# SIGNATURE PAGE

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Expected Output(s)/Indicator(s):	Albania's SNC finalized / Publication of SNC
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NEX,

UNDP Executing Agency, Ministry of Environment Implementing Agency Budget \$405,000

Allocated resources:

• Government

Regular

• Other:

• GEF

\$405,000

Agreed by (Government): •	Them	Renga	assi	A LANGE		
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Agreed by (UNDP	):			1AM	<u> </u>	4.05

# **UNDP Project Document Format**

Government of ALBANIA

United Nations Development Program

# ENABLING ACTIVITIES FOR THE PREPARATION OF <u>ALBANIA'S</u> SECOND NATIONAL COMMUNCIATION TO THE UNFCCC

# Brief description

This project aims at enabling Albania to prepare and report its Second National Communication with the Conference of the Parties (CoP) of the UN Framework Convention on Climate Change (UNFCCC) according to 17/CP8 and other guidance provided. It will be a follow up of previous studies already identified under a stocktaking exercise. The project will be working under a priority area / category selection approach in order to allocate resources in the most effective manner. The main components of the project are: (a) an inventory of greenhouse gases for the year 2000 and time series 1994-2000; (b) an update of analysis of potential measures to abate the increase in greenhouse gas emissions in Albania; (c) an assessment of potential impacts of climate change in a selected area of Albania and adaptation measures; (d) preparation of the Second National Communication of Albania and submission to the CoP. In addition, public awareness activities and stakeholder consultations will be cross-cutting along the overall course of this exercise therefore, the preparation of the Second National Communication is expected to enhance general awareness and knowledge on climate change-related issues in Albania, and help into highly taking them into account in the process of national planning and policy.

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## <u>Acronyms</u>

APF
CCA
CCF
Adaptation Policy Framework
Common Country Assessment
CCF
Country Cooperation Framework

CCU Climate Change Unit

CDM Clean Development Mechanism
CGE Consultative Group of Experts

CHP Small Scale Combined Heat and Power

CoP Conference of Parties

DCFR Directorate of Communication and Foreign Relations

DHS District Heating Systems

DPEP Directorate for prevention of the environmental pollution
DPIL Directorate of Policy, EU Integration and Legislation
ECAT Environmental Centre for Administration of Technology

EEC Energy Efficiency Center

EESD Energy and Environment for Sustainable Development

FNC First National Communication
FoNS Faculty of Natural Sciences
GDP Gross Domestic Production

GHG Greenhouse Gas

GoA Government of Albania

HDRs Human Development Reports

IHM Institute of Hydrometeorology

INSTAT National Institute of Statistics

IPCC Intergovernmental Panel on Climate Change

IR Inception Report

LUCF Land use change and forestry
MDGs Millennium Development Goals
MoAF Ministry of Agriculture and Foods

MoE Ministry of Environment MoH Ministry of Health

MoIE Ministry of Industry and Energy

MoTAT Ministry of Territory Adjustment and Tourism MoTT Ministry of Transport and Telecommunication

MYFF Multi Year Fund Framework
NAE National Agency of Energy
NAP National Action Plan
NC National Communication

NCSP National Communication Support Program

NGOs Non-governmental Organizations

NPD National Project Director NPM National Project Manager

NRBM Directorate of Natural Resources and Biodiversity Management

NSSED National Strategy for Socio-Economic Development

PHI Public Health Institute
PIU Projects Implementation Unit
PRSP Poverty Reduction Strategy Paper

QA/QC
QPRs
Quality Assurance/Quality Control
QPRs
Quarterly Progress Reports
REC
Regional Environmental Center
SAA
Stabilization Association Agreement

SAA Stabilization Association Agreement
SBAA Standard Basic Assistance Agreement

SGP Small Grants Program

SNC Second National Communication
SRF Strategic Results Framework
TNA Technology Needs Assessment

TRs Technical Reports

UNDAF United Nations Development Assistance Framework

UNDP United Nations Development Program
UNEP United Nations Environment Program
UNFCCC United Nations Framework Convention

UNFCCC United Nations Framework Convention on Climate Change

V&A Vulnerability and Adaptation

# Part 1: Elaboration of Narrative

#### 1.1 Situation Analysis

- 1. Albania is a small mountainous country, located in the southwestern part of the Balkan Peninsula, on the coast of the Adriatic and Ionian Seas. To the north and the northeast Albania is bordered by the Former Yugoslavia Republic of Macedonia and to the south and southeast by Greece. It covers an area of 28,748 km². The population of Albania is 3.3 million (2003 census). Small rivers that traverse the country tend to be torrential and have high erosive power due to the rugged relief of the land. However, this power constitutes an important source of hydropower by supplying over 95% of the electricity to the country. Albania is situated in the Mediterranean climatic belt, with hot dry summers, and generally mild winters with abundant rainfall. Albania's forests cover about 1,047 million hectares, or about 36% of total land resources of the country.
- 2. Since 1998 the country has seen steady progress. As of 2003, the estimated Gros Domestic Production (GDP) average growth per year was 7% per year. Inflation rate has been 2-4%, with stable currency. However 46,6% of the population lives below the poverty line of \$ 2 per day. 53 % of the population lives off land. High levels of unemployment and migration are observed: 15% of population has immigrated aboard.
- 3. In 2002 the Government formulated, with financial and technical support from World Bank, and other players of the international community, the National Strategy for Socio-Economic Development (NSSED). This Strategy developed through a broad participatory process that included local government, civil society, private sector and donors, aims to address poverty reduction through a broad set of reforms and activities.
- 4. Albania is also in the process of negotiating a Stabilization and Association Agreement (SAA) with the European Union, which will set the conditions for the country's eventual accession to the EU. The policies that need to be adopted and actions to be taken are fully in line with the NSSED. These two instruments are the main focus of national development and donor support.
- 5. The Government considers the environment to be an integral component of poverty reduction and will work to achieve an integrated rural development that includes the protection and improvement of use of natural resources. Environmental policies during the period 2002 2004 are directed at halting the process of environmental degradation, creating conditions for rehabilitation of polluted areas and promoting the sustainable use of natural resources. The Law on Environmental Protection¹ forms the basis for environmental management in Albania. The law addresses the prevention and reduction of pollution, sustainable management of natural resources, monitoring and how to define pollution levels. It provides binding provisions for environmental impact assessment and the implementation of the "polluter pays" principle.
- 6. Currently the government, with support from UNDP, is engaged in a continued participatory dialog and advocacy to integrate the MDGs into the NSSED. Initial progress has been made in linking MDG-NSSED development priorities with the annual Medium-Term Budget Program (MTBP) under which Albanian public institutions are working. Thanks to UNDP efforts in promoting and advocating for national commitment to Millennium Development Goals, the NSSED is also seen as one of the mechanisms to achieve the Millennium Development Goals (MDGs).
- 7. UNDP is assisting Albania in determining both national and regional Millennium Development Goals targets and indicators as well as monitoring progresses made toward achieving these targets. UNDP Albania's soft assistance interventions with the Ministry of Environment (MoE) have played a significant role in terms of increasing national capacities for integrating environmental conventions into planning and policies.

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<sup>&</sup>lt;sup>1</sup> The Law is adopted in 1993 and is amended in 1998 and 2002

8. Since 2000, UNDP support to Albania in terms of sustainable environmental development has focused assistance towards compliance with international environmental conventions, aiming at (a) promoting environmental governance in mainstreaming sustainable development and implementing relevant policy, legal and regulatory measures, and (b) capacity development to implement global environmental conventions primarily through UNDP-GEF portfolio for Climate Change (Albania's First National Communication to the UNFCCC and – Technology Needs Assessment and Improvement of the quality of greenhouse gas (GHG) inventory).

#### 1.2 Strategy

- 9. This project is addressing one of the main issues identified in the UNDP Country Cooperation Framework (CCF) (2002-2005), and the Strategic Results Framework (SRF) (2002-2005) that aimed to "Strengthening the Ministry of the Environment (MoE) to assist the Government achieving global environment concerns and commitments integrated in national development planning and policy.
- 10. Within this SRF outcome framework, the Second National Communication project will enable Albania to prepare the Second National Communication to the Conference of Parties in accordance with Article 12 of the UNFCCC after the successful completion and submission of the First National Communication to the COP8 in 2002. It will develop and enhance national capacities to fulfill Albania's commitments to the Convention on a continuing basis; enhance general awareness and knowledge of government planners on issues related to climate change and reduction of greenhouse gas emissions, thus enabling them to take such issues into account into national development agenda; and mobilize additional resources for projects related to climate change and mitigation of greenhouse gases; projects which may be eligible also for further funding or co-funding by GEF or other multilateral or bilateral organizations.
- 11. By addressing the energy sector as the main source of GHG emissions and vulnerable to the expected climate change the project is addressing one of the issues highlighted into the Common Country Assessment (CCA). UNDP Country Program for Albania (2006-2010) address national development plans that adequately reflects issues related to gender, decentralization, the environment and other issues related to MDGs.

#### 1.3 Management arrangements

12. The project will be executed through NEX modalities with the Ministry of Environment, which will be serving as Governmental body. The Climate Change Unit established in the course of Albania's FNC preparation would serve as implementation body of such project. The Project Steering Committee (PSC) will provide guidance and support to the project. For more information about management arrangements go to the section of Institutional Framework for Project Implementation.

# 1.4 Monitoring and Evaluation

- 13. <u>Monitoring responsibilities and events</u>: A detailed schedule of project reviews meetings will be developed by the project management, in consultation with project implementation partners and stakeholder representatives and incorporated in the Project Inception Report. Such a schedule will include: (i) tentative time frames for Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms) and (ii) project related Monitoring and Evaluation activities.
- 14. <u>Day to day monitoring of implementation progress</u> will be the responsibility of the Project Manager, based on the project's Annual Workplan and its indicators. The Project Team will inform the UNDP-CO of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely and remedial fashion.

- 15. <u>Periodic monitoring of implementation progress</u> will be undertaken by the UNDP-CO through quarterly meetings with the project proponent, or more frequently as deemed necessary. This will allow parties to take stock and to troubleshoot any problems pertaining to the project in a timely fashion to ensure smooth implementation of project activities.
- 16. <u>Project Monitoring Reporting</u> The Project Coordinator in conjunction with the UNDP-GEF extended team will be responsible for the preparation and submission of the following reports that form part of the monitoring process.

#### (a) Inception Report (IR)

- 17. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.
- 18. The Inception Report will include a more detailed narrative on the institutional roles, responsibilities, coordinating actions and feedback mechanisms of project related partners. In addition, a section will be included on progress to date on project establishment and start-up activities and an update of any changed external conditions that may effect project implementation.
- 19. When finalized the report will be circulated to project counterparts who will be given a period of one calendar month in which to respond with comments or queries. Prior to this circulation of the IR, the UNDP Country Office and UNDP-GEF's Regional Coordinating Unit will review the document

#### (b) Quarterly Progress Reports (OPRs)

20. Short reports outlining main updates in project progress will be provided quarterly to the local UNDP Country Office and the UNDP-GEF regional office by the project team.

#### (c) Technical Reports (TRs)

- 21. Technical Reports are detailed documents covering specific areas of analysis or scientific specializations within the overall project. As part of the Inception Report, the project team will prepare a draft Reports List, detailing the technical reports that are expected to be prepared on key areas of activity during the course of the Project, and tentative due dates. Where necessary this Reports List will be revised and updated, and included in subsequent APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.
- 22. <u>Audit Clause</u>. The Government will provide the Resident Representative with certified periodic financial statements, and with an annual audit of the financial statements relating to the status of UNDP (including GEF) funds according to the established procedures set out in the Programming and Finance manuals. The Audit will be conducted by the legally recognized auditor of the Government, or by a commercial auditor engaged by the Government.

### 1.5 Legal Context

- 23. This Project Document shall be the instrument referred to as such in Article I of the Standard Basic Assistance Agreement (SBAA) between the Government of ALBANIA and the United Nations Development Programme. The host country-implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.
- 24. UNDP acts in this Project as Implementing Agency of the Global Environment Facility (GEF), and all rights and privileges pertaining to UNDP as per the terms of the SBAA shall be extended mutatis mutandis to GEF.
- 25. The UNDP Resident Representative is authorized to effect in writing the following types of revision to this Project Document, provided that he/she has verified the agreement thereto by GEF Unit and is assured that the other signatories to the Project Document have no objection to the proposed changes:
  - a) Revision of, or addition to, any of the annexes to the Project Document;
  - Revisions which do not involve significant changes in the immediate objectives, outputs or activities of the project, but are caused by the rearrangement of the inputs already agreed to or by cost increases due to inflation;
  - c) Mandatory annual revisions which re-phase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility; and
  - d) Inclusion of additional annexes and attachments only as set out here in this Project Document.

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		Local consultants		Contractual services / individuals	Local consultants	Travel	General operating expences	Equipment & furniture	Communiaction and audiovisual equipment	Supply	Miscellaneous operating expences		International consultants	Contractual services / individuals	Local consultants	Travel	Equipment & furniture
		71300		71300	71400	71600	72100	72200	72400	72500	74000	N 100 N	71200	71300	71400	71600	72200
		GEF		GEF	GEF	GEF	GEF	GEF	GEF	GEF	GEF		GEF	GEF	GEF	GEF	GEF
77		National Circumstances	Nat. Circum. total								GHG inventory	GHG inventory total	GHG abatement				
Part 2: Budget	Albania's Second	Communication															

			Communication and audiovisual				
	GEF	72400	equipment	•	1,000		1,000 2,000
	GEF	72500	Supply	•	200		500 1,000
GHG abatement total				27,000	21,500		11,500 60,000
	GEF	71200	International consultants	4,000	3,000		3,000 10,000
		71300	Contractual services / individuals	11,000	10,000		5,000 26,000
	GEF	71400	Local consultants	15,000	7,000		3,000 25,000
	GEF	71600	Travel	7,000			7.000
	GEF	72200	Equipment & furniture	20,000	5,000		-25.000
	GEF	72400	Communication and audiovisual equipment	1,000	1,000	1,000	1,000 3,000
	GEF	72500	Supply	1,000	1,000		1,000 3,000
V&A	GEF	74000	Miscellaneous operating expenses	1,000	1,000		1.000 3.000
V&A total				000'09	28,000		14,000 102,000
	GEF	71400	Local consultants	1	4,000	2,000	2,000 6,000
Gaps and constaints	GEF	74000	Miscellaneous operating expenses	3,000	3,000	3,000	3,000 9,000
Gaps and constraints total		Jakob A		3,000	7,000	9865	5,000 15,000
-	GEF	71400	Local consultants	5,000	5,000	4,000	4,000 14,000
Other information	GEF	74000	Miscellaneous operating expenses	2,000	2,000	2,000 6,000	000,9
Other information total				2,000	7,000	6,000	6,000 20,000
Project Management	GEF	71300	Contractual services / individuals	25,000	25,000	25,000 75,000	75,000
	GEF	72400	Communication and audiovisual equipment	2,000	2,000	1,000 5,000	2,000

	GEF	GEF 72500 Supply	Supply	2,000	2,000		1,000 5,000
	GEF	74000	Miscellaneous 74000 operating expenses	2,000	2,000	1.000	1.000 5.000
P.W. total				31.000		~	8
Monitoring and Reporting (M&R)	GEF	74100	GEF 74100 Professional services	2.000			\$ 000 15 000
M& R total				5,000	la de la composición dela composición de la composición dela compo	2,000	5,000 15,000
BUDGET TOTAL				189.000	189.000 133.500	82.500 405.000	405 00

#### Part 3: Appendixes

# Appendix A: Summary report of the self-assessment exercise

# I. Scope and approach to the stocktaking

- 26. The *main objective* of the self-assessment exercise performed in accordance with GEF Operational Procedures for the Expedited Financing of National Communications from Non-Annex I Parties (GEF/C.22/Inf.16) is to undertake a highly consultative and participatory process of needs assessment, to identify and validate the critical priorities for UNFCCC implementation in Albania in general, and SNC project proposal in particular.
- 27. This exercise is considered as the first but critical step in preparing the proposal for the SNC to the UNFCCC. A synthesis report is produced as the main output by serving of dual purpose: It is being used as a baseline document for the SNC proposal, as well as an input to identify and validate priorities for further in-depth studies and new areas of work to be carried out in the course of the SNC. In addition, it will provide an assessment of gaps, uncertainties, barriers and lessons learnt during previous and ongoing activities. This approach helps to ensuring that the SNC is build upon previous activities, studies, experiences, and institutional settings. The stocktaking exercise is focused on all thematic areas related to National Communication as indicated by 17/CP8.
- 28. The *approach* applied for the stocktaking exercise is based on the <u>Terms of Reference</u> by requesting a brief summary of activities and results achieved under prior and/or ongoing activities<sup>2</sup> that will ensure that proposal for SNC is build upon them.
- 29. The following main tools have been used for the stocktaking: (i) in-desk review of relevant documents; (ii) e-discussions among stakeholders; (iii) interviews with stakeholders; (iv) questionnaires; (v) consultative meetings / workshops<sup>3</sup>. The stocktaking exercise took about 20 weeks brought together around 50 stakeholders from different ministries, public institutions, NGOs, academia, international organizations based in Albania and private sector. (See matrix of stakeholders)
- 30. To facilitate the stocktaking exercise a stocktaking team was set up. The National Coordinator of Climate Change Projects has led the stocktaking and served as facilitator and coordinator of this exercise. The stocktaking team was composed of three main thematic teams (GHG inventory team, GHG mitigation team, and Vulnerability and Adaptation (V&A). team) led by a team leader each. The members of the thematic teams who have been involved in the NC and Technology Needs Assessment (TNA) have been considered as primary stakeholders. A secondary group of stakeholders that consist of Project Steering Committee members, members from different ministries, research institutions, UNDP, NGOs, private sector etc., have been consulted as well. Each team leader was responsible of producing a separate report on the respective thematic area. In addition, team leaders have held consultations directly to the stakeholders when necessary. Three specific thematic reports have been submitted to the National Coordinator who was responsible for the compilation of final synthesis report<sup>4</sup> of the stocktaking and the SNC project proposal document, their circulation for comments and feedback and their incorporation.
- 31. The technical guidance provided by the UNDP-GEF National Communication Support Program (NCSP) either on-line, or by distributed documents and recommendations made in the course of a half-day workshop on stocktaking held in Skopje, 1 June, 2004, organized by UNDP-GEF Bratislava office, are highly taken into

Three draft reports, staring of a zero-draft-order were compiled and circulated among stakeholders.

<sup>&</sup>lt;sup>2</sup> All Prior and ongoing projects for climate change funded by GEF or other organization such as Albania's FNC, Top-Up phase, GEF Regional Project for Improvement of the quality of GHG inventories (East Europe and CIS) etc.

Four consultative meetings were held in the course of the stocktaking exercise. The first was a scoping meeting. The second was held on GHG inventory and mitigation. The third was held on V&A and other issues. The fourth was held on the synthesis stocktaking report.

consideration. In addition, other countries experiences that have been completing the stocktaking exercise either under the SNC<sup>5</sup> or NCSA are considered. Other forums, mainly regional, have provided with the possibility of discussion and sharing experiences within the region. *User Manual for the Guidelines on the Preparation of NC from non-Annex I Parties* prepared by the UNFCCC Secretariat and the Guide for Self-Assessment of Country Capacity Needs for Global Environmental Management also provided useful ideas on ensuring successful stakeholder participation. Step-by-step guidance / feedback provided by NCSP for the preparation of the SNC Project Document and teleconferences on such matter have been very useful.

32. For the thematic area of vulnerability and adaptation, prioritization of issues / studies were needed. For setting priorities a *prioritization* matrix has been set up. *Criteria* are chosen through consultations with experts and stakeholder. *Weight* of each criterion is considered equal. Each expert has independently allocated *scores* for each criteria and afterwards points are totaled and issues with highest points are considered as priorities. For more information see the <u>summary evaluation matrix</u> of priorities developed under Annex B.

# II. Summary of main findings of the assessment

33. The stocktaking team performed an assessment of each thematic area relevant to the National Communication. The main focus of assessment was Albania's FNC performed under the GEF funded project, namely: "Enabling Albania to prepare its FNC to the CoP of the UNFCCC". It was followed by the Albania's TNA compiled under the Top- Up phase funded by GEF, namely "Additional financing for capacity building in priority areas" and regional project funded by GEF, namely "Building capacities to improve the quality of inventories (East Europe and CIS)". In addition, other projects funded either by GEF or other donors relevant to each thematic area were considered when available. They are listed in the stakeholders matrix developed under Annex C.

#### **II.1 National Circumstances**

#### II.1.1 The baseline

- 34. The Albania's FNC is the main document where a profile of Albania's circumstances was provided as the first heading of this document. Information on national circumstances provided under Albania's FNC was relevant to the thematic areas of NC, aiming at giving a clear and full picture of the sector situation.
- 35. The section of national circumstances under Albania's FNC contains information on: (i) Geographic profile; (ii) Climate profile; (iii) Natural resources [water, forests; land use]; (iv) Economic and sector profile [agriculture; livestock; energy, mining; transport, industry; tourism; fisheries]; (v) Resources and infrastructure [population; public health; education; environment]. Further to Albania's FNC, the Albania's TNA report provides some additional and updated information on the national development context and sectorial profiles including policy and legal framework that was relevant to the issue of technology transfer and development.
- 36. For some of the areas/sectors described under the Albania's FNC, the *reporting time frame* was around 1990-1999, although there were many cases that due to the lack of data and information the analysis was made for fewer years (1995-1999). Given that the inventory base year was the year 1994, the relevant inventory sectors were analyzed around this year and for other years when data were available. In the Albania's TNA the reporting time frame was around 1990-2000. Although in some cases analysis beyond 2000 is provided or assessments have been made for fewer years than 1990-2000 due to the lack of information and data.
- 37. The main information and data on national circumstances was received through the National Institute of Statistics (INSTAT) and complemented by respective Annual Reports and data from Ministries and Public Research Institutes. Also Human Development Reports (HDRs) and produced from UNDP and other relevant publication have been considered.

<sup>&</sup>lt;sup>5</sup> Macedonia and Georgia have been completing the stocktaking under the SNC at that time.

- 38. Having the new reporting requirements provided by the new UNFCCC guidelines (17/CP8) and the critical review of the reports (FNC and TNA reports), the information provided so far on national circumstances *lacks* the following:
  - a. Country development context, including national development priorities indicating whether climate change is addressed under the country's development agenda;
  - b. Sector profile including policy and legal framework, relevant to the NC
  - c. Description of institutional arrangements relevant to the preparation of NC on regular basis.
- 39. Knowing the very drastic nature of change of many of economic sectors that are relevant to the NC in the course of the years 1990-2000, there is a strong need to update the sector profiles, especially for energy, transport, agriculture, land use change and forestry (LUCF,) industrial processes and waste for such a time frame.
  - II.1.2 Priorities / new areas of work under SNC.
- 25. Referring to the new UNFCCC guidelines, the National Circumstances chapter under Albania's SNC shall contain information on the following items: (i) Geographic profile; (ii) Climate profile (iii) Natural resources: water resources, forests, land use, biological and ecosystem diversity; (iv) Economic and sector profile: agriculture, livestock, energy, mining, transport, industry, tourism, fisheries, (v) Infrastructure: population, public health, education, environment. (vi) Institutional arrangements relevant to the implementation of the UNFCCC and NC preparation process.
- 26. Given that the majority of geographic profile information is provided into Albania's FNC and is sufficient it might need only some minor additions and updates such as share of land covered by surface water, information on international waters that Albania shares with other neighbors, population changes and distribution during the recent years.
- 27. There is a need to update the *climate profile* (temperature and precipitation) mainly with the recent extreme weather events. Additional information will be provided for the time horizon 1990-2003 which will be additional to the previous baseline 1960-1990.
- 28. As per the *natural resources* the majority of the updated information will be provided on forests, pastures and land use change along with the most recent legal and policy framework that regulates the forest and land use change in Albania.
- 29. The review and update of the information on economic and sector profile will consist first on the update of the information regarding the newly adopted strategies for socio-economic development such as National Strategy for Socio-Economic Development (NSSED), Poverty Reduction Strategy Paper, (PRSP), MDGs, and Stabilization Association Agreement (SAA), National Energy Strategy, National Strategy for Development of non-Food Industry Sector, Strategy for Development of Agriculture, and Strategy for Development of Tourism. Information on GDP trends for the period 1990 –2004 will be additional too.
- 30. The review and update of the information on *infrastructure* such as: population; public health; education; environment will consist on the update of the new trends of development for each item under this section such as trends on population development during 1990-2004, state of the public health and education will be updated and a clear picture for 1990-2004 will be provided. The state of the environment including the state of urban air, water waste and hot spots will be provided along with institutional framework, legal framework, and public awareness and education on environment. This type of information would be new as it was missing to the Albania's FNC.
- 31. The information on *institutional arrangements* relevant to the implementation of the UNFCCC and preparation of NC would be quite new as it was missing to the Albania's FNC. This section would provide information as following: (i) National Focal Point; (ii) status of Albania under the UNFCCC and Kyoto

Protocol; (iii) state of implementation of the UNFCCC and Kyoto Protocol; (iv) distribution of responsibilities among other national institutions, NGOs etc; (v) stakeholders involved in the process; (v) institutional framework of climate change office (GHG inventory team; GHG abatement team; vulnerability and adaptation team, Clean development Mechanism (CDM) team. The above information would be provided since 1995 when Albania became a Party to the UNFCCC up to date.

#### II.2 GHG inventory

#### II.2.1 The baseline

- 32. The first GHG emission inventory by sources and sinks for Albania is performed under the Albania's FNC project. Attempts to improve the quality of GHG inventory are being made under the GEF regional project<sup>6</sup>, namely "Building capacitates to improve the quality of the GHG inventories in East Europe and CIS" which is using key-sources approach and the IPCC Good Practice Guidance as cost -effective approach for improving the quality of data inputs to national greenhouse gas inventories.
- 33. The lead agency responsible for the GHG inventory preparation is the Climate Change Unit/Program under the Ministry of Environment of Albania. The Unit/Program is established since 1998 when the GEF provided the funding for the preparation of the Albania's FNC. Having the capacity of the UNFCCC Focal Point, this Unit is responsible for the implementation of the UNFCCC. Up to date, the Unit/Program has mainly worked in project-based approach<sup>8</sup>.
- 34. Albania's first GHG inventory covered all sources and sinks as well as all gases as mandated by 10/CP2. Albania's first GHG inventory considered five main modules such as energy, industrial processes, agriculture, and waste, LUCF, as guided by revised IPCC of 1996. Solvents category have been considered as well. The national inventory has considered three direct GHGs such as: CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O and three indirect GHGs such as: CO, NO<sub>x</sub>, and NMVOC. Estimates of key sources<sup>9</sup> have been provided as well. Aggregated GHG emissions and removals expressed in CO<sub>2</sub> equivalent have been provided too. In addition, indicators such as CO<sub>2</sub>/GDP and CO<sub>2</sub>/Capita have been estimated mainly for comparability purposes. Estimates for Albania's first national GHG inventory have been made for the base year 1994. Time series (1990-1994) have been provided ONLY for the category of CO<sub>2</sub> emissions from fuel combustion as a very significant one.
- 35. The estimates of GHG emissions and sinks were performed according to the 1996 revised IPCC Guidelines. In addition, the IPCC Good Practice Guidance has been used for the uncertainty assessment and key source estimates. Also CORINAIR has been referred for the solvent category. Methods elaborated have been "Tier I" and "Tier 2". Emissions of carbon dioxide released from energy & transport, have been estimated by utilization of two approaches: top-down and bottom-up approach.
- 36. All activity data concerning each sector were national. The main activity data source/provider has been the INSTAT although it did not provide activity data for GHG inventory purposes according to the IPCC nominations. Other data providers/sources have been National Agency of Energy, Ministry of Environment, Ministry of Energy and Industry, Ministry of Transport, the National Directorate of Forestry, Taxation Department, Costumer Offices and different data bases, surveys and studies prepared by International organizations (like the World Bank, UNDP, EBRD, EIB and etc), Universities and different NGOs. As

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Given the long title of this project for the rest of this document its title is provided as: regional project on GHG inventories

The designation "lead agency" implies that the agency has overall responsibility for the inventory and that the agency carried out most, or all, of the following duties: co-ordination/compilation of national inventory; archiving of relevant national data; periodic updating of the inventory; documentation of selection process for national activity data, emission factors, and other conversion factors; documentation of methods and assumptions used; validation of conversion units and other data; verification of inventory estimates; compilation of the inventory report; and reporting to international bodies.

<sup>&</sup>lt;sup>8</sup> For more information visit the national climate change homepage: http://: www.ccalb.org

<sup>&</sup>lt;sup>9</sup> A key source category is one that is prioritized within the national inventory system because its estimate has a significant influence on a country's total inventory of direct GHGs, in terms of the absolute emissions level and trend.

<sup>10</sup> Monte Carlo method is used for uncertainty estimates.

regards *emission factors*, in most of the cases they have represented default factors provided by IPCC 1996 Revised Guidelines. Exception was made in two cases ONLY: (i) Emissions released from fuel consumption in small industrial boilers and (ii) emissions from burning of fuel wood in household stoves. Most of emission factors used in estimates do not reflect Albanian situation.

- 37. The major technical *constraints* that has faced the GHG inventory process was related to the activity data gaps and use of IPCC default emission factors that do not reflect the country situation.
- 38. Activity data gaps identified for the Albania's First GHG inventory were mainly related to the data availability (disaggregated activity data or inconsistency with IPCC format) and their variability after '90s. In most of the cases, activity data reported were at aggregate form or inconsistent with the IPCC format, which made the estimation of the emissions very difficult. Most of activity data were characterized for their variability after 90's the time when the country entered a rapid development. In the course of these years, sectors like transport, agriculture, industry and waste, merged into a drastic change. In addition, the problem of data gaps becomes a significant one when source categories whose data could not be obtained are identified as key ones. This was the case for categories such as: mobile combustion, enteric fermentation, fuel combustion in industry, fuel wood burned for energy purposes, solid waste treatment.
- 39. The overall *uncertainty* estimated for the Albania's first GHG inventory was 17.03<sup>11</sup> % where the CO<sub>2</sub> equivalent emissions from *fuel wood* category contributed with 79.23%. This comes especially from the large degree of uncertainty of activity data for this subcategory (especially from fuel wood self-collected from rural areas).
- 40. Attempts to improve the quality of GHG inventory have started on June 2002 through the UNDP-GEF regional project: "Building capacitates to improve the quality of the GHG inventories in East Europe and CIS". The goal of this project is to build on the inventory work undertaken for first FNC in preparation for SNC, aiming at creation of sustainable technical and institutional capacity. The progress made so far under this project consists on strengthening national arrangements for compiling, archiving, updating and managing GHG inventories. Albania's system of GHG inventory is under the process of documentation. A national inventory report along with the manual of procedures is drafted. Archiving of data and estimates is underway. A national strategy aiming at improvement of quality of GHG inventories is drafted. The strategy focuses on activity data collection and identification of methods/approaches for reducing gaps. A plan that can be put into place for SNC is developed. It consists of the development of a methodology for filling the gaps that would be implemented during the SNC preparation. Survey method stands in the heart of such methodology for filling the activity data gaps for those categories when they do not exist.

#### II.2.2 Priorities / new areas of work under SNC.

- 41. Albania 's second national GHG inventory will cover all sources and sinks as well as all gases as mandated by 17/CP8. Therefore it will consider three direct GHGs:  $CO_2$ ,  $CH_4$  and  $N_2O$  and other indirect GHGs such as: CO,  $NO_x$ ,  $SO_x$  and NMVOC. In addition, estimates of HFCs, PFCs and  $SF_6$  will be provided, not reported under the Albania's FNC. Emissions released from bunker fuels will be estimated and reported separately as instructed by the guidelines. Estimates of the key sources, sensitivity analysis and uncertainty level will be provided. The second GHG inventory will report on estimates of aggregated GHG emissions and removals expressed in  $CO_2$  equivalent. In addition, indicators such as  $CO_2/GDP$  and  $CO_2/Capita$  would be estimated mainly for comparability purposes.
- 42. Estimates for Albania's second national GHG inventory shall be made for the base year 2000. Re-estimates for the year 1994 will be made as well. Given the variability of activity data after '90s the team has agreed to develop time series for a 10-year time frame (1994-2000) in order to provide a clear view of the emission trends. This will also create a clear background for the abatement analysis. A special attention will be given to

<sup>11</sup> The combined uncertainty reported under Albania's FNC is found to be higher (19%). The above value of 17.03% is a corrected one estimated after the peer reviews of the GHG inventory.

the key source categories and a sensitivity analysis is needed to be done in order to see how / whether the key sources have changed. Therefore priority will be given to the key source categories such as enteric fermentation [22%]; fuel wood burned for energy purposes [21%]; fuel combustion in industry [14%]; fuel combustion in transport [11%], waste [4%] which totally make around 72 %.

- 43. Improved estimates of GHG emissions are expected mainly due to the majority of outputs of the GEF regional project on GHG inventories. *Soft methodology* for filling the activity data gaps that do not exist already developed under the GEF regional project on GHG inventories will be utilized under SNC phase. This will be critical for the implementation of the GHG inventory improvement strategy, already drafted under the above project. In addition, the Quality Assurance/Quality Control (QA/QC) plan drafted under the regional project will be implemented as well.
- 44. As regards *emission factors*, in most of the cases default factors provided by IPCC 1996 Revised Guidelines will be used. The team will see the possibility to use Emission factors calculated under other studies / projects/ programs like the case of industrial boilers or wood stoves. In addition, Emission Factor Database will be visited to see if appropriate factors relevant to our circumstances are provided. Also regional Emission Factors that are or will be developed under the GEF regional project on GHG inventories will be utilized if appropriate.
- 45. All the new input data utilized along with emission estimates will be *archived* using the same format as for the first inventory archive done under the GEF regional project on GHG inventories. Also the *Manual of Procedures* and *National Inventory Report* developed under the above project will be updated in the same line.

# II.3 GHG abatement analysis

#### II.3.1 The baseline

- 46. The first GHG emission abatement analysis for Albania is performed in the frame of the Albania's FNC. This analysis consists of development of GHG scenarios: (i) GHG baseline scenario and (ii) GHG abatement scenario. Projections for Albania's GHG abatement are made for the time horizon 1994-2020. Projections of GHG emissions performed for Albania are sector-specific ones. They are built up for all GHG source categories such as: energy & transport; LUCF; agriculture; waste, industrial processes and solvents. The GHG abatement analysis considers also three direct GHGs -- carbon dioxide, methane and nitrous oxide. The development of both scenarios is based even in a number of assumptions are based from their side on the macro-economic projections of the country as a whole, as well as in the development plans of the economic sectors taken in particular
- 47. Given that the baseline GHG emissions scenario forecasts the most significant share of CO<sub>2</sub> emissions [83%] will be released from the energy & transport activities, the team has decided to analyze the energy & transport sectors in detail, i.e. in a *quantitative* way. As per the other sectors, they are analyzed *qualitatively*.
- 48. The abatement GHG emissions scenario combines the emissions in the baseline scenario (reference scenario) with the changes (i.e., reductions) of emissions introduced by various abatement options being evaluated. Selection of measures for energy and transport sectors was made taking into account the actual situation of energy sector in Albania and key sources of GHG emissions and reference scenario of GHG emissions for energy and transport sectors.
- 49. GHG abatement measures / technology options identified under Albania's FNC have undergone a prioritization process through the Albania's TNA exercise carried out under Top-Up phase of Climate Change Enabling Activities. The TNA as a complex process is a continuation of the work already carried out or identified/recommended under Albania's FNC and through other activities to enhance technology transfer. This assessment of technology needs has been made through a sector-by-sector approach, starting with the energy sector which, according to the Albania's FNC has the most significant contribution to the overall GHG

- emissions inventory. The assessment covers also other sectors such as LUCF; agriculture; waste management and industrial processes.
- 50. Using the compiled information on alternative technologies for the priority sectors and sub-sectors and based on the ranking of the alternative technologies, top 3 to 4 technologies are considered as key ones for most of sectors under assessment. Once the key technologies are selected, the barriers are assessed along with the policy needs and actions. A package of project ideas for the key technologies is designed.
- 51. The tool used for development of energy & transport baseline emissions scenario was the *software* namely: Long-range Energy Alternatives Planning (LEAP)<sup>12</sup> (version 95). Concerning the non-energy sectors, the 1996 revised IPCC methodology is used for development of baseline emission projections. Exception is made for solvent use sector. The predictions for NMVOC emissions by the year 2020 have been made according to CORINAR methodology. The development of GHG abatement analysis for energy and transport sector is based on LEAP and GACMO<sup>13</sup> software. For the rest of sectors, the analysis has been more qualitative as the quantitative one was not possible
- 52. Base year *data* (data for the year 1994) for the development of the GHG baseline scenarios are identical to those of GHG inventory. Data for other years (1994-2000) and predictions on macro-economic indicators have been received from INSTAT and other relevant institutions/ministries already mentioned in GHG inventory section.
- 53. Having the GHG inventory as the starting point for the GHG abatement analysis and given the data gaps related to this inventory, gaps and uncertainties of the same nature were present to the abatement analysis exercise as well. Therefore attempts to reduce data gaps and level of uncertainty under the GHG inventory will bring in turn more accurate abatement analysis, i.e. more realistic predictions. The team lacked the necessary data to perform quantitative analysis for some technology options like: (i) Central Heating CH schemes; (ii) District Heating Systems (DHS); Small Scale Combined Heat and Power (CHP) and DHS in new urban areas.
- 54. The stocktaking team identified another gap related to the programming issue. In other words, in the course of the preparation of the Albania's FNC sector-specific scenarios and related national strategies and programs were not available for the sectors that have been under the focus of the GHG abatement analysis. This is not the case for the time being. There are many new strategies and action plans recently adopted by the Government of Albania that have their impact to the GHG abatement in Albania, therefore both scenarios (baseline and abatement scenario) need to be updated and improved.

#### II.3.2 Priorities / new areas of work under SNC

- 55. The GHG abatement analysis under the SNC will be sector specific, i.e. it will consider the following sectors: energy, agriculture, waste, LUCF, industrial processes and solvents. A special attention will be put under the energy and transport sector as significant contributors to the GHG emissions, already considered as priority categories under this thematic area.
- 56. The Baseline Scenario developed under the Albania's FNC will be subject of revision, update and adjustments in accordance with the new development conditions of the country and possibilities for future socio-economic development. The GHG inventory base year 2000 will serve as the starting point of the GHG analysis. The GHG abatement analysis and will go up to 2025, i.e., 5 years beyond the analysis carried out under FNC. There is also a need to update and revise all details and assumptions made. Assuming to have better and more improved GHG inventory due to data improvement, better inputs from more comprehensive

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<sup>&</sup>lt;sup>12</sup> LEAP is a computer-based accounting and simulation tool designed to assist policy makers in evaluating energy policies and developing sound, sustainable energy plans. It is developed by the Stockholm Environment Institute - Boston (SEI-B) with support from the United Nations Environment Program (UNEP) and other agencies.

<sup>&</sup>lt;sup>13</sup> GACMO is a GHG Costing Model, developed at the UNEP Center for Energy and Environment 01/28/05

national economic development parameters, more accurate assumptions for economic and demographic parameters, which are based from their side on the macro-economic projections of the country as a whole, as well as in the development plans of the economic sectors, more reliable and improved GHG scenarios for all relevant sectors will be developed.

- 57. The list of abatement options proposed for the abatement scenario for each sector will be *reviewed and updated* in the light of new developments and needs. Key sources identified and updated under the GHG inventory exercise will be considered while making the selection of technology options. The impact of specific emission reduction actions / options will be measured (quantitative at the possible extend) against the baseline scenario. The cost and benefit will be analyzed.
- 58. During stocktaking has been identified the need of analysis of other technology options / measures that are not considered before under previous studies but are relevant to current Albania's conditions and development context. They are identified as following:
  - District Heating Schemes, Central Heating Schemes and, Hot Water Supply (HWS)<sup>14</sup>.
  - Interconnection of natural gas to EU networks. This is relevant to the integration of Albania's energy sector to that of EU.
  - Quantitative analysis of GHG abatement for transport, agriculture, forestry and waste.
  - Revisiting and review of the stock of options / measures analyzed in quantitative manner under Albania's FNC and TNA in the light of the new development conditions (improved data and GHG inventory<sup>15</sup>, new strategies, energy prices and structure changes and shares of GDP);
  - There is a need to develop programs for implementation of those abatement options found as of negative cost of GHG reduction. Barriers, policy needs and stakeholder to be involved will be addressed into these programs.
- 59. Once the options have been identified, barriers assessed there is a need to select them for short and long term interventions. This process involves revisiting of priorities identified earlier in the light of barrier analysis. In the course of the selection process the team agreed to consider two distinct Tires of options/measures (Tier 1 and Tier 2):
  - Win-win options /measures that could be delivered / implement faster, cheaper and easier.
  - In a longer term, new options will become available which need significant resources and efforts.
- 60. The scenarios for energy, including transport sector will be still based on LEAP 2000 Software (the latest version). As per other sectors the team will explore on the possibility to utilize appropriate models/ software such as STAIR or COPATH for Agriculture if will be made available. IPCC Excel Spreadsheets will be utilized in case that no specific software will be available. Selection of abatement options will be done though a multi criteria analysis. For that purpose criteria will be set and a selection process will be done based in the scores. Type and respective weight for each criterion will be decided through consultations with different stakeholders and scores for each option will be found then.

#### II.4 Vulnerability and adaptation

#### II.4.1 The baseline

61. The very first assessment of Albania's climate vulnerability and adaptation options has been carried out under UNEP/Mediterranean Action Plan in 1995. The study has been very modest and covered the Albania's coastal area only. This assessment performed under IPCC guidelines of 1994 consisted on study of the expected climate changes and their impact on the relevant sectors. A more completed assessment of vulnerability and adaptation has followed. It was one of the main activities carried out under Albania's FNC project. This study covered the overall Albanian territory. It was focused on the assessment of expected climate impacts in

15 An improved GHG inventory is expected to be developed for time series: 1990-2000

<sup>14</sup> This option is partly considered under TNA. This is the case for Solar HWS.

- hydrosphere, natural and managed ecosystems, energy, tourism, health and sanitation, population. Official districts have been considered as base units, constrained within available data.
- 62. The overall work performed under Albania's FNC to assess the vulnerabilities has consisted of: (i) Evaluation of climate variability and trends during baseline period; (ii) Analysis of environmental and socio-economic situation in the absence of climate change; (iii) Development of climate change scenarios for Albania; (iv) Projections of environmental situation affected by climate change. (v) The factors that are directly affected by climate (such as river flows, runoff, energy needs, etc.) (vi) Projections of socio-economic situation affected by climate change.
- 63. As a climatologic baseline a 30-years 'normal period' as defined by WMO has been accepted. The period 1961-1990 is selected as a baseline to study the influence of climate on the relevant sectors. Three time horizons were considered: years 2025, 2050 and 2100. Although the year 2100 was fixed as upper horizon, in some cases such as in social-economic assessments, projections were not reliable for more than a few years ahead. For these cases (energy, population, etc.) the team has considered the year 2025 as the upper level. For others (natural ecosystems, forestry, etc.) that have longer response, the vulnerability assessment has been extended up to 2050 and 2100 horizons.
- 64. A long list of sector-specific adaptation options is developed by taking into account two main objectives identified, as following: (i) promotion of sustainable development, and (ii) the reduction of vulnerability (IPCC 1994).
- 65. In the course of the Top-Up phase the adaptation team has been focused on TNA for coastal adaptation, already assessed as the most vulnerable under the Albania's FNC. The assessment process was sector specific one and has consisted on the review the evaluation for technology for the following sectors: (i) water resources, (ii) agriculture, (iii) forestry, (iv) human health, (v) tourism and settlements.
- 66. Using likely the same criteria as for abatement technologies 2-3 top adaptation options / technologies have been considered as key ones. Once key technologies were selected, barriers were assessed along with actions needed. Concrete actions were proposed in the form of the project ideas.
- 67. The assessment of vulnerabilities and adaptation options is carried out in accordance with the IPCC guidelines (IPCC, 1994). The scenarios of likely climate change for Albania were prepared by using MAGICC/SCENGEN software as recommended by NCSP.
- 68. A variety of analytical methods in climate impact assessment (CIA) have been selected. Among others, worth mentioning were: experimentation, impact projections, empirical analogue studies and expert judgment. The LEAP model has been used to evaluate the likely impact of climate change on energy. A simple statistical model has been used in the runoff assessment. For the other sectors, statistical models were developed or empirical analogues have been used (regional analogies of present climate and regional analogies of future climate). The need to use socio-economic scenarios or integrated system models were highly stressed.
- 69. All climatologically data have been received from the Hydro-metrological Institute. Data regarding relevant sectors were received from other relevant institutions/ministries like National Agency of Energy, Ministry of Environment, Ministry of Energy and Industry, Ministry of Transport, the National Directorate of Forestry, and different data bases, surveys and studies prepared by International organizations, Universities and different NGOs.
- 70. Lack of sufficient data due to lack of systematic monitoring process was a major constraint that generated limitation to the study of vulnerability. The team has been unable to develop baseline scenarios for sectors like agriculture, livestock, tourism, and health as their development before '90s was dictated by political factors within a centralized economy.
- 71. Lack of explicit guidelines from UNFCCC for vulnerability and adaptations has made the process rather difficult. Other methodological constraints like the *lack of a finer resolution* for application of MAGIC /SCENGEN, lack of methodology for simulation of extreme weather events and lack of models on cost/benefit analysis has generated limitations to the study.

II.4.2 Priorities / new areas of work under SNC

- 72. The stocktaking team agreed to narrow the focus of the assessment to be carried out under the SNC to an area with subset of vulnerabilities, where there is both high vulnerability and a likelihood of significant impacts of climate change and vulnerability. The focused area along with the sectors under analysis will comprise a compound system that will be under the focus of analysis. Three specific areas have been analyzed under the stocktaking exercise. They are (i) *Drini river Cascade*; (ii) *Shkumbini River Basin* (8<sup>th</sup> corridor); (iii) *Durres-Kukes Highway*
- 73. A set of selection criteria of equal weight was developed and agreed through the broad consultations with stakeholders. They were: (i) Scale of vulnerability; (ii) Relevance to national development priorities; (iii) Development benefits; (iv) Data availability. Each member of the evaluation team has independently allocated one of the following scores: (i) High (+++); Medium (++); Low (+). The final result of the selection criteria was the selection of the area of Drini River cascade. The summary matrix of evaluation is presented in Appendix C.
- 74. The selected area is wide spread, from east to west of Albania putting together an interesting topographic diversity such as mountains, gorges, fields, coast, seashore. The Drini River cascade originates from Kukës up to the coast, to its delta (Lezha). Design of an Adaptation Policy Framework (APF) for the selected area will be the main outcome of the vulnerability and adaptation exercise under the SNC. This will facilitate the process of mainstreaming the climate vulnerability and change and adaptation response to the national planning and policy.
- 75. The team has agreed the assessment of vulnerability will be sector –specific and will consider the following related sectors, such as: (i) water resources; (ii) agriculture; (iii) energy; (iv) forestry; (v) tourism; (vi) population and settlement. A special attention will be put to water resources and their respective impact to the hydroelectricity produced, as it is known that more than 95% of electrical energy in Albania is produced from hydro sources. Climate change is expected to affect seasonally the amount and flow of rivers, which in turn is expected to affect electricity supply generated annually by hydroelectric and its timing. An assessment will be done on of the impact of climate change to the electrical energy supply for the selected area. The hydropower cascade of Drini River has a total exploitable capacity of 1.7 GW and a generation potential of 6.8 TWh, accounting for the bulk of Albania's hydroelectric potential.
- 76. The assessment will integrate also other sectors like agriculture (irrigation systems and cereals production), forests (erosion) etc, as it is known that adaptation in one sector often has consequences for others therefore, an integrated assessment will be done at the extend possible. The area has potential resources from the economic development point of view (agriculture, livestock, mining, tourism, etc.). The Shengjini beach is well known for its attractive touristy values especially during the summer time. The selected area brings together diverse demographic processes and social phenomena, such as unemployment, poverty, emigration, social conflicts, etc. In some sub-areas extreme cases of such infant mortality, poverty, rural and exodus are observed. The coastal part of the selected area Lezha field (plain) is known for inundations after heavy rains that are becoming more and more frequent. These evens that are registered as extreme ones have caused serious damages mainly in agriculture, tourism and settlement. Lack of infrastructure in this area has triggered the situation.
- 77. The emphasis will be put on the current conditions i.e. current *climate risk and vulnerability* and on this basis the future vulnerability will be predicted. This part of the assessment also includes an assessment of the scope and effectiveness of adaptation measures that may have been implemented. Three baselines will be developed for the selected area: (i) climate baseline; (ii) environmental baseline and (iii) socio-economic baseline.
- 78. Current vulnerability and climate impact to sectors will be assessed through the use of some indicators: For the climate system the indicators will be temperature (seasonal), precipitation (seasonal), wind, cloudiness and sunshine duration. The average change in mean runoff will be selected as the main indicator for water resources. For energy sector the main indicators would be of energy demand and supply. Forests area and eroded land would be the main indicators to assess the forests sector. Plant production, irrigation systems, cattle breeding poultry production and would be as indicators for agriculture/livestock. Coastal tourism under

- the selected will be assessed in terms of the impact of the sea level rise and the rise of temperatures. Settlements will be assessed in terms of impact of droughts and flooding into inhabitant's wellbeing.
- 79. Designing of an Adaptation Strategy Paper based in Adaptation Policy Framework (APF) for the selected area will be the main outcome of the vulnerability and adaptation exercise under the SNC. This will facilitate the process of mainstreaming the climate vulnerability and change and adaptation response to the national planning and policy. The strategy paper will outline adaptation measures and plans of implementation (what); the way of implementation and resources needed (how); time frame (when); responsible parties for its implementation (who). It will serve as the basic document that will create the momentum for a follow-up of this process, i.e. addressing climate variability and change to the national planning and policy.

# II.5 Constraints and gaps, and related financial, technical and capacity needs

#### II.5.1 The baseline

- 80. Albania's FNC contains a separate chapter that addresses the problems, gaps, constraints that have faced the NC exercise, and respective needs. The information has been provided in thematic-area-specific manner. The constraints and gaps have been assessed in terms of institutional, technical, methodological and resource availability.
- 81. The issue of gaps and constraints has not been explicitly highlighted into the TNA report. The report addressed the needs for technologies that help GHG abatement and adaptation to climate change. Financial, institutional and policy needs are addressed for technology options proposed under TNA. Most of these needs have been addressed through the project ideas.

# II.5.1 Priorities / new areas of work under SNC

- 82. Although some of the information on gaps and needs may be provided under various sections, it would be necessary to further elaborate under this section gaps and needs that would be identified.
- 83. After the completion of technical components of the SNC an in-depth analysis of all types of constraints and gaps (methodological, technical, financial) will be done. A special attention will be paid to the *previously identified gaps and needs* under the previous activities such FNC, Top-Ups and Regional project on GHG inventors, explanations whether and how they have been addressed under the SNC and their status.
- 84. New gaps and constraints while undertaking the SNC if any, will be identified and related financial and technical capacity needs. In addition, gaps and constraints while implementing the UNFCCC will be reported. The information will include constraints and gaps associated with the complication and improvement of NC in continuous basis. Also needs, gaps and constrains related to the technology transfer will be provided. This section will contain information on financial resources and technical support provided by GEF and other multilateral/bilateral contributions.

# II.6 Other information relevant to the National Communication process

#### II.6.1 The baseline

85. Regarding other information relevant to NC Albania's FNC contains also a separate chapter regarding Public Awareness, Education and Training. This chapter highlights these issues as relevant and crosscutting ones to the NC preparation exercise. The most interesting finding from this chapter is the relatively low level of awareness on climate change and education. The training component has moved much more forward by building up a strong team for performing NC and related studies.

# II.7 Priorities / new areas of work under SNC

86. This section will provide information on any steps that have been taken to mainstreaming climate change into national development agenda, i.e., steps to integrate climate change into socio-economic and environmental

- policies. Activities related to technology transfer as indicated under Article 4/CP7 will be reported under this section as well, for example how Albania is addressing activities related to the transfer of, access to environmentally sound technologies and know-how.
- 87. The above section will provide information on climate change research and systematic observation systems. The above information will consist of the status of national programs for research and systematic observation, type of observation (metrological, atmospheric), level of participation into global research systems, needs and priorities for systematic observations.
- 88. Information on Albania's participation in the regional / sub-regional or global research networks and programs will be provided.
- 89. A special attention under this section will be put on the issue of, training, education, public awareness capacity building and information and, the steps that Albania has taken to implement Article 6 of the UNFCCC and respective part of Buenos Aires Plan of Action. The information on public awareness, training and education will consist on the institutional (i) framework for implementation of Article 6 of the UNFCCC; (ii) level of awareness; (iii) implemented or/and ongoing activities for education, training, public awareness (iv) public access to information; (v) sub-regional, regional, and international cooperation to promote education, training, and public awareness.
- 90. Regarding capacity building the section will provide information on: (i) Status of the capacities built and developed; (ii) needs and options on capacity building and development; (iii) dissemination and sharing of information on capacity building activities; (iv) status of activities and level of participation in Southeast cooperation with other institutions.
- 91. Information is an essential part that along with capacity building, public awareness and training remains a crosscutting issue. This section will include information on: (i) efforts made to promote information sharing; (ii) participation in and contribution to information networks; (iii) access to and use of information technologies for information exchange.

#### II.8 Lessons learnt and good practices

- 92. The preparation of the NC was a *learning-by-doing* exercise that served for building and developing national capacities to compile NC to the CoP of the UNFCCC.
- 93. The maintenance of the expert teams involved in NC was critical for the success of this process. This approach along with extension of the expert teams though training the trainers is a step towards sustainability of the process. Starting with inventory and then following with GHG abatement analysis by engagement of the same team of experts into both activities. This is a lesson learnt during these exercises. Without GHG inventory preparation skills and input data the work for GHG abatement could even not start.
- 94. Technical support provided by UNDP-GEF NCSP through thematic workshop, help desk, newsletters and peer review of all components of the NC was critical for the quality improvement of the National Communication.
- 95. Partnership with other UNDP programs and other national public institutions to address climate change issues into development agendas is a good practice already identified. Albania's Government has taken clear measures through its newly adopted National Energy Strategy for promotion of affordable alternative energy sources to support them for meeting space heating energy demand and most important energy services. In the frame of the MDGs process and mainstreaming, the Climate Change Program naturally linked up national energy planning, poverty and climate change issues. The National Energy Strategy has already integrated many findings and outputs from the Climate Change project, which is a significant indicator of raised awareness of policy makers into climate change. In addition, the current program is helping MDG process in achieving the relevant targets.
- 96. Working in synergy with other GEF climate change or non-climate change projects was an efficient way of getting good and desired results. This is the case for GEF Regional project on GHG inventories, NCSA, GEF-Small Grants Program, and UNDP Energy Efficiency Project.

97. National Communication exercise has been seen not only as a tool to meet the commitments that Albania has as a Party to the UNFCCC but also as *leverage for programming purposes*. Project proposals and/or ideas have been identified under FNC/TNA as follow up of this exercise. This is the case of two proposals, one on utilization of solar energy for Hot Water Supply and second, thermal insulation of the buildings. Both are potential projects to be funded mainly by GEF. Arrangements have been started for formulation of the Project Development Facility.

# Appendix B: Technical components of the project proposal

#### 1. Background/Context

- 98. The United Nations Framework Convention on Climate Change (UNFCCC) was signed in June of 1992 at the Rio "Earth Summit". The ultimate objective of the Convention is to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate. By becoming Parties to the Convention, both developed and developing countries accepted a number of commitments which include, *inter alia*, those to:
  - Develop, periodically update, publish and make available to the Conference of the Parties (CoP) of the UNFCCC national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol;
  - Formulate, implement, publish and regularly update national and, where appropriate, regional programs containing measures to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, and measures to facilitate adequate adaptation to climate change; and
  - Communicate to the CoP information related to implementation of the Convention, in accordance with Article 12.
- 99. Since January 1995, Albania has been a Party to the UNFCCC, having the status of a non-Annex 1 country. Albania has recently joined the Kyoto Protocol with the status of Annex B. Having such a status Albania lacked financial resources to prepare its first national communication to the CoP. This has prompted the government of Albania to request assistance from UNDP/GEF which was made available in 1998 through the project: "Enabling Albania to prepare its First National Communication to the CoP of the UNFCCC".
- 100. The preparation of the Albania's First National Communication (FNC) along with a National Action Plan (NAP) for climate change mitigation was the first accomplishment of the Government of Albania to the CoP of the UNFCCC. It was officially submitted to the UNFCCC secretariat in September 2002 and launched in November 2002 at COP 8 in New Delhi, India. At the start of the project in 1998, a climate change office was established in the Ministry of Environment. This office serves not only for the UNDP/GEF project implementation but is responsible for the implementation process of the UNFCCC, serving as the National Focal Point for the UNFCCC and possible nucleus for a national UNFCCC secretariat/committee in the future. A Program Steering Committee has also been established which oversees all projects and activities within the framework of the UNFCCC. This informal Committee includes high-level participants from all major government and non-government stakeholders. A technical level climate change national team, with three thematic working groups (respectively GHG emission inventories, GHG abatement measures and vulnerability and adaptation), has been established.
- 101. The Government of Albania has always been very active in the climate change negotiations. In 2001, Albania became a member of the UNFCCC informal consultations group CAMCA (Central Asia, Moldova, Caucasus and Albania) established during the COP 6 in 1999.
- 102. As a non-Annex 1 country, Albania does not have any commitments to reduce certain amounts of GHG emissions as Annex I countries have. The NAP aims at reducing GHG emissions growth rates. The abatement scenario foresees the introduction and implementation of different options mainly focused on energy saving and energy efficiency. The NAP also sets out measures to be applied in order to adapt to the expected climate changes.
- 103. In Albania, per capita emissions of GHG are relatively low due to the fact that 94 % of electric power is generated by hydro sources. However, emissions per GDP are relatively high due to high intensity and low degree of efficiency of the energy. The main source of GHG emissions is the energy sector, which accounts for 44% and forests (fuel wood), which contribute 21%, of the total. Based on the predictions for future emissions, if no GHG abatement measures are taken it is expected that by 2020 total GHG emissions will rise from 7061.45 Gg in 1994 to a level of 37.653 Gg.

- 104. Albania is a coastal country with a fragile environment lying on the Mediterranean. As such, it is vulnerable to global climate change. The future climate scenarios for Albania predict changes such as increased temperatures, decreased precipitation, and reduction of water resources and loss of arable land.
- 105. The Albanian energy sector is facing serious challenges. Demand has increased significantly since 1990, and supply has not been able to grow apace. In the short term, imports will continue to meet the surplus demand. A positive development is the preparation of the recently approved National Energy Strategy. This strategy includes the development over the coming decade of several large-scale thermo-electric plants. In recognition of Albania's participation in the UNFCCC, energy sector planners agreed to use modern, lower GHG emissions technologies, although it is a more expensive option.
- 106. After the completion of the FNC, Albania secured 'Add-on' support from UNDP/GEF. Through this project, the climate change team that prepared the FNC is now preparing a Technology Needs Assessment (TNA). A national report on TNA is competed. The TNA report provides a self-assessment of the national needs for both types of technologies GHG abatement technologies and adaptation technologies. The above assessment consists of the prioritizing of key abatement and adaptation technologies for GHG relevant sectors and coastal zone, under a set of evaluation criteria agreed by experts and stakeholders consulted. After the selection of key technologies, a package of project proposals, addressing each selected technology option is developed.
- 107. GEF is also supporting a regional project to develop capacity to prepare GHG inventories. This project covers 12 countries from East Europe and Former Soviet Union, including Albania. The project will build on the expertise gained during the preparation of First National Communications. By strengthening institutional capacity to prepare inventories and establishing a trained, sustainable inventory team, the project will help countries to reduce uncertainties and improve the quality of inventories for subsequent National Communications. This, in turn, will allow countries to improve national strategies for reducing greenhouse gas emissions.
- 108. Donors and international collaboration in the climate change sector has been limited so far. During 2001-2002, Albania participated in a sub-regional project namely: "Building capacities on climate changes in Balkan region", funded by the Greek Ministry of Environment and Physical Planning. This project aimed at raising awareness and building capacities to consider and address climate change issues.

### 2. Project Strategy

- 109. The goal of this project is to prepare the Albania's Second National Communication through building on the previous work carried out under Albania's First National Communication, Technology Needs Assessment, GEF regional project on GHG inventories and other climate change related activities which *lays a sound ground and baseline* for developing such a product. Working with priority areas / issues selected under the stocktaking exercises would be under the main focus. Synergies with other climate change ongoing activities such as with GEF regional project on GHG inventories will be utilized. In more details, many outputs coming from this project such as the soft methodology to fill data gaps; QA/QC plan; National Manual of GHG Inventory; Archive of GHG inventory estimates and, the National Strategy for improvement of the GHG inventory will be utilized under the SNC exercise. As a result of such strategy the components prepared under Second National Communication will be of a higher quality than those prepared under First National Communications.
- 110. The strategy of the project is to *involve expert teams* already established under Albania's FNC/TNA exercise and institutions that have already been put in a roster mainly for the purpose of facilitation of administrative arrangements. New experts and institutions should be invited to join the teams after provision training-of—trainers on different thematic areas. This strategy will enhance the sustainability of the teams and the process of preparation of national communication. Participation in trainings and workshops to be organized from UNFCCC Secretariat, UNDP-GEF NCSU etc; The SNC preparation will rely on existing expertise in the country. Mobilization of local experts is a strategy for sustaining the knowledge in the related areas. This will also foster internal networking of national experts. The project will hire a short-term international consultant if and when necessary. Albania's experience in *institutional and technical capacity* building and

development regarding National Communication should be *sustained and leveraged* to support the preparation of the SNC exercise. This experience will be utilized for taking highly into consideration climate change issues into national planning and policy and for the programming purposes such as promotion of innovative financing schemes for climate friendly technology transfer and development in the country.

- 111. The strategy of *partnership* with governmental institutions, international organizations, academia and NGOs, that was found to be successful from the experience with Albania's FNC/TNA will be utilized and improved by bringing more stakeholders on board and building an emerging partnership with the private sector that is crucial for promoting investments of cleaner technologies in the country. The role of the Project Steering Committee will be critical to the success of this strategy.
- 112. The initial *emphasis* of the project will be on GHG inventory and assessment of vulnerability for the selected area (*Drini cascade*). Building on results of these studies, the options to mitigate climate change by addressing GHG emissions and facilitating adaptation to climate change for the selected area will be analyzed and reviewed in the light of country development context. Gaps, uncertainties and constraints along with other information related to the UNFCCC will be addressed as indicated by 17/CP8. Finally, the information gained during the project will be communicated to the CoP in the form of the Second National Communication of Albania

## 3. Project Development Objectives

- 113. The **development objective** of this project is to develop and enhance national capacities and facilitate the process of mainstreaming climate change issues into national planning and policy<sup>16</sup>, thus enabling the country to deal with climate change and consider it not only as environmental issue but as an issue of sustainable development.
- 114. The project will contribute to the global effort to better understand the sources and sinks of greenhouse gases, potential impacts of climate change, and effective response measures to achieve the ultimate objective of the UNFCCC, which is "to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".
- 115. The project helps to identify and to the extent feasible, develop projects related to climate change and mitigation of greenhouse gases; projects which may be eligible also for further funding or co-funding by GEF other multilateral or bilateral organizations and eligible for funding under Clean Development Mechanism.
- 116. In addition, the project will contribute to enhance general awareness and knowledge on climate change related issues in Albania, and to strengthen the dialogue, information exchange and cooperation among all the relevant stakeholders including governmental, non-governmental, academic, and private sectors in accordance to the Article 6 of the UNFCCC and Implementation of Buenos Aires Plan of Action.
- 117. The **project objective** is to enable Albania to prepare and submit its Second National Communication to the CoP of the UNFCCC in accordance to its commitments as a non -Annex 1 Party to the Convention as mandated by Article 4 and 12 of this Convention.

#### 4. Project Activities:

#### 4.1. National Circumstances

118. Information provided on National Circumstances under Albania's FNC was relevant to the thematic areas covered by National Communication, aiming at giving a clear and full picture of geography, climate, natural resources, relevant economic sectors, resources and infrastructure. In addition, Albania's TNA provides some updates of the sectors relevant to TNA process. Given that the inventory base year was the year 1994,

<sup>&</sup>lt;sup>16</sup> This is addressed as a priority action to the NSSED. For further information refer to the NSSED Priority Action Plan (2004-2007), page 202.

the relevant inventory sectors were analyzed around this year. For majority of sectors /areas the reporting time frame was around 1990-1999 although there were many cases that due to the lack of data and information the analysis was made for fewer years (1995-1999). The information provided so far on National Circumstances *lacks* country development context; sector profile including policy and legal framework description of institutional arrangements relevant to the preparation of NC on regular basis. Knowing the very drastic nature of change of many of relevant economic sectors in the course of the years 1990-2000, there is a *strong need to update* the sectors profiles, especially for energy, transport, agriculture, land use change and forestry (LUCF,) industrial processes and waste for such a time frame.

119. This activity will crosscut among other activities. Each team will be responsible in providing relevant national circumstances section, which will be summarized at the end. Referring to 17/CP8, the National Circumstances chapter under Albania's SNC shall contain updated and additional information on all items as indicated by this decision. The geographic profile might need only some minor additions such as share of land covered by surface water, international waters that Albania shares with other neighbors and update on population changes and distribution during the recent years. There is a need to update the climate profile with recent extreme weather events and data on temperature and precipitation for the period 1990-2003, which is additional to the FNC baseline (1960-1990). As per the natural resources the majority of the updated information will be provided on forests, pastures and land use change along with the most recent legal and policy framework. The review and update of the information on economic and sector profile will mainly consist on the update regarding the newly adopted strategies such as NSSED, PRSP, MDGs, SAA, National Energy Strategy, National Strategy for Development of non-Food Industry Sector, Strategy for Development of Agriculture, and Strategy for Development of Tourism etc. Update of the information on infrastructure such as: population; public health; education; environment will consist on the update of the new trends of development for each item under this section. The information on institutional arrangements relevant to the implementation of the UNFCCC and preparation of NC would be quite new as it was also missing to the Albania's FNC.

Output 4.1.1: National circumstances reviewed, updated and described.

#### Activities

- 1. Validate the gaps of information identified under stocktaking exercise in the light of recent /new developments, if any. Responsible party: NPM, TLs, Information & PA Assistant.
- 2. Identify the respective sources of information and establish links to get these data as necessary. Responsible party: NPM, TLs, Information & PA Assistant.
- 3. Collect data and information from different sources in the course of the project implementation. Responsible party: NPM, TLs, Information & PA Assistant, National Experts.
- 4. Fill the gaps, update and add the new information in accordance to the TORs for National Circumstances section of the Albania's SNC. Responsible party: NPM, TLs, Information & PA Assistant, National Experts.
- 5. Draft national circumstances sections that would be respectively relevant to each thematic area. Responsible party: TLs, Information & PA Assistant, and National Experts.
- 6. Draft the National Circumstances section under the SNC in compliance with the guidelines set by 17CP/8. Responsible party: NPM, TLs, Information & PA Assistant.
- 7. Circulate the National Circumstances section for comments receive comments and incorporate them into the report. Responsible party: NPM, Information & PA Assistant.
- 8. Finalize the National Circumstances section under the SNC. Responsible party: NPM, Information & PA Assistant

#### 4.2: GHG inventory:

- 120. Albania's first GHG inventory covers all sources and sinks as well as all gases as mandated by 10/CP2. Estimates of key sources were provided as well. In addition, indicators such as CO\_GDP and CO\_Capita were estimated mainly for comparability purposes. Estimates have been made for the base year 1994. Time series (1990-1994) were used ONLY for the category of CO<sub>2</sub> emissions from fuel combustion. All activity data concerning each sector were national. As regards emission factors, in most of the cases they represent default factors provided by IPCC 1996 Revised Guidelines. The major technical constraint that has faced the inventory process is related to the activity data gaps, which has brought a high uncertainty level of estimates (17.03%). Activity data gaps have mainly been related to the data availability (disaggregated activity data or inconsistency with IPCC format) and their variability after 90s. In most of the cases, activity data reported were at aggregate form or inconsistent with the IPCC format. Lack of reporting from the private sector due to the lack of respective legislation is identified as a significant constraint for data gathering.
- 121. Attempts to improve the quality of GHG inventory have been made through the UNDP-GEF regional project on GHG inventories. Improved estimates of GHG emissions are expected mainly due to the majority of outputs of the GEF regional project on GHG inventories. A national strategy aiming at improvement of quality of GHG inventories is drafted. The strategy is focuses on activity data collection and identification of methods/approaches for reducing the activity data gaps. A plan that can be put into place for SNC is drafted as well. It consists on the development of a *soft methodology* for filling the Activity data gaps that would be implemented during the SNC preparation. Survey method stands in the heart of such methodology. It will be used for priority categories selected from the key source analysis in order to fill the activity data gaps, which do not exist in disaggregate form. This is the case for enteric fermentation, fuel combustion in industry, mobile sources, and fuel wood, solid wastes.
- 122. Albania 's second national GHG inventory will cover all sources and sinks as well as all gases as mandated by 17/CP8. In addition to those reported under FNC estimates of new gases such as HFCs, PFCs and SF<sub>6</sub> will be provided. Estimates of the key sources, sensitivity analysis and uncertainty level will be provided. CO<sub>2</sub>/GDP and CO<sub>2</sub>/Capita would be estimated mainly for comparability purposes. Estimates under Albania's second national GHG inventory shall be made for the base year 2000. Re-estimates for the year 1994 will be made as well. Given the variability of activity data after '90s the team has agreed to develop time series for a 10-year time frame (1994-2000) in order to provide a clear view of the emission trends. This will also create a clear background for the abatement analysis.

# Output 4.2.1: The GHG inventory team maintained and strengthened.

#### Activities:

- 1. Identify and mobilize national experts in targeted sectors and areas of relevance. Responsible party: TL;
- 2. Review the existing information on the first GHG inventory already archived and documented in the GHG Inventory Manual of Procedures. Responsible party: TL, National Experts.
- 3. Identify all new sources of information for filling data gaps. Responsible party: TL, National Experts

Output 4.2.2: Methodologies for GHG inventory estimates analyzed, selected and validated.

#### Activities:

1. Analyze the acceptability of the available methodologies of estimates under the Albania's specific conditions for each category. Responsible party: TL, National Experts

- 2. Decide on the Tier level based on the decision trees as guided by IPCC GPG. Responsible party: TL, National Experts.
- 3. Decide and select the methodology for estimates of emissions from the new group of GHG gases such as HFCs, PFCs and SF<sub>6</sub>.
- 4. Decide on the source categories to which surveys for filling data gaps will be carried out. The questionnaires are developed under the GEF regional project on GHG inventories. Responsible party: NPM, TL, National Experts.
- Review and update the QA/QC plan developed under the regional project on GHG inventories. NPM, TL.

#### Output 4.2.3: GHG inventory data collected

#### Activities:

- 1. Review available activity data already archived under the GEF regional project on GHG inventories that are already archived. Responsible party: TL, National Experts
- 2. Identify new activity data needed for estimates of GHG emissions for 1994-2000. Responsible party: TL, National Experts
- 3. Identify possible sources of data for estimates of GHG emissions for 1994-2000. Responsible party: TL, National Experts
- 4. Collect the necessary activity data from the available sources. Responsible party: TL, National Experts.
- 5. Utilize the methodology developed under the GEF regional project to fill the data gaps.
  - a. Undertake surveys to get the data that does not exist for the year 2000 for those categories considered as priority ones<sup>17</sup> such as: enteric fermentation, fuel consumption from mobile sources, fuel combustion in industry, fuel wood collection in rural areas, solid wastes. Use interpolation method for getting the data for 1994-2000. Responsible party: TL, National Experts
  - b. Find ways for getting data on coal, oil and gas production, refining and transportation from private companies for the year 2000 and use interpolation method for 1994-2000.
- 6. Decide on EFs to be utilized. Analyze the suitability of Emission Factors developed under the GEF regional project on GHG inventors to Albania's circumstances. Identify national studies that can provide EFs. Responsible parties: NPM, TL, National Experts.
- 7. Identify data gaps, if available. Responsible party: TL, National Experts.

Output 4.2.4: A completed national inventory of anthropogenic greenhouse gas emissions by sources and removals by sinks for 2000 following the guidelines adopted by the CoP (17/CP8) developed. Time series 1994-2000 developed.

#### Activities:

- 1. Re-estimate GHG emissions inventory for 1994. Responsible party: TL, National Experts.
- 2. Estimate the GHG emissions inventory for 2000 and develop time series for 1994-2000. Responsible party: TL, National Experts

<sup>&</sup>lt;sup>17</sup> Key source categories are considered as priorities.

- 3. Prepare a draft inventory of anthropogenic greenhouse gas emissions by sources and removals by sinks for 2000 and time series for 1994-2000 following the guidelines adopted by CoP. Responsible party: TL, National Experts.
- 4. Develop key sources analysis (year 2000) and sensitivity analysis (years 1994-2000) as guided by IPCC GPG. Responsible party: TL, National Experts.
- 5. Develop a key sources inventory for 2000. Responsible party: TL, National Experts.
- 6. Undertake uncertainty assessment as guided by GPG IPCC. Responsible party: TL, National Experts
- 7. Circulate the inventory for internal review as part of QA/QC plan. Responsible party: NPM, TL, National Experts.
- 8. Technical peer review performed as part of QA/QC plan. Responsible party NPM, TL, NCSU.
- 9. Organize a national workshop to present findings from the GHG inventory exercise and get more comments. Responsible party NPM, TL.
- 10. Incorporate comments received from the review process. TL, National Experts.
- 11. Finalize the inventory to be submitted as a part of the SNC of Albania. NPM, TL, National Experts.

#### 123. Output 4.2.5: GHG inventory data and estimates documented and archived

#### Activities:

- 1. Archive activity data, emission factors and estimates to the template developed under GEF regional project on GHG inventories. Responsible party: TL, National Experts, and Information & PA Assistant.
- 2. Update the Manual of Procedures and National Inventory Report with new GHG inventory data and estimates. Responsible party: TL, National Experts, and Information & PA Assistant

#### 4.3. Programs containing measures to mitigate climate change

- 124. The first GHG emission abatement analysis for Albania performed in the frame of the Albania's FNC consisted on development of two GHG scenarios: (i) GHG baseline scenario and (ii) GHG abatement scenario. Projections have already been made for the time horizon 1994-2020 and were sector-specific ones. They were built up for three direct GHGs and all GHG source categories such as: energy & transport; LUCF; agriculture; waste, industrial processes and solvents. Energy and transport have been analyzed in quantitative manner. A cost-benefit analysis has been carried out for such sectors. The rest of the sectors are analyzed qualitatively. Selection of measures for energy and transport sectors has been made taking into account situation of energy sector at that time and key sources of GHG emissions. The tool used for development of energy & transport emissions scenario was the LEAP version 95.0 for baseline scenario and GACMO for abatement one.
- 125. GHG abatement measures / technology options identified under Albania's FNC have undergone a prioritization process through the Albania's TNA exercise. The TNA was a continuation of the work carried out under Albania's FNC and other related activities. This assessment of technology needs has been made through a sector-by-sector approach, covering energy, LUCF, agriculture, waste management and industrial processes. A range of 3 4 technologies has selected under a multi-criteria analysis. Designing a package of project ideas for the key technologies was part of the TNA exercise

- 126. Having the GHG inventory as the starting point for the GHG abatement analysis and given the data gaps related to this inventory, gaps and uncertainties of the same nature were present to the abatement analysis exercise as well. The team lacked the necessary data to perform quantitative analysis for some technology options like: (i) Central Heating CH schemes; (ii) District Heating Systems (DHS); Small scale Combined Heat and Power CHP and DHS in new urban areas. In the course of the preparation of the Albania's FNC sector-specific scenarios, related national strategies were not available for the sectors that have been under the focus of the GHG abatement analysis. There are many new strategies and action plans recently adopted by the Government of Albania that would have their impact to the GHG abatement in Albania, therefore both scenarios (baseline and abatement scenario) need to be updated and improved.
- 127. The GHG abatement analysis under the SNC will be sector specific, by covering the same sectors as previous studies but putting a high emphasis under energy and transport sector which contribute with a significant share to the Albania's overall emissions. The Baseline Scenario developed under the Albania's FNC will be subject of revision, update and adjustments in accordance with the new development conditions. The GHG inventory base year 2000 will serve as the starting point of the GHG analysis. The GHG abatement analysis and will go up to 2025, i.e., 5 years beyond the analysis carried out under FNC. There is also a need to update and revise all details and assumptions made. The list of abatement options proposed for the abatement scenario for each sector will be reviewed and updated in the light of new developments and needs and key source categories. The impact of specific emission reduction actions / options will be measured (quantitative at the possible extend) against the baseline scenario. The cost and benefit will be analyzed. Criteria of prioritization will be revisited and updated as well. In the course of the selection process the stocktaking team agreed to consider two distinct Tires of options/measures (Tier 1 and Tier 2) as following:
  - Win-win options /measures that could be deliver / implement faster, cheaper and easier.
  - Long term options that need significant resources.
- 128. The scenarios for energy, including transport sector will be still based on LEAP 2000 Software (the latest version). As per other sectors the team will see on the possibility to utilize appropriate models/ software such as STAIR or COPATH for Agriculture. IPCC Excel Spreadsheets will be utilized in case that no specific software will be available. Selection of abatement options will be done though a multi criteria analysis

Output 4.3.1: Necessary data and relevant information for scenario development collected analyzed and fend into the scenario development.

#### Activities:

- 1. Consider estimates of GHG inventory for the base year 2000, which will serve as starting point for the analysis of the GHG emissions towards 2025; Responsible party: TL and, National Experts.
- 2. Develop a comparative analysis of figures /estimates obtained under the GHG Inventory for 2000 to those figures forecasted for the same year (2000) under Albania's First National Communication. Define the *uncertainty level* for such a case and take it into account for the scenario development/update. Responsible party: TL and, National Experts.
- 3. Collect all relevant macro-economic data and set assumptions to be made for the purpose of emission scenario development. Responsible party: TL, Information and PA Assistant and, National Experts.
- 4. Assess at what extend GHG abatement measures (if any) are undertaken (if so) into all adopted National Strategies and Action Plans. Responsible party: NPM, TL, Legal expert, PSC, National Experts.
- 5. Review the status of the relevant policy and legal framework in cooperation with all relevant Ministries. Responsible party: NPM, TL, Legal expert, National Experts.

6. Process the collected data and make them ready as required by the software that are going to be utilized for the purpose of scenario generator. Responsible party: TL, Information and PA Assistant and, National Experts.

#### Output 4.3.2: A revised GHG baseline scenario developed.

#### Activities:

- 1. Develop a revised baseline GHG emission scenario for energy & transport for 2000-2025 by using the software LEAP (version 2000). Responsible party TL, National experts.
- 2. Develop a revised baseline GHG emission scenario for the rest<sup>18</sup> of sectors (non-energy ones) for 2000-2025 by using STAIR or COPATH for agriculture and IPCC for the rest. Responsible party TL, National experts.
- 3. Identify any difference / change to the GHG baseline scenario developed under Albania's FNC, if any and, explain the reasons for such differences. Responsible party TL, National experts.

Output 4.3.3: The tier of GHG abatement measures / technology options revisited and revised.

#### **Activities**

- 1. Re-visit the list of GHG abatement measures /technology options already developed under FNC and TNA for each sector under analysis. Responsible party NMP, TL, National experts.
- 2. Add new GHG abatement measure/technology options, if data available. Put a special attention to energy and transport category. Responsible party NMP, TL, National experts.

#### Output 4.3.4: GHG abatement scenario developed / updated

#### Activities

- Develop/ update the GHG abatement scenario for energy and transport category for 2000-2025 by using the software CACMO and LEAP. Take into consideration the tier of measures selected. Responsible party TL and, National experts
- Estimate the GHG reduction potential against the baseline scenario, cost of reduction and penetration rate of each measure proposed under GHG abatement scenario for energy and transport sector. Responsible party TL and, National experts
- 3. Develop / update the GHG abatement scenario for non-energy sectors. Use IPCC software if other sector-specific software would not be available. Take into consideration the tier of measures selected. Responsible party TL and, National experts
- 4. Identify any difference / change to the abatement scenario developed under Albania's FNC, if any and, explain the reasons for such differences. Responsible party TL, National experts

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#### Output 4.3.5: GHG abatement priority measures / technologies selected

#### **Activities**

<sup>&</sup>lt;sup>18</sup>LUCF, agriculture, waste and industrial processes;

- 1. Re-visit and validate criteria for assessment of measures and respective weights already used under TNA exercise and identify whether they are relevant to the Albania's circumstances and development priorities. Responsible party NPM, TL, National experts, PSC.
- 2. Undertake an assessment of measures according to the criteria decided by using a multi-criteria analysis. Select 4-5 priorities for energy and transport. In addition, develop a second tier of win-win measures that could be implemented faster, cheaper and easier. Select up to 2 priority measures for non-energy sectors. Responsible party NPM, TL, National experts, PSC.
- 3. Identify barriers and policy needs for implementation of such measures. Propose policy interventions and financing schemes (GEF, WB, CDM, bilateral, other) to address these measures into national planing and policy process for respective sectors. Responsible party NPM, TL, National experts, PSC, Legal expert.
- 4. Update the package of project proposals developed under TNA with new ones, if other priorities identified. Responsible party NPM, TL, National experts, PSC, Legal expert.

Output 4.3.6: A GHG abatement analysis completed for the period 2000-2025.

# <u>Activities</u>

- 1. Develop the draft chapter of the GHG abatement analysis. Responsible party TL.
- 2. Circulate the draft chapter of GHG abatement analysis for internal review and comments. Responsible party NPM, TL.
- 3. Circulate the draft chapter of GHG abatement analysis for external peer review and comments. Responsible party NPM.
- 4. Receive comments and reflect to the document. Responsible party NPM, TL, National experts.
- 5. Organize e national workshop to highlight findings from the GHG abatement analysis and get more comments. Responsible party NPM, TL.
- 6. Finalize the GHG abatement analysis chapter to be submitted as a part of the SNC of Albania. Responsible party NPM, TL, National Experts.
- 7. Archive and document all the GHG abatement analysis related studies and estimates. Responsible party NPM, TL, National Experts.

# 4.4. Programmes containing measures to facilitate adequate adaptation to climate change

132. The very first and modest assessment of Albania's climate vulnerability and adaptation options was carried out under UNEP/Mediterranean Action Plan in 1995, which covered the Albania's coastal area only. A more completed assessment followed the first one, already carried out as part of Albania's FNC. The study covered the vulnerability and adaptation measures for the overall Albanian territory. As a climatologic baseline a 30-years 'normal period' was used. The period 1961-1990 has been selected as a baseline to study the influence of climate on the relevant sectors and three time horizons were considered: 2025, 2050 and 2100. The Top-Up phase was focused on coastal adaptation as it was assessed as the most vulnerable under the Albania's FNC. The assessment process carried out was sector – specific. It covered: (i) water resources, (ii) agriculture, (iii) forestry, (iv) human health, (v) tourism and settlements. Priority adaptation measures were selected at the end.

- 133. The assessment of vulnerabilities and adaptation was guided by IPCC guidelines, 1994. The scenarios of likely impact of climate change were assessed by MAGICC/SCENGEN software. Other tools have been used for impact assessment such as experimentation, impact projections, empirical analogue studies and expert judgment. The LEAP software has been used for impact assessment in energy sector. A simple statistical model is used in the runoff assessment. For the rest of sectors, statistical models are developed or empirical analogues are used. The need to use socio-economic scenarios or integrated system models are highly stressed. All climatologically data were received from the Hydro-metrological Institute. Data regarding relevant sectors have been received from other relevant institutions/ministries. However, the team lacked data from systematic monitoring. In addition the study lacked proper guidance from UNFCCC, simulation of extreme weather events and cost benefit analysis.
- 129. In the course of the stocktaking the team agreed to narrow the focus of the assessment to be carried out under the SNC to a compound area with subset of vulnerabilities, likelihood of significant impacts of climate change and significant development context. After a multi-criteria analysis involving set of criteria, weight and scoring (see Appendix C) of three areas, namely Drini river Cascade,; Shkumbini River Basin (8th corridor) and Durres-Kukes Highway, the first one was selected as the most priority one. It has significant representative patterns: is wide spread, from east to west of Albania putting together an interesting topographic diversity such as mountains, gorges, fields, coast, seashore. The team agreed that the assessment of vulnerability would be sector—specific. However a special attention will be put to water resources and their respective impact to the hydroelectricity produced, as it is known that more than 95% of electrical energy in Albania is produced from hydro sources and HPPs of the selected area are known for their significant capacity of electricity generation. The assessment will also integrate other sectors like agriculture (irrigation systems), forests (erosion) etc., therefore, an integrated assessment will be done at the extend possible.
- 130. Current climate vulnerability as a new area of study and future climate risk to sectors will be assessed through the use of some *indicators*: For the climate system the indicators will be temperature (seasonal), precipitation (seasonal), wind, cloudiness and sunshine duration. The average change in mean runoff will be selected as the main indicator for water resources. For energy sector the main indicators would be of energy demand and supply. Forests area and eroded land would be the main indicators to assess the forests sector. Plant production, irrigation systems, cattle breeding poultry production would be as indicators for agriculture/livestock. Coastal tourism under the selected will be assessed in terms of the impact of the sea level rise and the rise of temperature. Impact to population / settlements will be assessed in terms of frequency and scale of droughts and flooding into people's wellbeing.
- 131. Designing of an Adaptation Policy Paper for the selected area by using at the extend possible the Adaptation Policy Framework (APF) and respective Technical Papers will be the main outcome of the vulnerability and adaptation exercise under the SNC. The strategy paper will outline adaptation measures and plans of implementation (what); the way of implementation and resources needed (how); time frame (when); responsible parties for its implementation (who). It will serve as the basic document that will create the momentum for a follow-up of this process, i.e. addressing climate variability and change to the national planning and policy.

Output 4.4.1: Specific approaches, tools and methods to be used under APF decided. Pertinent data and information assembled, analyzed, and synthesized.

#### Activities

- 1. Decide on the range of the assessment: qualitative versus quantitative. Decide on the approaches, tools and methods to be used for the assessment. Responsible party NPM, TL, and National Experts.
- 2. *Identify the type and scope of data and information* needed in order to use the above models and tools. Responsible party NPM, TL, and National Experts.

- 3. Review the policy process and development context for the selected area in order to explore how adaptation measures can be introduced into decision-making agenda and what is the best way of addressing them. Responsible Party: NPM, PSC, TL, National Experts.
- 4. Collect and synthesize the necessary data and information. Responsible party: TL, and National Experts

## Output 4.4.2: Current vulnerability and adaptation of the priority selected area assessed

#### **Activities**

- 1. Develop respective indicators for the purpose of the baseline development. Responsible party: NPM, PSC, TL, and National Experts
- 2. Develop a climate baseline for the priority area by highly taking into consideration the baseline developed under stocktaking exercise. Responsible party: TL, and National Experts
- 3. Develop an environmental-socio-economic baseline. Responsible party: TL, and National Experts..
- 4. Access current vulnerability of climate and sectors under the priority area. Responsible party: TL, and National Experts
- 5. Access any previous adaptation experience under priority area, if available. Responsible party: TL, and National Experts

Output 4.4.3: Future climate risk and adaptation measures assessed for the priority area. A policy paper for adaptation for the Drini River Cascade developed.

#### **Activities**

- 1. Develop climate trends and risks by using MAGIC/SCHENGEN. Responsible party: TL, and National Experts
- 2. Develop environmental-socio-economic trends and risks (water resources, energy, agriculture, forests, tourism, population and settlements). Put more attention to waters resources and energy generation as priorities. Responsible party: TL, and National Experts
- 3. Develop adaptation response measures, identify barriers and opportunities. Responsible party: TL, and National Experts
- 4. Compile an Adaptation Policy Paper of Drini Cascade. Responsible party: NPM, PSC, TL, and National Experts

#### Output 4.4.4: Chapter of Vulnerability and Adaptation (V&A) for the priority system completed

#### **Activities**

- 1. Develop the draft chapter of the V&A. Responsible party TL.
- 2. Circulate the draft chapter of V&A for internal review and comments. Responsible party NPM, TL.
- 3. Circulate the draft chapter of V&A for external peer review and comments. Responsible party NPM.
- 4. Receive comments and reflect to the document. Responsible party NPM, TL, National experts.

- 5. Organize e national workshop to highlight findings from the V&A study and get more comments. Responsible party NPM, TL.
- 6. Finalize the V&A chapter to be submitted as a part of the SNC of Albania. Responsible party NPM, TL, National Experts.
- 7. Archive and document all the V&A related studies and estimates. Responsible party NPM, TL, National Experts.

# 4.5. Constraints, gaps, and related financial, technical and capacity needs

- 132. The issue of gaps and constraints is explicitly addressed under Albania's FNC. It is provided in thematic-area-specific manner by giving information from institutional, technical, methodological and resource point of view. The TNA address the needs for technology transfer and constraints are addressed in terms of barriers. Most of the needs are provided in the form of project ideas.
- 133. A separate section will be elaborated on the issue under Albania's SNC. New gaps and constraints if any, identified while undertaking each section of the SNC, would be reported along with related financial and technical capacity needs. A special attention will be paid to the *previously identified gaps and needs* under the previous activities such FNC, Top-Ups and Regional project on GHG inventors, explanations whether and how they have been addressed under the SNC and their status. In addition, gaps and constraints while implementing the UNFCCC will be reported.

Output 4.5.1: Constraint, gaps and related needs (financial, technical and capacity) identified and reported.

#### **Activities**

- 1. Review the status of the constraints and gaps (technical, institutional, methodological, financial, capacity) from previous studies. Responsible party: NPM, TLs, National Experts.
- 2. Identify new constraints and gaps (technical, institutional, methodological, financial, capacity), if any related to each thematic area (inventory, abatement analysis, V&A) and elaborate needs to overcome and fill them. Responsible party: NPM, TLs, National Experts.
- 3. Identify constraints and gaps (institutional, financial, capacity) related to Article 6 activities, which are crosscutting the NC preparation exercise. Elaborate needs to overcome and fill them. Responsible party: NPM, Information and PA assistant; TLs, National Experts.
- 4. Summarize constraints, gaps and needs identified and draft a synthesis report as a separate chapter on that regard. Responsible party: NPM, TLs, National Experts.
- 5. Distribute the above draft chapter for comments, collect comments and reflect in the document. Responsible party: NPM, TLs, Information and PA assistant. National Experts.
- 6. Finalize the above chapter as part of the Albania's SNC. Responsible party: NPM, TLs, Information and PA assistant.

# 4.6 Other information considered relevant to the achievement of the objective of the Convention

134. The Albania's FNC contains also a separate chapter regarding Public Awareness, Education and Training. This chapter highlights these issues as relevant and crosscutting ones to the NC preparation exercise. The Albania's SNC will have a separate chapter on "other information". A special attention will be given to in information about *Article 6 activities* (Public Awareness, Education, and Training). This section will also provide information on any steps that have been taken to mainstreaming climate change into national

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development agenda and activities related to *technology transfer* as indicated under Article 4/CP7 and, climate change research and systematic observation systems. In addition, information on all relevant ongoing projects / programs relevant to climate change will be reported.

Output 4.6.1: The information considered relevant to the achievement of objective of the UNFCCC compiled and synthesized

#### Activities:

- 1. Collect, synthesize and provide the overall *information relevant to the Article 6 activities*. Responsible Party: NPM, Information and Public awareness assistant, TLs.
- 2. Collect, synthesize and provide the *information on steps taken to integrate climate change* into socioeconomic and environmental policies in Albania. Responsible Party: NPM, Information and Public awareness assistant, TLs, National Experts.
- 3. Collect, synthesize and provide information on how Albania is addressing activities related to the *transfer* of, access to environmentally sound technologies and know-how. Responsible Party: NPM, Information and Public awareness assistant, TLs, National Experts.
- 4. Collect, synthesize and provide information on the research and systematic observation systems. Responsible Party: TL of V&A, Information and Public awareness assistant, National Experts.
- 5. Collect, synthesize and provide information on ongoing programs and project relevant to climate change and National Communication process. Responsible Party: NPM, Information and Public awareness assistant, TLs, National Experts.
- 6. Summarize all the information collected in a draft chapter. Distribute it for review and comments (internally). Responsible Party: NPM, Information and Public awareness assistant, TLs, National Experts.
- 7. Incorporate comments to the above draft chapter and *finalize* it as part of the Albania's SNC. Responsible Party: NPM, Information and Public awareness assistant, TLs.

#### Output 4.6.1: SNC prepared, translated, submitted and disseminated

#### Activities:

- 1. Compile a draft of the Albania's Second National Communication;
- 2. Circulate the draft for comments and review and incorporate them;
- 3. Endorse the document by the PSC:
- 4. Finalize the Second National Communication of Albania:
- 5. Publish the Albania's SNC to the CoP of UNFCCC:
- 6. Prepare e-copies of Albania's SNC in CD-ROMs;
- 7. Submit officially the Albania's SNC to the CoP of the UNFCCC;
- 8. Organize a national workshop to launch and present the findings of the Albania's SNC;
- 9. Launch the report in a side event during the CoP /Subsidiary Body sessions;

The overall findings from the studies carried out under the SNC project will be synthesized in reported under a National Report namely Albania's Second National Communication to the CoP of UNFCCC. The structure and scope of the report will be designed as guided by the 17CP8. The draft report will be circulated for comments and review and will be endorsed by the PSC. The report will be published in English (one of the UN languages). An electronic version in a CD-ROM will be attached to it. The same distribution scheme and launching as for Albania's FNC will follow. The SNC report will be submitted to the UNFCCC secretariat and distributed internally (to the relevant stakeholders) and externally (to the

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Parties). It will be internally launched in a national workshop and externally to a CC: FORUM to be organized as a side event in the course of the nearest CoP/ Subsidiary Body sessions.

# 5. Institutional Framework for Project Implementation

- 135. This exercise will utilize the National Execution modality with the Ministry of Environment (MoE) as the Executing Agency. Given that responsibility the MoE will be responsible for the overall management of the project, primarily with regard to the achievement of the outputs (results), impact and objectives. Similarly, MoE will be accountable to UNDP for use of project resources.
- 136. In order to ensure the sustainability, efficient use of resources and linkages between prior and ongoing climate change enabling activities, the SNC processes will be fully executed under the same structures, already established since 1998, when the Albania's FNC started. In the course of the last years the Project Implementation Unit already based in the Ministry of Environment has merged to the Climate Change Unit being fully responsible not only for the planning, coordination and management of UNDP-GEF climate change portfolio but also for the overall UNFCCC implementation process.
- 137. The National Project Manager (NPM), to be hired in full-time basis will coordinate the day-to-day project execution activities and will be responsible for meeting the objectives of the project. An Administrative and Finance Assistant and an Information and Public Awareness Assistant who will be hired in full—time basis, will assist the NPM. In addition the NPM will be assisted by three technical teams, respectively GHG inventory team, GHG abatement team and V&A team which, will perform technical tasks and activities proposed under this project. A National Team Leader will lead each team. It is expected that this exercise to involve the majority of the experts who have been previously engaged under First National Communication and Top-up phase. They are already filed in a roster of national experts. However, new comers are expected to enter the process as Train of Trainers exercises will be held in the course of the years to come. National experts will be coming from key relevant sectors including government agencies, academic institutions, NGOs, and private sector as necessary. National experts mentioned above will be hired in Ad-Hoc basis under Special Service Agreements. The recruitment process will be made according the UNDP rules and regulations.
- 138. The ultimate responsibility in the MoE for managing the project will be placed on the senior Government official designated as the National Project Director (NPD). The NPD will liaise with the members of Project Steering Committee in terms of decision-making and guidance for the project.
- 139. The Climate Change Project Steering Committee<sup>19</sup> already established since 1998 as a high level body will continue to provide support and guidance to the implementation of the project and support this exercise by ensuring that the results will be disseminated to, and validated by, all the relevant stakeholders in Albania. An update and revision of the composition of the PSC is planned also. This will be done at the start up phase of the project. The members of the PSC will be from, but not limited to the Ministry of Environment, Ministry of Energy and Industry, Ministry of Agriculture, Regional Environmental Center, UNDP Tirana, NGOs, Academia, Private sector.
- 140. The project will maintain links to the UNDP-GEF NCSP, which will be regularly updated through UNDP regional office for the status of activities and will provide in the same time technical assistance as required. Technical assistance is also expected by the UNFCCC secretariat /Consultative Group of Experts (CGE), mainly through the workshops and trainings.
- 141. A summary of the institutional arrangements for the project for preparation of the Albania's SNC to the CoP of the UNFCCC is provided in a chart form under Appendix F

<sup>&</sup>lt;sup>19</sup> The PSC is an informal Committee

- 142. During the project inception phase project key personnel will be contracted that includes: a full-time National Project Manager (NPM), Administrative & Finance Assistant and Information & Public Awareness Assistant. Terms of Reference for the NPM are provided in <a href="Appendix G">Appendix G</a>. Technical teams will be established. Short-term experts will be recruited as and when needed by the project, possibly including Team Leaders for each thematic area and technical experts as member of the teams. Terms of Reference for Team Leaders are provided in <a href="Appendix G">Appendix G</a>. PSC composition will also be updated during the inception phase. Once the project implementation mechanisms have been in place a project initiation workshop will be organized aiming at presenting objectives and activities of the project; clarifying the link between previous, ongoing and future climate change activities; identifying possible synergies with other projects; finalizing the project work plan and TORs. This workshop will also serve at raising awareness among the invited stakeholders about climate change issues.
- 143. A special meeting a scoping meeting will also be organized for the national experts. The TORs of the SNC which will consist on structure and content of the each chapter of the Albania's SNC will be drafted at the start up phase of the project and discussed during a scoping meeting with Team Leaders, Experts and PSC members.
- 144. As part of the project implementation set up mechanisms of communication, participation, networking and dissemination will be decided and established. The network of e-communication already established under previous activities among national experts / institutions will be maintained and upgraded for the purposes of effective communication and dissemination of relevant information received from UNFCCC, UNDP/GEF NCSU, UNIDO, IPCC, CC:INFO, CC: TRAIN, TT CLEAR, CTI networks and UNDP Knowledge Management Network, if available. In addition links to ongoing similar project in other countries, especially from the region / sub-region will help to gain information to support the implementation of this project and to learn from experiences of similar exercises elsewhere. These links will also help to identify potential international partners to cooperate with, either on this project or on the eventual follow-up projects, dealing with the implementation of the identified response measures. The project will maintain and upgrade the electronic network among national experts / institutions to ensure an effective communication and dissemination of project relevant information. And will also update and maintain the national climate change web page.

#### 6. Assessing project impact

- 145. The project team will utilize the same strategy and approach that has already been used under the FNC and Top/Up phase that has resulted very successful as indicated by the UNDP Environmental Outcome Evaluation, carried out on early 2004. The strategy used consisted on the utilization of the capacities developed and resources mobilized under the UNDP-GEF climate change activities not only for preparing National Communications as a commitment under the UNFCCC but also for developing programs for climate change mitigation and its mainstreaming into national planing agenda and policy. Incorporation of climate change issues into national policy documents like NEESD, MDG reports and National Strategies is an indicator for such impact, which in addition indicates the awareness level on climate change issues in Albania.
- 146. The National Energy Strategy has already integrated many findings and outputs from the climate change studies undertaken under UNDP-GEF funded projects for climate change in Albania. This is an achievement from the mainstreaming point of view, which came as result of the good and fruitful cooperation between respective Ministries and the advocacy activities undertaken under climate change projects. In this context the Albanian Government has taken clear measures though its newly adopted National Energy Strategy for promotion of affordable alternative energy sources to support them for meeting space heating energy demand and most important energy services. In the frame of the MDGs process and mainstreaming, the climate change program linked the national energy planning, poverty and climate change issues. The mainstreaming of the climate change into the key policy frameworks and agendas will be a continuous effort during the SNC.

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147. As explained under the project strategy, mobilizing national expertise, archiving the overall data and information utilized under the National Communication exercise, raise awareness and advocacy to climate change issues in Albania, working in synergy with other projects / programs would help to increase the sustainability of the process for preparation of the National Communication.

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7. Detailed work-plan

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Outpine/Avivine	- 10	- 70	- 60	10	90	90	20	01 02 03 04 05 06 07 08 09 010 011 015	- 60	010	110	012
ingements and projectine offices.												
1. Contract the project office staff	×											
2. Establish technical teams	×											
3. Update the composition of the PSC	×											
4. Organize a project initiation workshop	×											
5. Organize a scoping meeting	×											
6. Maintain and upgrade the electronic network among experts/institutions	×	×	×	×	X	X	X	×	×	×	×	×
7.Update and maintain the national climate change web page	×	X	×	×	×	×	×	×	×	×	×	×
4.1: National circumstances												
1. Validate the gaps of information identified under stocktaking	×	X										
2. Identify the respective sources of information	×	X										
3. Collect data and information from different sources	×	X	×	×	X							
4. Fill the gaps, update and add the new information		X	X	X	X							
5. Draft national circumstances sections relevant to each thematic area.						×	×	×				
6. Draft the National Circumstances section under the SNC								×	×			
7. Circulate the National Circumstances section for comment, get comments.									×			
8. Finalize the National Circumstances section under the SNC										×		
4.2: GHG inventory												
4.2.1 The GHG inventory team maintained and strengthened												
1. Identify and mobilize national experts in targeted sectors and related areas of	X	X										
relevance												
2. Review the existing information on the previous GHG inventory and familiarize with puidelines	×	×										
4.2.2 Mathadologies for CHC inventory actimates anolysed salacted and volidated												
1. Analyze the acceptability of the available methodologies estimates	×	×										
2. Decide on the Tier level based on the decision trees as guided by IPCC GPG	×	×										
3. Decide and select the methodology of estimates new gases: HFCs, PFCs, SF <sub>6</sub>		×	×									
4. Decide on the source categories to which surveys for filling data gaps will be carried		×	×									
out												
5. Review and update the QA/QC plan		X	X									
4.2.3: GHG inventory data collected												
1. Review available activity data already archived		×	×									
2. Identify new activity data needed for estimates of GHG emissions for 1994-2000			X	×								
3. Identify possible sources of data		X										
4. Collect the necessary activity data from the available sources		X	X									
5. Utilize the methodology developed under the GEF regional project to fill data gaps			×	×								
6. Decide on EFs to be utilized.			X	×								

Outputs/Activities =	)1   02	8)	8	.50	90	07	<u> 8</u>	6	10 0	11	717
7. Identify gaps, if available.	X	×	X	×							
Output 4.2.4: A completed national inventory for 2000 along with time series 1994-2000 developed	00 develo	ped					ļ				
1. Re-estimate GHG emissions inventory of 1994			X								
2. Estimate the GHG emissions inventory for 2000 and develop time series for 1994-2000			X	X							
3. Prepare a draft inventory for 2000 and time series 1994-2000				×	×				<del> </del>		
4. Develop key sources analysis for 2000 and sensitivity analysis (1994-2000)					X	X					
5. Develop a key sources inventory for 2000.						×					
						×					
7. Circulate the inventory for internal review as part of QA/QC plan						X					
8. Technical peer review performed as part of QA/QC plan							X				
9. Organize e national workshop to present findings of the GHG inventory								×			
10. Incorporate comments received from the review process.								×	×	<u> </u>	
11. Finalize the inventory to be submitted as a part of the SNC of Albania									×		
Output 4.2.5: GHG inventory data and estimates documented and archived									<u> </u>		
1. Archive activity data, emission factors and estimates				×	×	×	×	×			
2. Update the Manual of Procedures and National Inventory Report with new GHG				×	×	×		×	×	×	
inventory data and estimates.							<b></b>				
4.3. Programmes containing measures to mitigate climate change											
4.3.1: Necessary data and relevant information for scenario development collected, analyzed and taken into consideration for scenario development.	alyzed an	d take	n into	consi	leratio	n for s	cenario	devel	pme	nt.	
1. Consider estimates of GHG inventory for the base year 2000				X							
2. Compare figures /estimates obtained under the GHG Inventory for 2000 to those figures forecasted for the same year (2000) under Albania's FNC				×	×						
3. Collect all relevant macro-economic data and set assumptions	×	×	×	×		-		-			
4. Assess at what extend GHG abatement measures (if any) are undertaken (if so) into					×						
all adopted National Strategies and Action Plans.									$\dashv$		
5. Review the status of the relevant policy and legal framework	×	×	×	×	×						
6. Process the collected data and make them ready as required by the software that are going to be utilized				×	×						
Output 4.3.2 A revised GHG baseline scenario developed.							-	 			
1. Develop a revised baseline GHG emission scenario for energy & transport					×	×					
2. Develop a revised baseline GHG emission scenario for non-energy scenarios					X	×					
3. Identify and explain any difference / change to the GHG baseline scenario developed under Albania's FNC						×					
Output 4.3.3: The tier of GHG abatement measures / technology options revisited and revised	revised.										
1. Re-visit the list of GHG abatement measures /technology options						×	×				
2. Add new GHG abatement measure/technology options, if data available					X	X					
Output 4.3.4: GHG abatement scenario developed / updated							•				
1. Develop / update the GHG abatement scenario for energy and transport category					×	×	1				
2. Estimate the GHG reduction potential, cost of reduction and penetration rate of each					×	×	×	-	$\dashv$	_	$\neg$

Develop   update the GHG ablatement searuh for non-energy gentra	Outputs/Activities   04   05   06   07   08   09   0410:   011	1 02 0.	3 0	50	90	10	OR	90	OHO.	11.11	010
1. Develop update to file determinent scenario for related and sevention developed under PinC  Output 1.4.5. GHC definement perform scenario developed under PinC  Output 1.4.5. GHC definement perform scenario developed under PinC  Output 1.4.5. GHC definement perform scenario developed selected  2. Underdate an assessment of measures and select 3-4 priorities.  2. Underdate an assessment of measures and select 3-4 priorities.  3. Indentify surries and perform of the competition of such measures.  3. Indentify surries and perform of the competition of such measures.  4. Underdate the dark datastement analysis for internal review  5. Creditate the dark datastement analysis for internal review  7. Creditate the dark datastement analysis for internal review  8. Creditate the dark datastement analysis for internal review  9. Creditate the dark datastement analysis for internal review  9. Creditate the dark datastement analysis for internal review  9. Creditate the dark datastement analysis for internal review  9. Creditate the dark classer of GHC abutement analysis of the competition of the such darks and selection of the priority area  9. Review of the data selection of the such methods  1. Develop the dark of the asserts to feetitate adequate adaptation to elimate change  1. Develop the dark of the such darks and selection of the priority area  9. Review the dark of the such darks and selection of the priority area assessed  1. Develop the control methods to be used under the priority area assessed of the priority area and development content for the such darks and selection of the priority area assessed of the priority area are treceased and information reveals and triaks  1. Develop an environmenta	measure proposed under GHG abatement scenario for energy and transport sector.										
1. Underly any difference of Langue to the abuncton scenario of Verbolge selected under FNC Output 4.3.5. CHG batterment princity measures it echanologies selected with the North Control of Langue and Selected Households a	3, Develop / update the GHG abatement scenario for non-energy sectors						×	×	T		
Output 4.25. GHe abstraction in private very electrod.  1. Revisit and visitatic criteria for assessment of measures and espective weights.  2. Undertake an assessment of measures and espective weights.  2. Undertake an assessment of measures and espective weights.  2. Undertake an assessment of measures and eslect 3.4 priorities.  2. Undertake an assessment of measures and eslect 3.4 priorities.  3. Health burding of project proposals developed for the period 2000-2025.  3. Health burding of project proposals developed under ThA with the cures, if any project deft chapter of The GHG abstract analysis for external project with the character analysis for external project with the character analysis of external project and the character analysis for external project and the character analysis for external project and the character analysis or external project and the character analysis chapter of HGG abstracter analysis or external analysis o	4. Identify any difference / change to the abatement scenario developed under FNC							×			
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4. Access current vulnerability of climate and sectors under the priority area  5. Access any previous adaptation experience under priority area, if available  Output 4.4.3: Future climate risk and adaptation measures assessed for the priority area. A policy paper for adaptation for the Drini River Cascade  1. Develop climate trends and risks  2. Develop environmental-socio-economic trends and risks  3. Develop adaptation response measures  4. Compile an Adaptation Policy Paper of Drini Cascade  Output 4.4.4: Chapter of Vulnerability and Adaptation (V&A) for the priority system completed  1. Develop the draft chapter of the V&A  2. Circulate the draft chapter of V&A for internal review and comments.  3. Circulate the draft chapter of V&A for external peer review and comments.  3. Circulate the draft chapter of V&A for external peer review and comments.	3. Develop an environmental-socio-economic baseline		+					+		+	
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t to the document						X			
5. Organize e national workshop to present findings from the V&A						X			
6. Finalize the V&A chapter to be submitted as a part of the SNC						X			
7. Archive and document all the V&A related studies and estimates					X	$\mathbf{x} \mid \mathbf{x}$	X		
4.5. Constraints, gaps, and related financial, technical and capacity needs									
Output 4.5.1: Constraint, gaps and related needs (financial, technical and capacity) identified and reported	ed and re	ported							
1. Review the status of the constraints and gaps from previous studies			X	X	X				
2. Identify new constraints and gaps for each thematic area					X	X			
3. Identify new constraints and gaps related to Article 6 activities,					X	X			
4. Summarize constraints, gaps and needs identified and draft a synthesis report as a senarate chanter						×			
5. Distribute the above draft chapter for comments, collect comments and reflect in the						×			
6. Finalize the above chapter as part of the Albania's SNC.						×			
4.6. Other information considered relevant to the achievement of the objective of the Convention	rtion								
Output 4.6.1: The information considered relevant to the achievement of objective of the UNFCCC compiled and synthesized	VFCCC c	ompile	d and	synthe	sized				
1. Collect, synthesize and provide the overall information relevant to the Article 6	×	×	×	×					
2. Collect, synthesize and provide the information on steps taken to integrate climate	×	×	×	×					
change into socio-economic policies in Albania.				1	1	+	1		
3. Collect, synthesize and provide information transfer of, access to environmentally sound technologies and know-how in Albania.	×	×	×	×					
4. Collect, synthesize and provide information on the research and systematic observation systems	×	X	×	×					
5. Collect, synthesize and provide information on relevant ongoing projects				×	×				
					×				
and comments internally.  7. Incorporate comments to the above draft chapter and finalize it as part of the	-				×	×			
Albania's SNC						_			
Output 4.6.2. SNC produced, translated, submitted and dessiminated						-	_		
1. Compile a draft of the Albania's Second National Communication						X			
2. Circulate the draft for comments and review and incorporate them					_	X			
3. Endorse the document by the PSC						×			
4. Finalize the Second National Communication of Albania							×		
5. Publish the Albania's SNC to the CoP of UNFCCC								×	
6. Prepare e-copies of Albania's SNC in CD-ROMs							×		
7. Submit officially the Albania's SNC to the CoP of the UNFCCC								×	
8. Organize a national workshop to launch and present the findings of the Albania's SNC			-					×	
9. Launch the report in a side event during the CoP /Subsidiary Body sessions									×

Appendix C: Summary matrix for assessment of priority area under the Vulnerability and Adaptation

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# Appendix D: Stakeholders matrix

The CCU based under the MoE led and coordinated the stocktaking exercise at national level being responsible for the preparation of the final stocktaking report and the Project Proposal for the Albania's Second National Communication to the UNFCCC;  Directorates, officials and experts of the MoE are consulted and have provided their inputs and feedback to this process;
MOE leads the Project Steering Committee; MoE through its Climate Change Unit (CCU) is responsible for the preparation of National Communications to the CoP of the UNFCCC stands under the MoE along with the overall implementation process of the UNFCCC; The responsibly of the GEF Focal Point (Operational/Political) stands under MoE; The responsibility of the UNFCCC and IPCC Focal Point stands under CCU; The responsibility of the UNFP and other UN Conventions stands under MoE; The MoE is the Executing Agency for UNDP-GEF portfolio for climate change and also for all GEF projects Albania;
MoE is the main specialized governmental body responsible for environmental protection in the Republic of Albania. Responsibilities of MoE and its directorates and institutions that are under its responsibility and relevant to the climate change are as following:  Drafts and implements governmental policies, strategies and action plans for environmental protection.  Drafts laws, by-laws and decisions for the protection of the environment; Follow-up the implementation of laws, by-laws and decisions of the Council of Ministers for Environmental Protection;  Coordinates the cooperation between relevant Ministries, local government, research institutions, and NGOs;  Supervise the monitoring of the state of environment in collaboration with relevant Ministries, local government, research institutions, and NGOs;  Proposes measures, activities and standards to protect water, soil, air and biological diversity;  Designs and endorse projects for the protection and related issues;  Raises awareness on environmental protection and related issues;  Issues environmental permission/ licence for all activities that have an impact to environment;  Prepares agreements and MoUs, in the framework of bilateral and multilateral cooperation and artends their implementation after their adoption;  Oversees the implementation process of all environmental conventions where Albania is a Party;
Ministry in general
MINISTRY OF ENVIRONMENT (MoE)

The CCU led and coordinated the stocktaking exercise; The CCU synthesized thematic area specific reports into the core stocktaking report. The CCU held consultations with all national climate change relevant stakeholders in the country; The CCU got technical guidance from UNDP-GEF NCSU and exchanged experience with homologue offices/colleagues from East Europe and CIS countries who were to develop stocktaking exercises;	DPEP is consulted on issues related to GHG inventories, GHG mitigation analysis; related activity data for GHG inventory (industrial processes, wastes); synergies related to other environmental conventions and related activities.      DPEP drafted the report on GHG mitigation analysis as significant part of the core stocktaking report; Information on the stock of activities / studies related to the SNC provided.      Reedback and validation of stocktaking report the SNC provided.      Reedback and validation of stocktaking report provided by DPEP;
Main institution responsible for climate change and related issues in the Republic of Albania CCU is responsible for the coordination of stocktaking and preparation of the final stocktaking report and the Project Proposal for the Albania's Second National Communication to the UNFCCC; Potential for coordination of SNC project.	Team Leader for GHG mitigation analysis and expert of energy for GHG inventory are provided by the DPEP.     Potential provider of technical expertise under the SNC (expertise on estimates of GHG emissions inventory and mitigation analysis).     Potential provider of activity data for different source categories of GHG emissions (industrial activities and wastes).     Provides policy advice on development of GHG emission scenarios especially for sectors like industrial activities and wastes;
Serves as National Focal Point for the UNFCCC and provides technical support and policy advice to the MoE for its implementation process and represents GoA into the policy advice to the MoE for its implementation process and represents GoA into the policy advice to the MoE for its implementation process and represents GoA into the policy advices;  Serves as National Focal Point for the IPCC:  Serves as National Focal Point for the Pocisions;  Prepara surventives of GHG emissions and removals by sources;  Regiantly archives data and inventory estimates;  Develops scenarios of GHG emissions and removals by sources;  Performs assessment of vulnerability and proposes adaptation measures to the expected climate change;  Prepara region of the final stocktaking and representation policies and measures;  Performs assessment of vulnerability and proposes adaptation measures to the expected climate change;  Prepara region of the final stocktaking and representation policies and measures;  Performs assessment of vulnerability and proposes adaptation measures to the expected climate change;  Prepara region of the final stocktaking perport.  Prepara strong the regions and readed by the COU got technical to recordination of SNC prepares Inchange governmental, non-governmental, academic, private sectors on climate change and related to the implementation of the UNFCCC;  Mobilizers resources for implementation of the UNFCCC;  Designs and implementation process and provides and proposes and provides and proposes and provides and measures;  Prepara strong them are as specific perport and the Project Proposal for the corporation among all the relevant stakeholders including governmental, academic, private proposal contributions and area prepared provided and co-peration among all the relevant stakeholders including governmental, non-governmental, academic, private proposal contributions and area prepared provided and co-peration and proposes and provided and co-peration and proposes and provided provided and co-peration and propo	Manages issues related to the prevention of air and water pollution;  Supervises the monitoring of pollution indicators into air and water (surface, ground) Supervises the control and monitoring of Urban Solid Wastes;  Prepares (Otlows and controls the implementation of the monitoring process of air, water and wastes;  Propose control measures regarding the meeting of discharging standards into air and water;  Manages issues related to the environmental Hot Spots and take measures for their regular monitoring and remediation;  Participates and provides advice and technical expertise to the process of Participates and provides advice and technical expertise to the process of have impact to air, water and wastes related ones;  Provides technical support to implementation of many international treaties related to air pollution, water pollution and wastes;
Climate Change Unit (CCU)	Directorate for prevention of the environmental pollution (DPEP)

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Directorate of Policy, EU Integration and Legislation (DPIL)	 Organizes, co-ordinates and supervises the drafting of environmental polity and their integration into strategies and action plans for environmental protection. Supervises the issues and related tasks regarding Stabilization Association Agreement (SSA) and prepares periodic progress reports on that regard. Supervises the issues and related tasks regarding the NSSED and prepares periodic progress reports on that regard.  Drafts laws and by laws related to the environmental protection in cooperation with other technical directorates of the MoE and other relevant ministries and research institutions.	 Facilitates mainstreaming of climate change issues into national planning and policies; Provides assistance and advice to the CCU regarding the legal issues related to the implementation of the UNFCCC, Has and continues to provide assistance to the CCU regarding the ratification of Kyoto Protocol from the GoA; Provides policy advice into the climate change mitigation policy;	DPIL is consulted by CCU on issues related to the GHG mitigation analysis and adaptation measures, specially on those issues related to the possible legal and policy barriers related to the transfer of technologies; Feedback and validation provided regarding GHG mitigation and adaptation issues.	. (7
Directorate of Natural Resources and Biodiversity Management (NRBM)	 Supervises and manages the issues related to the biodiversity (Flora, fauna, land other natural resources).  Supervises and coordinates issues related to the Protected Areas, their administration, protection, and provision of such a status to the new ones;  Supervises the administration of natural resources (forests, land, rivers, lakes etc) and their sustainable use;  Proposes rules and standards for land administration and management and its protection from erosion and chemicals and also designs national programs and undertakes activities in favour of food security.  Proposes and drafts laws for protection of the biodiversity and Protected Areas; Supervises and coordinates the monitoring process of biodiversity indicators Participates and provides advice and technical expertise to the process of environmental impact assessment / environmental licensing for those activities that have impact to biodiversity and nature protection;  Provides technical support to the implementation of many treaties related to the protection of the biodiversity, nature and land.	 expertise related to GHG emissions/sinks released/absorbed from the category of Land Use Change and Forestry (LUCF) and Agriculture; Potential provider of the technical expertise related to the impact of vulnerability assessment to the Forest category, Agriculture, Land and Coastal Zone; Potential of data for the category of LUCF; Potential of data for the category of LUCF; Potential policy advice provider related to the development of forestry sector, land use and coastal zone management; Potential to recommend synergies with UN Convention of Biological Diversity	 NRBM is consulted by CCU regarding thematic areas such as GHG inventory, GHG mitigation and Vulnerability and Adaptation for categories of LUCF, Agriculture and Coastal Zone; Information on the stock of activities / studies related to activities / studies related to activities / studies related to stocktaking report provided by NRBM;	J
		ON Convention of Biological Diversity and Convention on Desertification.		

Directorate of Communication and Foreign Relations (DCFR)		Supervises and coordinates the communication with public and the civil society regarding environmental protection issues; Collaborates with other technical directorates of the MoA and Regional Environmental Agencies (REA)s for collection and processing the information, creation of a database and take measures for preparing and publishing periodic reports on the state of environment.  Facilitates and coordinates the information issues with and among REAs; Collects and synthesize the information provided from REAs in monthly basis; Coordinates and facilitates the procedures for the membership of Albania to the international conventions, protocols and MoUs related to the environmental protection; Coordinates and supervises the process of meeting the commitments that Albania has as a Party to the international conventions, protocols and MoUs related to the environmental protection; Coordinates the collaboration between		Potential activity data provider specially for industrial activities and waste category and other related data; Provides continuous support to the implementation process of the UNFCCC and facilitates the representation of MoE into the negotiation process; Provides support for the ratification of the Kyoto Protocol;	DCFR is consulted by CCU regarding data provision;     Facilitated the collection of information regarding climate change related activities through different sources;     Feedback and validation of stocktaking report provided;
 Projects	•	Coordinates the contaboration between nomotogue ministries of other countries, international institutions and facilitates procedures of participation of Albania's representatives to the international meetings, conferences, training, workshops and seminars.  Monitors and supervises the implementation process of all environmental projects		PIU is responsible for projects and	Feedback and validation
Implementation Unit (PIU)		funded by different donors and prepares periodic progress reports on their status; Monitors and supervises the implementation of projects funded by the MoE and prepares periodic progress reports on their status; Evaluates and endorses the projects proposed from different donors; Prepares the necessary support documentation for project proposals approvals in accordance to the national procedures and rules set by donors; In consultations with technical directorates and units prepares and updates the priority needs for projects. Designs TORs for interested companies / parties and takes measures for tender process;	•	new mobilized funds; Monitors the progress made under UNDP-GEF climate change projects	provided on stocktaking report, specially regarding to the new areas of work / priorities under SNC; Information on the stock of activities / studies related to the SNC provided;
Environmental Inspectorate		Coordinates the control of environmental pollution through the REAs and inspectors of environment.  Supervises the accomplishments and functioning of REAs Monitors the impact of activities carried out from different parties into environment and check whether they are in line with standards and rules set under the environmental permissions issued;  Take necessary measures for penalty collection when applicable;  Coordinates national activities with regional and international homologue offices;  Cooperates with other directorates for drafting of environmental laws and by-laws;		Potential coordinator for data provision from REAs specially for industrial activities and wastes;	Consulted by CCU regarding data provision;     Feedback and validation of stocktaking report provided
Institute of Environment	Thi the Inst pro pro buil	This is the former Research Institute of Chemical Technology that has recently merged into the Institute of Environmental according to a Decree of the Council of Ministers. The Institute's responsibility is the monitoring of the status of environment. There are some projects funded by international donors and state budget that are aiming at re-profiling, building institutional and technical capacities in order to provide the to this Institute the status of an accredited institution for monitoring of environment.		Potential member of PSC Potential data provider for waste category	Consulted by CCU regarding data provision;     Feedback and validation of stocktaking report provided

MoAF is the main specialized governmental body responsible for agriculture and food responsible for agriculture and food institutions that are relevant to the climate change are as following: - Drafts and implements governmental policies, strategies and action plans for institutions that are relevant to the climate change are as following: - Drafts and implemental governmental policies, strategies and action plans for institutions that are relevant to the climate change are as following: - Drafts and implemental policies, strategies and action plans for institutions that are relevant to the climate change are as following: - Drafts and implemental policies, strategies and action plans for institutions that are relevant to the climate change are as following: - Trategies: - Standards and propose policies and measures to ensure the improvement of food sackor, and protect consumers; - Design pactical policies for irrigation and decisions for development of agriculture and food sector and adherent of the brown aims; - Poliow-up the implementation of laws, by-laws and decisions for development of agriculture and food sector and adherent of the propose policies and measures to ensure the regional one, by inglighting integrated rural acceleration of the Council of Ministers for development of agriculture and food sector and adhievement of the acceleration of Albamia's agriculture and food sector and adhievement of cooperation between relevant Ministries, local government, research institutions, and NGOs regarding the development of Agriculture and food sector and actions are active to the coordination of Agriculture and food sector and active the regional and European integration of Albamia's agriculture and food sector and actions and the development of Agriculture and food sector and actions are relevant Ministries, local government, research institutions, and NGOs regarding the development of agriculture and food sector and actions are provided and and provided and an action of the Council of the Agriculture and	<ul> <li>Drafts strategies for sustainable management of forest pastures;</li> <li>Drafts laws and by-laws for management of forests and pastures.</li> <li>Takes care of implementation of strategies and legislation for forests and pasture.</li> <li>Designs policies and regulations for protection of woods used for energy purposes (heating, cooking)</li> <li>Ensures a rational use of pastures, fauna and their by-products;</li> <li>Drafts laws and by-laws for management of forests and pastures.</li> <li>Provides policy advise regarding the data provision requision for forests and pastures.</li> <li>Pregarding the data provision for LUCF activities / studies related to activities / studies related to the SNC provided.</li> <li>Freedback on stocktaking report provided;</li> </ul>	<ul> <li>Drafts strategies and laws for the development of the livestock population in Albania and takes care of their implementation;</li> <li>Monitors animals health and related impacts to the public health;</li> <li>Takes measures for establishment of full structures for animal and public health;</li> <li>Takes care of veterinary border inspection process and its improvement;</li> <li>Controls marketing of animal origin products within parameters which safeguard public health;</li> <li>Drential data provider for livestock are for livestock;</li> <li>Information of the stock of activities / studies related to the SNC provided.</li> <li>Feedback on stocktaking report provided;</li> </ul>	<ul> <li>Design policies and legal framework on land administration and protection structures;</li> <li>Facilitates and supervises procedures which permit farm consolidation by swap process, as well as land sale and leasing;</li> <li>Establishes and regularly updates information system and a database of registered land forests and natures.</li> </ul>
Ministry in general MG ins	General Directorate of Forests and Pastures	Directorate of Veterinary	Directorate of Land • Administration •

Consulted by CCU for data provision for LUCF category Information of the stock of activities studies related to the SNC provided. Feedback on stocktaking report provided	Consulted by CCU regarding the data provision for Energy and Industry     Information of the stock of activities / studies related to the SNC provided.     Feedback on stocktaking report provided;
Potential data provider for LUCF category	MolE is represented in the PSC     Provides policy advise regarding the development of the Energy and Industry sector and related GHG mitigation and adaptation strategies for these sectors;     Significant data provider for Energy and Industry category;
The RIFP is an Institute that works under the responsibility of the Ministry of MoAF. Its main duties are as following:  Monitors the situation on forests and pastures;  Monitors health forests against fires, illegal cuttings, climate conditions and different other hazards;  Develop research studies related to forest and pastures related indicators  Develop and implement different projects related to forests and pastures  Develop database on the above indicators and provide them to national and private institutions	MoIE is the highest governmental authority responsible for energy and industry policymaking in the republic of Albamia. Responsibilities of MoIE and its directorates and institutions that are under its responsibility and relevant to the climate change are as following:  • Designs, revises and regularly updates national strategies for sustainable development of energy and industry sectors;  • Drafts the respective legal framework for the development of the energy and industry sectors;  • Forecasts the continuous demand for different energy sources;  • Promotes private investments, domestic or foreign ones, in both energy and industry sector by creating an attractive environment climate for these investments;  • Boosts market reforms in the energy and industry sector to achieve the national objectives for their integration under EU structures;  • Supervises and facilitates the merging of energy and industry public companies towards privatization process.
Research Institute of Forestry and Pastures (RIFP)	Ministry in general
	MINISTRY OF INDUSTRY AND ENERGY (MoLE)

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	National Agency of Energy (NAE)	institution in the control of the co	NAE advises the Government, Minister of Energy and other ministries and public institutions on energy issues.  Designs National Policy and Strategies for the Development of the Energy Sector and propose Actions for their implementation; Designs Laws and by-Laws for development of Energy sector, Prepares different development scenarios and carries out analyses in energy field (including energy efficiency) with the goal of orienting the Albania's economy towards a sustainable development of energy sector.  Supervises the implementation process of the National Energy Strategy.  Gathers, assembles and analyzes data on production, supply and consumption of energy sources in all economic sectors by creating a database according to International Agency of Energy (IAE) and EUROSTAT standards.  Develops annual energy balance of the country according to IAE and EUROSTAT formats.  Forecasts and proposes action plans for rational and efficient use of energetic fuels in different economic sectors.  Carries out studies for promotion of using of renewable energy sources.  Prepares in cooperation with other institutions, the environment standards related to exploitation of energy sources.	The Team Leader role of GHG inventory and technical expertise on GHG mitigation analysis are provided by the NAE; The NAE is the main data provider for energy sector, mainly from energy balance NAE is represented in PSC;	 The NAE has drafted the report on GHG inventories resport on GHG inventories core stocktaking report.  The NAE has drafted the sections of the V&A report related to the impact of CC into the energy sector and response adaptation measures.  The NAE is consulted on issues related to GHG inventories, GHG mitigation analysis; related activity data for GHG inventory (energy);  The NAE has provided information of the stock of activities / studies related to the stock of activities / studies related to the SNC;  Reedback and validation of the stocktaking report is provided by NAE
MINISTRY OF TERRITORY ADJUSMENT AND TURISM (MOTAT)	Ministry in general		Designs national policies and legal framework for sustainable development of tourism sector in Albania supervises the their implementation process,  Designs the policy and legal framework for management of the irrigation and sanitation network;  Designs national policies, standards and rules for territory planning and adjustment;  Develops national policies on settlements; technical standards of construction of buildings;	Potential member of PSC;     Provides policy advice for the development of tourism sector and settlements and for integrated assessment of impact of expected climate changes into these sectors;	 MoTAT is consulted by CCU regarding the tourism and settlements sector; Information of the stock of activities / studies related to the SNC provided.
MINISTRY OF TRANSPORT AND TELECOMMUNIC ATION (MoTT)	Ministry in general		Designs national policies for sustainable development of the transport and telecommunication sector through expanding and enhancing the transport infrastructure;  Designs transport master plans for each mode of transport (road, maritime, air);  Designs and implements measures for commercialization of services into the overall infrastructure network;  Designs and implements measures for rehabilitation of road network;  Designs the legal and institutional framework that would help the implementation of the polices and measures to the transport and telecommunication;	Potential member of PSC;     Potential data provider for transport category;     Provides policy advice for the development of transport and for integrated assessment of impact of expected climate changes into these sector;	MOTT is consulted by CCU regarding to the transport sector; Information of the stock of activities / studies related to the SNC provided.

MINISTRY OF HEALTH (MoH)	Ministry in general	MoIE is the highest governmental authority responsible for health policy-making in the republic of Albania. Responsibilities of MoH and its institutions that are under its responsibility and relevant to the climate change are as following:	MoH is represented in the PSC;     Provides policy advise regarding the development of Health sector and related impact of climate change and	MoH is consulted by CCU regarding the health sector, Information of the stock of activities / studies related to
		<ul> <li>Designs national polices for the protection of the public health and improvement of public health services</li> <li>Designs the respective legal framework and build institutional</li> <li>Implements policies, laws and regulations for the protection of the public health and health service;</li> </ul>	adaptation strategy for this sectors;  Potential data provider for health sector	
	Public Health Institute (PHI)	The Public Health Institute is a multidisciplinary research Institute that works under the responsibility of the MoH. Its main aim is prevention of population from exposed harmful impact caused by polluted air, waste, contaminated food, etc. Its duties are:	Potential data provider on health sector Potential provider of technical expertise related to climate change	PHI is consulted by CCU regarding health sector, Information of the stock of ordination of ordination of the stock of ordination of the stock of ordination of the stock of ordination ordination ordination ordination ordination ordination ordination ordination o
		<ul> <li>Analyses and monitors the lygienic and other conditions regarding the quality of drinking water and waste water,</li> <li>Analyses and monitors the quality of urban air;</li> <li>Analyses and monitors the quality of food products;</li> <li>Produces monitoring data on above indicators national level.</li> <li>Provide data to all institutions public and private upon their request</li> </ul>	impact to the neatth	the SNC provided.
Institute of Statistics (INSTAT)		The INSTAT is the main official data provider in the Republic of Albania that works under the direct responsibility of Council of Ministers.	Represented to the PSC     Major data provider for all sectors     pelacent to all themselve areas covered.	INSTAT is consulted by CCU related to the issue of data provision.
		<ul> <li>Collects, process, analyses and disseminates statistical data related to the economy, demography, and social life;</li> <li>Provides accurate statistical information, data and analysis to the users – the Governmental institutions, private and academic sector, individuals in order to innavave the process of business decision making democratisation of the society and</li> </ul>	relevant to att inematic areas covered by SNC;	data provision;
		scientific research;  Establishes and manages the databases and statistical registries on national level, setting down statistical methodologies, maintenance collaboration in the domain of the statistics, communication with the beneficiaries, etc.		
University of Tirana;	Faculty of Natural Sciences (FoNS)	<ul> <li>Provides education at all levels on Chemistry, Physics, Biology, Computing Science and Mathematics.</li> </ul>	<ul> <li>FoNS is represented in PSC</li> <li>FoNS is a potential provider of the</li> </ul>	FoNS is consulted by CCU     on genera technical issues;
		<ul> <li>Conducts scientific research and implements projects on Chemistry, Physics, Biology, Computing Science, and Mathematics;</li> </ul>	technical expertise for GHG inventory and GHG mitigation analysis	
Polytechnic University	Physics Department	<ul> <li>Provides classes of physics to all engineering branches at all levels;</li> <li>Conducts scientific research and implements projects related to the physics;</li> </ul>	Physics department provides technical expertise on uncertainty assessment for GHG inventory.	Physics department is consulted by CCU related to the issue of uncertainty assessment:
				<ul> <li>Feedback and validation of the stocktaking report is provided by IHM;</li> </ul>

Institute of Hydro- Meteorology (IHM)	The IHM is a public research institute that works under the responsibility of the Academy of Science of Republic of Albania. Its duties and responsibilities are as following:  Systematically observes and monitors meteorological parameters from all national stations.  Monitors the hydrological parameters of the country such as surface and ground water parameters; monitoring of sediment in rivers and lakes  Process the data and information received from the observations;  Process the data and information system on the hydro and metrological indicators of the country;  Develops weather forecast and provide it to the interested parties;  Report data to the World Metrological Organization and to other regional / subregional networks established;	The Team Leader role of V&A and significant technical expertise on V&A are provided by the IHM The IHM is the main hydrometrological data provider; NAE is represented in PSC;	The IHM has drafted the report on V&A - as significant part of the core stocktaking report; The IHM is consulted on issues related data IHM has provided information of the stock of activities / studies related to the SNC; Feedback and validation of the stocktaking report is provided by IHM
UNDP ALBANIA	UNDP Albania is uniquely placed to advise the government on policies and institutions to meet development challenges, to work with partners to mobilize talent and resources, and to play the advocacy role through the Human Development Report and the Millennium Development Goals (MDGs). UNDP is helping Albania integrate the Millennium Development Goals into national development frameworks. These global goals, each to be achieved by 2015, reflect many of the priorities already identified by the Albanian NSSED (an expanded Growth and Poverty Reduction Strategy).  The programs and projects within the unit are clustered around three main MD goals: Poverty, Gender and Environment, although many crosscutting elements and initiatives are present. In this context:  Poverty is related and addressed through improvements of personal and community security levels.  Gender is an overall crosscutting issue, which reflects its impact within cluster programs and extends to all other clusters from policy formulation to application.  Environment is directly linked to poverty reduction and improvement of livelihoods, thus an additional crosscutting area.	to Inpermenting Agency of the Implementing Agency of all GEF funded Projects; Im UNDP provides technical support to the implementation process of the project;  are project;	UNDP is systematically consulted by CCU in all steps of the stocktaking exercise; Feedback and validation of the stocktaking report is provided by UNDP Albania
WORLD BANK (WB)	The WB is helping Albania achieve social and economic development by providing the country with loans and grants to finance development projects. In addition, the WB is supporting the country's growth through the provision of technical assistance, as well as analytical and policy advice. In partnership with the EU, the WB has facilitated donor coordination efforts and helped to catalyze additional resources to support Albania's development.  The WB's Country Assistance Strategy for Albania for the period 2002-2005 focuses on reducing poverty and supports the Albanian Government's NSSED. The WB is working closely with the Albania's Government to achieve the priorities set in their strategy. The main priorities envisaged in the WB's strategy are to improve governance and strengthen institutions, promote sustainable private sector growth, and foster human development.	the WB has implemented and implements projects related to the management of natural resources including forests  which are a significant source of data and information to be considered under the SNC;  WB is a potential innovative financing mechanism for carbon sequestration through its Prototype Carbon Fund (PCF) and other similar funds;  WB has recently approached the CCU to participate into the Natural Resources Management Project, under PCF component.	WB is consulted by CCU regarding stocktaking

REGIONAL ENVIRONMENAT L CENTER (REC)	REC off protecti progamiz R et R	Potential new member of PSC; Collaborator regarding issues related to raising of awareness for climate change;	REC is consulted by CCU regarding stocktaking.
GEF Small Grants Program (SGP)	The GEF Small Grants Programme is a corporate programme of the GEF, implemented by UNDP and executed by UNOPS.  The GEF's Small Grants Programme aims to deliver global environmental benefits in the GEF Focal Areas of biodiversity conservation, climate change mitgation, protection of international waters, prevention of land degradation (primarily desertification and deforestation), and elimination of persistent organic pollutants through community-based approaches;	Collaborator regarding the projects on energy and climate change; Potential data provider from relevant projects as this program has funded some projects (finalized / ongoing) in energy efficiency and renewable energy sources.	GEF SGP is consulted by CCU regarding stocktaking; Information of the stock of activities studies related to the SNC provided.  Feedback on stocktaking report provided;
GEF Med Wet Coast Project	The Met Wed Coast Project addresses the focal area of biodiversity, under the operational program on coastal, marine & freshwater ecosystems. The project is the Albanian component of a Mediterranean regional initiative involving Albania, Egypt, Lebanon, Morocco, the Palestinian Authority and Tunisia. The project aims are:  Develops the innovative legal frameworks for protection coastal marine and fresh water ecosystems;  Develops the inter-sectorial management structures that would be able to address complex land management issues;  Intends to build national capacity and to promote a regional network that would be able to exchange experience, providing economies of scale and the transfer of innovative components of the project within and outside the region.	The project has developed some work on the vulnerability of the wetland selected areas to the climate change and hereby a potential data provider.	MED Wet Coast Project is consulted by CCU regarding stocktaking: Information of the stock of activities / studies related to the SNC provided. Feedback on stocktaking report provided;
Energy Efficiency Centre (EEC)	Energy Efficiency Centre is an NGO that was established by an agreement between the Government of Albania and EU. Its main aims are:  EEC promotes energy efficiency and use of renewable energy sources in the country;  Conducts energy audits to public institutions and private companies and provides technical advices and expertise for increasing of energy efficiency and saving;  EEC implements projects in the energy saving, renewable energies and energy efficiency field.	Potential new member of the PSC; EEC is a data provider for GHG mitigation analysis exercise (energy section). EEC is a potential provider of the technical expertise related to the GHG mitigation analysis exercise.	EEC is consulted by CCU regarding stocktaking: Information of the stock of activities / studies related to the SNC provided. Feedback on stocktaking report provided

Environmental Centre for Tendinistration of Technology (ECAT) - Tirana		ECAT is represented to the PSC;  ECAT has jointly implemented with CCU small projects on climate change and related issues; ECAT is a potential collaborator for the SNC implementation phase.	ECAT is consulted by CCU regarding stocktaking; Information of the stock of activities, studies related to the SNC provided. Feedback on stocktaking report provided
Energy and Environment for Sustainable Development (EESD)	EESD is a well-known NGO in the field of energy, climate change, environmental and economy planning. Its aims are as following:  Promotes sustainable development in the country through application of alternative energy options;  Promotes energy efficiency through energy saving schemes;  Provides technical expertise for implementation of different projects in the field of energy, climate change and environmental protection;  Raises awareness of public on environmental issues;	EESD centre is a potential new member of the PSC;  EESD centre provides technical expertise to the GHG inventory and GHG abatemen;  EESD centre performs significant part of activities under the GEF regional project on GHG inventories.	by CCU regarding stocktaking. Information of the stock of activities / studies related to the SNC provided. Feedback on stocktaking report provided
shpk	EUROPA Solar is the only one manufacturer of solar hot water heater systems in Albania. It is established since 2001 through a soft load from EU Synergy Program.	<ul> <li>This private company is highly interested for the promotion of the solar hot water heater systems in Albania.</li> <li>They are considered as a potential partner for the public awareness activities for promotion of solar energy utilization.</li> </ul>	EUROPA Solar are     consulted by CCU     regarding stocktaking.

Appendix E: Key source categories (1994)

K	6thris (000 660 680 6994	%	%
		Level assessment	Cumulative total
Nr.	Items	CO <sub>2</sub> eqv.	CO2 eqv.
1	CH <sub>4</sub> -Enteric fermentation	22.49	22.49
2	CO <sub>2</sub> -Woody biomass burned for energy	21.40	43.89
3	CO <sub>2</sub> -Fuel combustion in industry	14.03	57.91
4	CO <sub>2</sub> -Mobile combustion	11.24	69.16
5	CO <sub>2</sub> -Fuel combustion energy and transformation industries	8.15	77.30
6	CH <sub>4</sub> -Landfills	4.15	81.45
7	CO <sub>2</sub> -Fuel combustion in agriculture / forestry / fishing	2.87	84.32
8	CO <sub>2</sub> -Industrial processes	2.81	87.14
9	CO <sub>2</sub> -Fuel combustion in commercial / institutional sector	2.61	89.75
10	N <sub>2</sub> O-Use of nitric fertilizers	2.47	92.22
11	CO <sub>2</sub> -Forests and grassland convention	2.27	94.48

Key source categories for GHG emissions (year 1994) - Albania

**Global Project on NCs UNDP-GEF NCSP Ministry of Environment UNDP** Project local/ regional office Stakeholders Ministries **National Project INSTAT** Director **Public Institutes Private Institutes** Academia **NGOs Project Steering** Private sector Committee **Projects GHG Inventory GHG** Abatement V&A Team **Review Team** Team Team Team Team Team Team Leader Leader Leader Leader Expert 1 Reviewer 1 Expert 1 Expert 1 Expert 2 Reviewer 2 Expert 2 Expert 2 Expert 3 Reviewer 3 Expert 3 Expert 3 .....

Appendix F: Institutional framework for the project

#### Appendix G: Terms of Reference (TOR)s

#### 1. TOR for National Project Manager

In consultation with the Project Steering Committee (PSC), the Project Manager (PM) is responsible for day-to-day management, co-ordination and supervision of the implementation of the above project. Specifically, his\her responsibilities are but not limited to the following:

- Supervises and ensures the timely implementation of the project relevant activities as scheduled in the working plan
- Prepares a detailed work plan for the project and draft terms of reference for the subcontracts (in consultation with the PSC and UNDP);
- Compiles the scope and content of the overall SNC report and relevant sections in consultation with Team Leaders:
- Develops the scope of the work and TORs and other procurement documentation required to identify and facilitate recruitment of experts and consultants;
- Identifies and hire/subcontract the national experts and institutions (in consultation with the PSC and UNDP);
- Supervise project support staff national consultants who are recruited to provide technical assistance
- Organizes and supervise the workshops and training needed during the project;
- Liaises with the relevant ministries, national and international research institutes, NGOs, and other relevant
  institutions in order to involve their staff in project activities, and to gather and disseminate information
  relevant to the project;
- Prepares periodic progress reports of the project;
- Control the expenditures and otherwise ensure adequate management of the resources provided for the project;
- Summarizes and synthesizes the results of the project;
- Identifies the follow up activities and mobilizes other resources at the extend possible;
- Identifies and ensures synergy of the SNC with other relevant ongoing / new projects.
- Finalizes the Second National Communication of Albania along with the government personnel and national experts;
- Ensures that the SNC process is in the line with guidance provided by the CoP of the UNFCCC and contributes to the improvement of the UNFCCC reporting process.
- Oversees the maintenance and update of the Albania's climate change web page;
- Collaborates with all relevant stakeholders and the Project Steering Committee and other partners to ensure their involvement in the SNC

- Preferably master's degree in environment-related studies and other related disciplines;
- Good understanding of Albania's environment/development issues as well as the three thematic areas under investigations;
- At least six to eight years experience relevant to the project;
- Excellent communication (Written and Oral) Skills;
- Demonstrated experience in project management;
- Expertise in putting together costed, results-oriented action plans;
- Demonstrated experience in working with government, donors and the United Nations system;
- Appropriate experience working with government structures at local levels, and working with NGOs and private sector;
- Substantial involvement in the preparation of the national GHG inventory and the initial National Communication is mandatory
- Substantial knowledge of methodologies for inventories (IPCC Revised 1996 Guidelines and Good Practice Guidance, LEAP etc)

- Substantial experience in Government and in inter-departmental procedures preferred
- Familiarity with international negotiations and processes under the UNFCCC preferred
- Familiarity with computers and word processing

- An advanced degree (at least MSc. or equivalent) in energy, environmental management or other field relevant to the project
- A minimum of 7 years of working experience in the area relevant to the project;
- A demonstrated ability in managing projects, and in liaising and co-operating with all project personnel including government officials =, scientific institutions, NGOs, and private sector;
- Fluency in the government official language (s);
- A very good knowledge in English is absolutely necessary.

#### 2. TOR for National GHG Inventory Team Leader

The National GHG inventory Team Leader should work in consultation with and under the guidance and supervision of the National Project Manager. Specifically, his\her responsibilities are but not limited to the following:

- Assists the NPM in establishing the team of experts for performing the GHG inventory on the basis of the roster of experts;
- Oversees the training –of –trainers sessions on GHG inventory.
- Assists NPM to organize GHG inventory relevant training and workshops.
- Prepares a detailed work-plan for GHG inventory exercise on the basis of the overall project work plan.
- Provides periodic progress report to the NPM on the GHG inventory thematic area;
- Develops the scope of work and respective terms of reference for the team members;
- Leads the data collection process, including surveys.
- Leads and oversees the team to conduct the GHGs national inventory;
- Ensures synergy with Regional Project on GHG inventories;
- Ensure the timely and effective management of the activities as scheduled;
- In consultation with NPM select and implement the methodologies for the conducting of GHGs inventory;
- Identifies gaps and key sectors for GHGs inventory;
- Incorporates comments received from the review process.
- Drafts the National Inventory Report and respective chapter of Albania's SNC along with the respective part
  of executive summary.
- Leads and coordinates the updating the Manual of Procedures in the light of the new findings under the SNC exercise
- Archives new data and estimates of new inventory.

- An advanced degree in energy, environmental management or other field relevant to the project;
- A minimum of 7 years of working experience in the area relevant to the Climate Change;
- Substantial involvement in the preparation of the First National Communication is mandatory (GHG inventory and abatement analysis);
- Good understanding of GHGs inventory process and demonstrable knowledge of IPCC and GPG;
- Demonstrated ability of analytical and drafting work;
- Familiarity with computers and word processing (EXCEL; ACCESS)
- Fluency in English;

# 3. TOR for GHG Abatement Analysis Team Leader

The team leader of scenarios development sector should work in consultation with and under the guidance and supervision of the National Project Manager. Specifically, his\her responsibilities are but not limited to the following:

- Assists the NPM in establishing the team of experts for performing the GHG abatement analysis on the basis
  of the roster of experts;
- Prepares a detailed work-plan for GHG abatement analysis on the basis of the overall project work plan.
- Provides periodic progress report to the NPM on the GHG abatement analysis thematic area
- Develops the scope of work and respective terms of reference for the team members;
- Leads the data and information collection process.
- In consultation with NPM decide on methodologies for the elaboration of scenarios for sectors than energy;
- Leads and oversees the scenario development and update
- Organize the scheduled consultations/workshops and ensure their success;
- Ensures synergy with other relevant projects;
- Ensure the timely and effective management of the activities as scheduled;
- Incorporates comments received from the review process.
- Drafts the GHG Abatement Analysis Report and respective chapter of Albania's SNC along with the respective part of executive summary.
- Oversees the documentation of the studies made and archiving.

- An advanced degree in energy, environmental management or other field relevant to the project;
- A minimum of 7 years of working experience in the area relevant to the Climate Change;
- Substantial involvement in the preparation of the First National Communication is mandatory (inventory and abatement and analysis);
- Good understanding of GHGs inventory process and projection;
- Demonstrable knowledge of IPCC 1996, IPCC GPG, LEAP etc.
- Demonstrated ability of analytical and drafting work;
- Familiarity with computers and word processing;
- Fluency in English;

# 4. TOR for V&A Team Leader

The Vulnerability and Adaptation sector team leader should work in consultation with and under the guidance and supervision of the National Project Manager. Specifically, his\her responsibilities are but not limited to the following:

- Assists the NPM in establishing the team of experts for performing the V&A on the basis of the roster of
  experts;
- Prepares a detailed work-plan for V&A on the basis of the overall project work plan.
- Provides periodic progress report to the NPM on the V&A thematic area
- Develops the scope of work and respective terms of reference for the team members;
- Leads the data and information collection process for performing the V&A study.
- In consultation with NPM decide on approaches (not concluded under stocktaking phase) to be used if
- Leads and oversees the development baseline climate and socio-economic scenario and impact of climate change.
- Organize the scheduled consultations/workshops and ensure their success;
- Ensures synergy with other relevant projects
- Ensure the timely and effective management of the activities as scheduled;
- Incorporates comments received from the review process.
- Drafts the V&A Report and respective chapter of Albania's SNC along with the respective part of executive summary.
- Oversees the documentation of the studies made and archiving.

- An advanced degree in energy, environmental management or other field relevant to the project;
- A minimum of 7 years of working experience in the area relevant to the Climate Change;
- Substantial involvement in the preparation of the initial National Communication is mandatory (V&A);
- Good understanding of climate change and sustainable development issues;
- Demonstrated ability of analytical and drafting work;
- Demonstrable knowledge of IPCC 1994, MAGIC / SCHENGEN etc.
- Familiarity with computers and word processing;
- Fluency in English;

# 5. TOR for Project Steering Committee

In order to ensure a successful implementation of thes UNDP-GEF climate change projects, the Ministry of Environment of Albania as the Executing Agency of these Projects has agreed on establishment of a Project Steering Committee (PSC), being chaired by the National Project Director and composed of senior officials from the relevant ministries, research institutes, UNDP, NGOs and academia.

The duties, responsibilities and operating rules of the above PSC are as following:

- Provides assistance and political support to the National Project Director, National Project Manager and national experts and counterparts during the implementation process of all project activities.
- Reviews and make necessary comments for the all draft documents prepared by the national clime change team
- Receives information on regular basis on the status of the implementation of the project activities and problems to be faced with. National Project Manager submits the report on the status of the implementation of project activities.

## Rules under which PSC operates:

- NPM serves as Moderator of PSC meetings. NPD chairs the PSC meetings
- PSC meets not less than three times during the project life-time. In special cases the PSC shall meet upon the initiative of the National Project Director.
- When the PSC does not meet, the NPD and NPM may request inputs and support from individual members of the PSC.

In principle, the NSC shall operate on the basis of consensus. If consensus cannot be reached, then the case under discussion might put to a vote. Voting is performed through secret balloting.

# Appendix H: Endorsement letter from GEF OFP and UNFCCC Focal Point



#### Republic of Albania Ministry of Environment Rruga Durresit No 27, Tirana, Albania

Date, 29 December, 2004

To Anna Stjarnerklint Resident Representative UNDP/ALBANIA Rrugo: Deshmoret e 4 Shkuritit Vila 35, Tirana, Albania

Re: Project proposal for the preparation of Albania's Second National Communication to the United Nations Convention on Climate Change

Dear Madam,

On behalf of the Government of Albania and, in the respective capacities of GEF Focal Point and UNFCCC Focal Point, we hereby jointly endorse the request of funding from the Global Environment Facility for the above mentioned project proposal, to be presented through the United Nations Development Program.

In doing so, we express our joint agreement with the content of the project proposal and with its implementation arrangements.

We look forward to your kind consideration in this matter.

Sincerely.

Pellumb Abeshi CTV GEF Operational Foral Point Minustry of Emprenhent Albania

Ermira Fida UNFCCC Focal Point Climate Change Unit Ministry of Environment Albania