in preparing the final report (*maximum…pages excluding appendices*). (*Number*) copies of the final report in (*language*) (*double-sided printing on recycled or FSC-certified paper*) are to be submitted by (*date*).

8. FINANCIAL PROPOSAL

(According to the contracting modality used, the EC should indicate the form in which they wish consultants to make their financial proposal, e.g. break-down by categories of costs, as well as indicate the maximum budget for this contract.)

9. TIME SCHEDULE

(Insert time schedule.)

The consultant should respond to this time schedule and indicate in their proposal how they intend to organise the work for this purpose. The time schedule can be revised according to the results of the scoping study.

10. APPENDICES

Appendix 1. Standard format for the CRA scoping report

Maximum length of the main report (*without appendices*): 25 pages.

The following text appears on the inside front cover of the report:

> This report is financed by the European Commission and is presented by the (*name of consultant*) for (*national institution*) and the European Commission. It does not necessarily reflect the opinion of (*national institution*) or the European Commission.

Structure of the report

1. Executive summary
2. Description of the project under consideration and its alternatives
3. Applicable environmental legislative and institutional framework
4. Key stakeholders and their concerns
5. Key climate-related risks aspects and project-climate interactions to be addressed in the CRA
6. Climate risk baseline and areas of project influence
7. Proposed methodologies for assessing climate related risks
8. Timeframe and resources needed to carry out the CRA
9. Technical appendices
    a. Stakeholder engagement methodology
    b. List of stakeholders consulted (including contact details)
    c. Records of stakeholder engagement
    d. List of documents consulted

Appendix 2. Standard format for the CRA report

The following text appears on the inside front cover of the report:

> This report is financed by the European Commission and is presented by the (*name of consultant*) for (*national institution*) and the European Commission. It does not necessarily reflect the opinion of (*national institution*) or the European Commission.

Structure of the report

1. Executive summary
2. Background
    a. Project justification and purpose
    b. Project location
    c. Project description and associated activities
    d. Alternatives (if any)
    e. Relevant policy, legislative and institutional framework
3. Approach and methodology

(This chapter must set out the approach and methodology used in the CRA and how the data and information collected have been incorporated in the findings and recommendations).

    a. General approach
    b. Tools and methods for identifying and assessing risks
    c. Relevant indicators
    d. Assumptions, uncertainties and constraints

4. Climate risk baseline study
    a. Current climate risk context (hazards, vulnerability, adaptive capacity)
    b. Expected future climate risk context
5. Risk identification and assessment

(Indirect risks and interactions between (i) different types of risk, and (ii) climate-related and non-climate stresses could form additional subject headings to ensure that these aspects are not overlooked. Table and diagrams should be used to summarise and clarify findings in this chapter).

6. Conclusions and risk statement

(This section must present a clear statement of the conclusions and recommendations on actions to be taken to ensure that the climate-related risks are adequately addressed in subsequent project preparation, implementation, monitoring and evaluation phases. These conclusions and recommendations must be complete, yet concisely and clearly formulated.

This section must include one of the three 'risk statements' set out below:

- *The project (and any alternatives) are not associated with significant climate-related risks, provided that the measures recommended are followed through;*

- *The lower risk alternative(s) identified will be associated with some significant climate-related risks, for which adequate risk reduction / adaptation measures cannot feasibly be realised. Therefore, it is recommended to identify and assess additional alternatives or to check that the residual risks are acceptable given the expected benefits of the project;*

- *Each alternative identified is associated with significant and unacceptable climate-related risks irrespective of proposed risk reduction / adaptation and monitoring measures. Therefore, it is recommended that the project proposal is comprehensively re-worked and alternatives re-assessed).*

7. Risk reduction / adaptation measures and residual risks. This section should provide the key points of the Climate Risk Management Plan (CRMP) in a Technical Appendix.

8. Technical appendices

    a. Input into the logical framework planning matrix of the proposed project design (intervention logic, indicators, assumptions and preconditions);

    b. Data, data analysis, background material, figures and maps and other illustrative information not incorporated into the main report;

    c. Other technical information and data, as required;

    d. Records of stakeholder engagement;

    e. Climate Risk Management Plan.

9. Other appendices

    a. Study methodology/work plan (2–4 pages);

    b. Consultants' itinerary (1–2 pages);

    c. List of stakeholders consulted or engaged (1–2 pages);

    d. List of documentation consulted (1–2 pages);

    e. *Curriculum vitae* of the consultants (1 page per person);

    f. ToR.

MN-BA-16-002-EN-N

Publications Office