

Signature Page

Country: Turkey

Project Title: ENABLING ACTIVITIES FOR THE PREPARATION OF TURKEY'S SECOND NATIONAL COMMUNICATION TO THE UNFCCC

UNDAF Outcome(s): Outcome 1: By 2010, strengthen individual and institutional capacity for both democratic and environmental governance at local and central levels.

Outcome 1.1. Increased individual collective and institutional capacity for participation at all levels of decision making.

Outcome 1.2. Mechanisms for the implementation and monitoring of international norms and standards on human rights strengthened.

Outcome 1.3. Strengthened management and protection of ecosystems for sustainable development.

Expected CP Outcome(s):

(Those linked to the project and extracted from the CP)

UNDP will support the National Climate Change Commission by strengthening national and local capacities to formulate and implement strategies to address climate-related risks.

Expected Output(s): Output 1. National Circumstances Reviewed and Updated; Output 2. GHG Inventory Information Reviewed and Updated; Output 3. Policy and Measured Assessed and Analyzed; Output 4. GHG Projections reviewed, updated and links are identified in terms of total PaMs effects; Output 5. Review and update vulnerability assessment, climate change impacts and adaptation measures; Output 6. Review research and systematic observation completed in terms of climate change; Output 7. Financial Resources and Technology Transfer; Output 8. Review of national education, training and public awareness activities in Turkey; Output 9. Preparation of the SNC of Turkey and submission to the UNFCCC.

Executing Entity:

Ministry of Environment and Forestry

Implementing Agencies:

UNDP Turkey

Brief Description

The proposed project will apply a ten-pronged approach to develop the SNC: Output 1. National Circumstances Reviewed and Updated; Output 2. GHG Inventory Information Reviewed and Updated; Output 3. Policy and Measured Assessed and Analyzed; Output 4. GHG Projections reviewed, updated and links are identified in terms of total PaMs effects; Output 5. Review and update vulnerability assessment, climate change impacts and adaptation measures; Output 6. Review research and systematic observation completed in terms of climate change; Output 7. Financial Resources and Technology Transfer; Output 8. Review of national education, training and public awareness activities in Turkey; Output 9. Preparation of the SNC of Turkey and submission to the UNFCCC. 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 Turkey and help into taking them into account in the process of national planning and policy. This project will also cover the gaps that are identified during the UNFCCC In-Country Review of the First National Communication.

Programme Period:	2006 - 2010
Key Result Area (Strategic Plan)	Climate Change
Atlas Award ID:	00059382
Start date:	30 May, 2010
End Date	30 Nov. 2011
PAC Meeting Date	11 Nov. 2009
Management Arrangements	NIM

Total resources	
GEF	USD 500,000
In-kind contribution:	
MoEF	USD 1,100,000

Agreed by Ministry of Environment and Forestry (MoEF):


Sedat KADIOGLU
Deputy Undersecretary

Agreed by (UNDP):



31 MAY 2010

Ulrika Richardson-Golinski
Deputy Resident Representative



**UNDP Project Document Format
Government of Turkey**

United Nations Development Programme

**ENABLING ACTIVITIES FOR THE PREPARATION OF TURKEY'S SECOND
NATIONAL COMMUNICATION TO THE UNFCCC**

PIMS 4317

Brief description

The proposed project will prepare the Second National Communication by delivering the outputs: Output 1. National Circumstances Reviewed and Updated; Output 2. GHG Inventory Information Reviewed and Updated; Output 3. Policy and Measures Assessed and Analyzed; Output 4. GHG Projections reviewed, updated and links are identified in terms of total PaMs effects; Output 5. Review and update vulnerability assessment, climate change impacts and adaptation measures; Output 6. Review research and systematic observation completed in terms of climate change; Output 7. Financial Resources and Technology Transfer; Output 8. Review of national education, training and public awareness activities in Turkey; Output 9. Preparation of the SNC of Turkey and submission to the UNFCCC. 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 Turkey and help into taking them into account in the process of national planning and policy. This project will also cover the gaps that are identified during the UNFCCC In-Country Review of the First National Communication.

Contents

Acronyms	3
Part 1 – ELABORATION OF NARRATIVE	6
1.1 SITUATION ANALYSIS	6
1.2 STRATEGY	7
1.2.1 GENDER MAINSTREAMING.....	8
1.3 MANAGEMENT ARRANGEMENTS	9
1.4 MONITORING AND EVALUATION	9
1.5 LEGAL CONTEXT	10
1.6 LESSONS LEARNT AND GOOD PRACTICES	11
Part 2: BUDGET	12
Part 3: APPENDICES	19
APPENDIX A:	22
I. Summary of main findings of the FNC consultations.....	22
APPENDIX B – STAKEHOLDERS MATRIX	25
APPENDIX C – INSTITUTIONAL FRAMEWORK FOR THE PROJECT	41
APPENDIX D - TERMS OF REFERENCES (TORs)	42
1. TORs for National Project Coordinator	42
2. TORs for Project Manager	42
3. TORs for Project Assistant.....	43
4. TORs for Project Steering Committee.....	45
UNDP COUNTRY OFFICE SUPPORT SERVICES TO NATIONAL EXECUTION	46
APPENDIX E: REFERENCES	47
SIGNATURE PAGE	48

Acronyms

APF	Adaptation Policy Framework
BSEP	Black Sea Environment Programme
CBCC	Coordination Board on Climate Change
COP	Conference of Parties
DHKD	Turkish Society for the Conservation of Nature
DSI	State Hydraulic Works General Directorate
DSM	Demand-side management
DWGR	Draft Working Group Reports
EFT	Environmental Foundation of Turkey
NSYDP	NDP-9 th Development Plan (2007-2013)
EIA	Environmental Impact Assessment
EIE	General Directorate of Electrical Power Resources Survey and Development Administration
EIGM	General Directorate of Energy Works
ENPEP	Energy and Power Evaluation Program
EU	European Union
EUAS	Electricity Generation Co.
GAP	Southeast Anatolia Project
GCOS	Global Climate Observatory System
DGAPD	General Directorate of Agricultural Production and Development
GDF	General Directorate of Forestry
GDP	Gross Domestic Production
Guidelines	Review of the Implementation of Commitments and of Other Provisions of the Convention UNFCCC Guidelines on Reporting and Review (FCCC/CP/1999/7)
GDRS	General Directorate of Rural Services/Prime Ministry
GHG	Greenhouse Gas
GNP	Gross National Product
INC	Initial National Communication
IPCC	Intergovernmental Panel on Climate Change
IR	Inception Report
LULUCF	Land use, land use change and forestry
MAP	Mediterranean Action Plan
MARA	Ministry of Agriculture and Rural Affairs
MENR	Ministry of Energy and Natural Resources
MoEF	Ministry of Environment and Forestry

MoH	Ministry of Health
MoIT	Ministry of Industry and Trade
MoT	Ministry of Transport
MPWS	Ministry of Public Works and Settlement
MUSIAD	Independent Industrialists' and Businessmen's Association
MW	Megawatt
NAP	National Action Programme for Combating Land Degradation and Desertification
NEAP	National Environmental Action Plan
NC	National Communication
NCSP	National Communication Support Program
NGOs	Non-governmental Organizations
NPC	National Project Coordinator
NPD	National Project Director
NRSD	Turkey's National Assessment Report on Sustainable Development For the World Summit on Sustainable Development
PaMs	Policies and Measures
PM	Project Manager
PSC	Project Steering Committee
QA/QC	Quality Assurance/Quality Control
QPRs	Quarterly Progress Reports
R&DD	Research and Development Department
REC	Regional Environmental Center
SAA	Stabilization Association Agreement
SBAA	Standard Basic Assistance Agreement
SGP	Small Grants Program
TurkStat	Turkish Statistical Institute
TSMS	State Meteorological Service
SPO	State Planning Organization
TAG	Technical Activity Group
TCCC	Technical Committee for Climate Change
TEIAS	Turkish Electricity Transmission Company
TEG	Technical Expert Group
TEMA	Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats
TIS	Turkish Institute of Standards
TISK	Turkish Confederation of Employer Associations
AERI	Research, Institute for Agricultural Economy
TL	Turkish Lira
TNA	Technology Needs Assessment

TOBB	Turkish Union of Chambers and Commodity Exchanges
ToRs	Terms of Reference
TRs	Technical Reports
TUCEV	Turkish Society for the Conservation of Nature
TUSIAD	Turkish Businessman Association
TUGIAD	Young Businessmen Association of Turkey
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNFCCC	United Nations Framework Convention on Climate Change
V&A	Vulnerability and Adaptation
WG	Working Group
WCRP	World Climate Research Programme

Part 1 – ELABORATION OF NARRATIVE

1.1 Situation Analysis

1. Climate change is a global human development challenge which is threatening sustainability of ecosystems and brings about serious economic and social challenges for billions of people and nations around the world. Turkey is not an exception, and is a country highly vulnerable to climate change.
2. IPCC report makes it clear that future climate change could critically undermine efforts for sustainable development throughout the world and especially in the Mediterranean Basin. Climate change will have significant impacts on water resources which are already under high stress. Turkey is bordered by seas on three sides with 8,333 km coastal zone and 70% of industries are located at coastal zones. Turkey has exceptionally rich wetlands and biological diversity. Being an important economic and social sector in Turkey, agriculture will require special attention, since the studies show that it is one of the most vulnerable sectors to climate change.
3. When the UN Framework Convention on Climate Change (UNFCCC) was adopted in 1992, as an OECD member Turkey was included among the Annex I and Annex II countries which bear most of the burden of the commitments made under the agreement. Turkey acceded to UNFCCC in May 2004, following the decision taken during the 7th Conference of the Parties (COP-7) held in Marrakesh in 2001 recognizing Turkey's special circumstances in Annex I and deleting its name from Annex II. As per the Turkish Grand National Assembly's Decision (5 February 2009), Turkey is a Party to the Kyoto Protocol since 26th August 2009. However, when the Kyoto Protocol was adopted, Turkey was not in Annex-B as it was not a Party to the UNFCCC, thus it won't have any quantified emission reduction or limitation commitments until 2012.
4. Sustained economic growth in Turkey begun early 2000s, and the GHG emissions are growing rapidly since then. Also, Turkey does not have historical responsibility on GHG emissions accumulation in the atmosphere nor was its industrialization level comparable with that of other Annex-I countries. In this context, it is of utmost importance for Turkey to continue its sustainable economic development. Turkey's GHG emissions are expected to increase in the foreseeable future.
5. Turkey's level of industrialization is not yet comparable to that of OECD & UNFCCC Annex-I countries. Turkey has the lowest per capita emission and lowest cumulative emission figures amongst the OECD & UNFCCC Annex-I countries. Turkey has the lowest per capita primary energy consumption figures compared to OECD and Annex-I countries. The need for optimum use of domestic resources constitutes one of the main components of the national energy policy.
6. Turkey's Ninth Development Plan (2007-2013) highlights the importance of addressing climate change impacts and managing water and ecological resources in a sustainable manner. The National Rural Development strategy for Turkey (2006) also prioritizes management of natural resources, which is a key element of Turkey's strategy to overcome rural and urban disparities.
7. As a party to the UNFCCC, Turkey attaches importance to adapt to the impacts of climate change. Turkey with a rapidly growing economy and increasing population, has a high demand in energy. As a non-annex-B country, Turkey does not have any quantitative reduction commitments under Kyoto Protocol but comprehensive efforts in all sectors have been launched to address climate change. Therefore, various projects have been launched to address green house gas emissions on sectoral basis. The first National Inventory of Greenhouse Gas Emissions was submitted in 2006 to the UNFCCC Secretariat; the First National Communication to the UNFCCC was submitted in January 2007. The Greenhouse Gas Inventory is being prepared annually and the latest Greenhouse Gas inventory was submitted in 2008.
8. Consideration is now being given to the preparation of The National Climate Change Strategy and Action Plan, covering mitigation and adaptation, as called for in the 9th National Development Plan (2007-13). The National Climate Change Strategy was approved in 03 May 2010 by the High Planning Commission of State Planning Organization and preparations of the draft Action Plan is in progress with the aim that the document will be submitted to the Government of Turkey for consideration. Also, a draft nationwide

adaptation strategy is also being prepared under the Enhancing Turkey's Capacity to Adapt to Climate Change project which will be submitted to Government of Turkey for approval.

9. Responsibility for climate policy development, co-ordination, and preparation of national reports under the UNFCCC is vested in MoEF, which serves as the National Focal Point for Turkey under the Convention. Other governmental entities have also been contributing to the climate change work through research, programme initiatives and communication, which are to be further expanded and elaborated as Turkey's strategy on climate change is developed and implemented. These include the State Planning Organisation, Ministry of Foreign Affairs, Ministry of Energy and Natural Resources, Ministry of Trade and Industry, Ministry of Agriculture and Rural Affairs, Ministry of Transport, Ministry of Public Works and Settlement, Ministry of Health and Turkish Statistical Institute. In 2007, the role of the Parliament was expanded with the creation of a Research Commission to evaluate the causes of climate change and the implications for Turkey.
10. Public participation in climate change policy and implementation is provided through an inter-ministerial Co-ordination Board on Climate Change, established in 2004, with representation from domestic NGOs, industry and academia. Turkish environmental NGOs have expressed satisfaction with the degree of their participation in preparing the National Communication on Climate Change.
11. Since 2002 UNDP supports Turkey in focusing assistance towards compliance with international conventions, aiming at capacity development to implement global environmental conventions primarily through UNDP/GEF (six projects).

1.2 Strategy

12. This project is addressing one of the main issues identified in the UNDAF Outcome 1: By 2010, strengthen individual and institutional capacity for both democratic and environmental governance at local and central levels and UNDP Country Programme Document (CPD) (2006-2010), through the support of the Climate Change Coordination Board by strengthening national and local capacities to formulate and implement strategies to address climate-related risks.
13. The overall strategy of Turkey, as a developing country, is to make its contribution to the global efforts in combating climate change while taking into account her national capacity and special circumstances. Turkey wishes to take actively part in the negotiations for the post-2012 regime with a proper status that should reflect her socio-economic development level. In this framework, by being a party to the Kyoto Protocol Turkey positioned herself to take part of the global action to combat climate change.
14. The objective of the project is to assist the Republic of Turkey in implementation of obligations under UNFCCC by preparing its Second National Communication (SNC) as well as to strengthen its technical and institutional capacities to help the government fulfill its commitments to the Convention.
15. Completion of the INC enhanced the capacity of institutions, raised professional level of experts and decision makers, and improved the management and organization of work in the area of climate change. The preparation of the SNC will further strengthen these capacities and will also provide opportunities for additional analysis and capacity building for Turkey to participate in the post 2012 climate regime. Furthermore, technical, political, legislative, economic and institutional analysis of the relevant sectors will be completed and will provide the baseline information to develop Turkey's climate change road map for post 2012.
16. The project will provide links between climate change studies through the SNC process to the wider national development agenda. The analysis will also combine necessary institutional framework in order to ensure consistency and sustainability of national communication process. To ensure stakeholders involvement and endorsement, the project will be implemented through multi-stakeholder consultations. This project is also aimed to cover the gaps that are identified during the UNFCCC In-Country Review of the First National Communication.

17. The proposed project will apply a ten-pronged approach to develop the SNC: Output 1. National Circumstances Reviewed and Updated; Output 2. GHG Inventory Information Reviewed and Updated; Output 3. Policy and Measured Assessed and Analyzed (PaMs); Output 4. GHG Projections reviewed, updated and links are identified in terms of total PaMs effects (between 2010 and 2050); Output 5. Review and update vulnerability assessment, climate change impacts and adaptation measures, with more robust institutional and socio-economic impact assessment; Output 6. Review research and systematic observation completed in terms of climate change; Output 7. Financial Resources and Technology Transfer; Output 8. Review of national education, training and public awareness activities in Turkey; Output 9. Preparation of the SNC of Turkey and submission to the UNFCCC.
18. In addition, public awareness activities and stakeholder consultations will be approached as a cross-cutting issue in the different project components. Therefore, the preparation of the Second National Communication is expected to enhance general awareness and knowledge on climate change-related issues in Turkey and will help into taking them into account in the process of national planning and policy.
19. **Objective:** assist the Republic of Turkey in implementation of obligations under UNFCCC by preparation of Second National Communication (SNC).
20. The objective of the project, will be achieved through the following outputs:

Output 1.	National Circumstances Reviewed and Updated
Output 2.	GHG Inventory Information Reviewed and Updated
Output 3.	Policy and Measured Assessed and Analyzed
Output 4.	GHG Projections reviewed, updated and links are identified in terms of total PaMs effects.
Output 5.	Review and update vulnerability assessment, climate change impacts and adaptation measures.
Output 6.	Review research and systematic observation completed in terms of climate change.
Output 7.	Financial Resources and Technology Transfer
Output 8.	Review of national education, training and public awareness activities in Turkey.
Output 9.	Preparation of the SNC of Turkey and submission to the UNFCCC.

1.2.1 Gender Mainstreaming

21. As predicted by the Intergovernmental Panel on Climate Change (IPCC), “climate change impacts will be differently distributed among different regions, generations, age classes, income group, occupations and genders” (IPCC, 2001). The IPCC also notes: “the impacts of climate change will fall disproportionately upon developing countries and the poor persons within all countries, and thereby exacerbate inequities in health status and access to adequate food, clean water, and other resources.” People living in poverty are more vulnerable to environmental changes. The gender-poverty links show that 70 percent of the poor in the world are women. When natural disasters and environmental change happen, women and men are affected differently because of traditional, socially based roles and responsibilities.
22. In traditional societies as in Turkey, women are even more vulnerable to the impacts of climate change. Because they are partly involved in decision making at different levels (with a rate of 2 % in municipal assemblies and 9.1 % at the Turkish Grand National Assembly for example), women are less likely to receive critical information about climate and are less able to respond because of restrictions on mobility.
23. The project will incorporate and mainstream gender through: (1) including gender disaggregated data in all the reporting mechanism, as relevant; (2) promoting the inclusiveness of women at the local level in all the awareness campaigns making the information accessible to women; and (3) by promoting the equal participation of men and women in all the conferences, trainings and workshops to empower women through capacity building and technical training and therefore increase women’s capacity to effectively participate in policy-making and decision-making bodies.

1.3 Management Arrangements

24. The Ministry of Environment and Forestry, acting as the national focal point to the UNFCCC is the leading governmental agency for all issues related to climate change in Turkey. The project will be executed through National Execution (NEX) modality with this Ministry, serving as Governmental counterpart. UNDP is the GEF implementing agency for the project. The present Project Document shall enter into force on the date of the written notification by which the Government of Republic of Turkey notifies the other party, through diplomatic channels, of the completion of its internal legal procedures required for the entry into force of the Project Document.
25. Project Management Team (PMT) will consist of National Project Coordinator assigned by MoEF, Senior Project Coordinator, Project Manager and Project Assistant contracted by UNDP. PMT will be responsible for the planning, coordination and management of the SNC, its development for further submission to COP. The long-term objective of this enabling activity is to enhance capacity building efforts, make efficient use of compiled information, and engage technical experts and institution more effectively, as a way to ensure sustainability and continuity of activities.
26. The Project Steering Committee established in frame of the INC would continue to act as advisory body that will provide high-level guidance and support to the project. To avoid duplication and ensure continuity of efforts, the national expert teams established for the INC are expected to provide their input to the SNC development process.
27. The inter-ministerial National Coordination Board on Climate Change (CBCC), initially established in 2001, was revised by the No:25377 Circular of the Prime Ministry, published on 18.02.2004 in the Official Gazette No: 2004/13. The Council has set up a Technical Commission that consists of working groups who will contribute to the preparation of the national communication and will serve as project steering committee as well.
28. UNDP's role will be to provide technical guidance, promote participation, facilitation, ensuring coordination among relevant international donors/programs and establishment of new partnerships. Project duration is eighteen months.

1.4 Monitoring and Evaluation

29. Monitoring responsibilities and events:
30. Project monitoring and evaluation will be conducted in accordance with established UNDP and GEF procedures. Project reviews meetings will be developed in detailed schedule by the project management, in consultation with stakeholder representatives and project implementation partners and incorporated in the Project Inception Report.

Project schedule will include:

31. Tentative timeframes for Steering Committee Meetings, (or relevant advisory and/or coordination mechanisms).
32. Project related Monitoring and Evaluation activities.
33. Day to day monitoring of implementation progress will be the responsibility of the Project Manager, based on the project's Periodic Work plan 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.
34. Periodic monitoring of implementation progress 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.

35. Project Monitoring Reporting: The National 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)

36. A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed eighteen month Work Plan divided in monthly time frames detailing the activities and progress indicators that will guide implementation during eighteen months of the project. The Report will also include the detailed project budget for eighteen month of implementation, prepared on the basis of the Periodic Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted eighteen months time-frame.
37. 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.
38. When finalized, the report will be circulated to project counterparts 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 (QPRs)

39. 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)

40. 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 periodic reports. 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.
41. Audit Clause. 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

42. 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 Turkey 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.

43. 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.
44. 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 Appendixes to the Project Document;
 - b) 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 monthly 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 Appendixes and attachments only as set out here in this Project Document.
45. In order to accord proper acknowledgement to GEF for providing funding, a GEF logo should appear on all relevant GEF project publications, including among others, project hardware and vehicles purchased with GEF funds. Any citation on publications regarding projects funded by GEF should also accord proper acknowledgment to GEF.

1.6 Lessons learnt and good practices

46. The preparation of the National Report and technical assessment reports were a learning-by-doing exercise that served for building and developing national capacities to compile NC to the CoP of the UNFCCC.
47. The continuation of the expert teams involved in NC was critical for the achievement of this process. This approach, along with extension of the expert teams through training the trainers is a step towards sustainability of the process. Inventory preparation team and GHG abatement analysis team should have very close cooperation. This is a lesson learnt during these exercises. Partnership with other UNDP programs and other national public institutions to address climate change issues into development agendas, as already identified is also a good practice.
48. 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.
49. Turkey is playing an important role in the international activities and is a signatory of the UN Convention to Combat Desertification, the Biodiversity Convention, UN/ECE Convention of Long Range Transboundary Air Pollution, EMEP Protocol, the Montreal Protocol, and several regional conventions and protocols. Turkey is considered as a developing country according to UN Biodiversity Convention and the Montreal Protocol. Turkey's outstanding efforts for phasing-out ozone depleting substances have been recognized by the UN last year as a good practice for other developing countries. Turkey is ready to play a similar leading role among the developing countries under the UNFCCC.
50. 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 other relevant projects in achieving their targets.
51. Working in synergy with other GEF and other donor climate change or non-climate change projects will be an efficient way of getting good and desired results.
52. National Communication exercise has been seen not only as a tool to meet the commitments that Turkey has, as a Party to the UNFCCC but also as leverage for programming purposes.

Part 2: BUDGET

Total Budget and Work Plan

Award ID:	00059382
Award Title:	PIMS 4317 CC EA SNC Turkey "ENABLING ACTIVITIES FOR THE PREPARATION OF TURKEY'S SECOND NATIONAL COMMUNICATION TO THE UNFCCC"
Business Unit:	TUR10
Project Title:	PIMS 4317 CC EA SNC Turkey "ENABLING ACTIVITIES FOR THE PREPARATION OF TURKEY'S SECOND NATIONAL COMMUNICATION TO THE UNFCCC"
Project ID: PIMS no. 4317	00074231
Implementing Partner (Executing Agency)	Ministry of Environment and Forestry

GEF Outcome/Atlas Activity**	Responsible Party/Implementing Agent	Fund ID	Donor Name	Atlas Budgetary Account Code	ATLAS Budget Description	Amount (USD) Year 1	Amount (USD) Year 2	Total (USD) All Years	See Budget Note:
OUTCOME 1: National Circumstances Reviewed and Updated	MOEF	62000	GEF	71300	Local Consultant	4,500	4,500	9,000	X
					Total Outcome 1.	4,500	4,500	9,000	
OUTCOME 2: GHG Inventory Information Reviewed and Updated	MOEF	62000	GEF	71200	International Consultant	10,000	18,000	28,000	X
				71300	Local Consultant	5,000	10,000	15,000	X
				72100	Contractual Services	10,000	20,000	30,000	X
				71600	Travel	2,000	2,000	4,000	X
				74500	Misc. Expenses	100	400	500	X
					Total Outcome 2.	27,100	50,400	77,500	
OUTCOME 3: Policy and Measures Assessed and Analyzed	MOEF	62000	GEF	71200	International Consultant	4,000	24,000	28,000	X
				71300	Local Consultant	10,000	20,000	30,000	X
				72100	Contractual Services	-	6,000	6,000	X
				71600	Travel	1,500	1,500	3,000	X
				74500	Misc. Expenses	200	500	700	X
					Total Outcome 3.	15,700	52,000	67,700	

OUTCOME 4: GHG Projections Reviewed, Updated and Links are Identified in terms of total PaMs effects	MOEF	62000	GEF	71300	Local Consultant	5,000	5,500	10,500	X
				72100	Contractual Services	-	16,000	16,000	X
				71600	Travel	200	800	1,000	X
				74500	Misc. Expenses	50	150	200	X
					Total Outcome 4.	5,250	22,450	27,700	
OUTCOME 5: Review and Update Vulnerability Assessment, Climate Change Impacts and Adaptation Measures	MOEF	62000	GEF	71200	International Consultant	14,000	14,000	28,000	X
				71300	Local Consultant	6,500	25,000	31,500	X
				72100	Contractual Services	2,000	3,000	5,000	X
				71600	Travel	1,000	2,000	3,000	X
				74500	Misc. Expenses	100	300	400	X
	Total Outcome 5.	23,600	44,300	67,900					
OUTCOME 6: Review Research and Systematic Observation Completed in Terms of Climate Change	MOEF	62000	GEF	71200	International Consultant	2,000	5,000	7,000	X
				71300	Local Consultant	12,000	6,000	18,000	X
				71600	Travel	1,000	2,000	3,000	X
				74500	Misc. Expenses	100	1400	1500	X
					Total Outcome 6.	15,100	14,400	29,500	
OUTCOME 7: Financial Resources and Technology Transfer	MOEF	62000	GEF	71200	International Consultant	10,000	14,500	24,500	X
				71300	Local Consultant	15,000	16,500	31,500	X
				71600	Travel	2,400	3,000	5,400	X
				72100	Contractual Services	3,000	6,000	9,000	X
				74500	Misc. Expenses	300	400	700	X
	Total Outcome 7.	30,700	40,400	71,100					
OUTCOME 8: Review of National Education, Training and Public Awareness Activities in Turkey	MOEF	62000	GEF	71300	Local Consultant	4,000	8,000	12,000	X
				71600	Travel	400	1,600	2,000	X
				72100	Contractual Services	3,000	15,000	18,000	X
					Total Outcome 8.	7,400	24,600	32,000	

	MOEF	62000	GEF	71200	International Consultant	-	7,000	7,000	X
OUTCOME 9: Preparation of the SNC of Turkey and submission to the UNFCCC				71400	Contractual Services	10,000	5,000	15,000	X
				71600	Travel	4,000	3,000	7,000	X
				72100	Contractual Services	-	12,000	12,000	X
				74500	Misc. Expenses	380	1,040	1,420	X
				72800	Info.Tech.Eq.	5,000	1,160	6,160	X
				74200	Audio visual Prod. Costs	-	5,000	5,000	X
					Total Outcome 9.	19,380	34,200	53,580	
				71300	Local Consultant	4,500	-	4,500	X
OUTCOME 10: Monitoring, Learning, Adaptive Feedback & Evaluation (as per the logframe and M&E Plan and Budget)				72100	Contractual Services	-	7,000	7,000	X
				71600	Travel	2,200	-	2,200	X
				74500	Misc. Expenses	-	1,000	1,000	X
					Total Outcome 10.	6,700	8,000	14,700	
Project Management Unit				71600	Travel	4,000	11,800	15,800	X
				72500	Supply	2,400	1,200	3,100	X
				71400	Contractual Services	20,280	10,140	30,420	X
					Total Management	26,680	23,140	49,320	
Project Total						181,610	318,390	500,000	

Summary of Funds: 1

Donor Name	Year 1	Year 2	Total - All Years
GEF	181,110	318,890	500,000
UNDP in Cash	7500	7500	15,000
MoEF in Kind	363,000	737,000	1,100,000
TOTAL	551,610	1,063,390	1,615,000

1 Summary table should include all financing of all kinds: GEF financing, co-financing, cash, in-kind, etc. etc

Part II: Budget Notes

General Cost Factors:

Short-term national consultants (NC) are budgeted at \$1500 per week.

International consultants (IC) are budgeted at \$ 3500 per week.

DSA's are budgeted at \$ 200 per day.

Local Flight Tickets are budgeted at \$ 200 per round trip.

International Flight Tickets are budgeted at \$ 1000 per round trip.

This is based on UNDP standard costs.

Outcome 1:

1. National Circumstances Reviewed and Updated

- 6 Man/weeks of local short term consultant support (6 M/w x \$1500: \$9000) – the consultant will be hired to update the CBCC by reviewing the existing national circumstances through periodic reporting.

2. GHG Inventory Information Reviewed and Updated

- 8 Man/weeks of international short term consultant support (8 M/w x \$3500: \$28000) – The consultant will be hired to guide the PMU and the national consultant throughout the data review and calculation process in line with the UNFCCC requirements.
- 10 Man/weeks of local short term consultant support (10 M/w x \$1500: \$15000) - the consultant will be hired to update the CBCC by reviewing the existing data and conducting new calculations to analyze the situation in the country.
- \$30000 is budgeted for workshops including meeting space, meals and hotel accommodation of guests. (6 workshops x \$5000: 30000 USD) – The outcomes of the review and calculations will be shared with national and international counterparts including the members of the CBCC and Ministry of Environment Forestry through working group meetings and discuss the factors underlying the GHG emission trends for all source sectors/subsectors through a series of meetings.
- 5 local and 3 international flights [(5 flights x \$200) + (3 flights x \$1000): \$4000]
- \$500 is budgeted for miscellaneous expenses. The precise costs of the workshops are difficult to anticipate. The project will look for cost-savings wherever possible, particularly in relation to travel.

3. Policy and Measures Assessed and Analyzed

- 8 Man/weeks of international short term consultant support (8 M/w x \$3500: \$28000) – The consultant will be hired to guide the PMU and the national consultant throughout the assessment and analysis process in line with the UNFCCC requirements and international trends.
- 20 Man/weeks of local short term consultant support (20 M/w x \$1500: \$30000) - the consultant will be hired to update the CBCC by assessing and analyzing the possible (most significant) policy and measures to be taken into account with the support of information received from Outcome 1, Outcome 2 and Outcome 4.
- \$6000 is budgeted for workshops including, meeting space, meals and hotel accommodation of guests. (2 workshops x \$3000: 6000 USD) - The outcomes of the assessment and analysis will be shared with national and international counterparts including the members of the CBCC and Ministry of Environment Forestry to assess the country position and draft possible policy and measure options through a series of meetings.
- 5 local and 2 international flights [(5 flights x \$200) + (2 flights x \$1000): \$3000]
- \$700 is budgeted for miscellaneous expenses. The precise costs of the workshops are difficult to anticipate. The project will look for cost-savings wherever possible, particularly in relation to travel.

4. GHG Projections reviewed, updated and links are identified in terms of total PaMs effects.

- 7 Man/weeks of local short term consultant support (7 M/w x \$1500: \$10500) - the consultant will be hired to inform the CBCC by reviewing and updating the projections presented in the First

National Communication including the emissions and removals to identify the links in terms of total PaMs effects.

- \$16000 is budgeted for workshops including, meeting space, meals and hotel accommodation of guests. (4 workshops x \$4000: 16000 USD) - The reviewed projections will be shared with national and international counterparts including the members of the CBCC and Ministry of Environment Forestry to conduct discussions for Second National Communication Report through a series of meetings.
- 5 local flights (5 flights x \$200): \$1000
- \$200 is budgeted for miscellaneous expenses. The precise costs of the workshops are difficult to anticipate. The project will look for cost-savings wherever possible, particularly in relation to travel.

5. Review and update vulnerability assessment, climate change impacts and adaptation measures.

- 8 Man/weeks of international short term consultant support (8 M/w x \$ 3500: \$28 000) - The consultant will be hired for to guide the PMU and the national consultant throughout the vulnerability assessment and adaptation measure development process in line with the UNFCCC requirements and international trends.
- 21 Man/weeks of local short term consultant support (21M/w x \$ 1500: \$31500) – the consultant will be hired to inform the CBCC through a complete nationwide sectoral vulnerability assessment in terms of climate.
- \$5000 is budgeted for workshops including, meeting space, meals and hotel accommodation of guests. (5 workshops x \$1000: 5000 USD) - The outcome of the assessment and impacts will be shared with national and international counterparts including the members of the CBCC and Ministry of Environment Forestry to develop possible adaptive measures through a series of meetings.
- 5 local and 2 international flights [(5 flights x \$200) + (2 flights x \$1000): \$3000]
- \$400 is budgeted for miscellaneous expenses. The precise costs of the workshops are difficult to anticipate. The project will look for cost-savings wherever possible, particularly in relation to travel.

6. Review research and systematic observation completed in terms of climate change.

- 2 Man/weeks of international short term consultant support (2 M/w x \$ 3500: \$7000) –the consultant will be hired to inform the CBCC by identifying and assessing the actions, reviewing and assessing status of national plans and programs based on climate observing systems.
- 12 Man/weeks of local short term consultant support (12 M/w x \$ 1500: \$ 18000) – The consultant will be hired for to guide the PMU and the national consultant throughout the observation process in line with the UNFCCC requirements.
- 5 local and 2 international flights [(5 flights x \$200) + (2 flights x \$1000): \$3000] – The consultants are expected to work in Ankara and any other necessary city. Therefore the travel costs of the consultants needs to be covered.
- \$1500 is budgeted for miscellaneous expenses. The precise costs of the workshops are difficult to anticipate. The project will look for cost-savings wherever possible, particularly in relation to travel.

7. Financial Resources and Technology Transfer

- 7 Man/weeks of international short term consultant support (7M/w x \$ 3500: \$24500) – The consultant will be hired for to guide the PMU and the national consultant throughout the review and update process in line with the UNFCCC requirements.
- 21 Man/weeks of local short term consultant support (21M/w x \$ 1500: \$31500) – the consultant will be hired to update the CBCC by reviewing and updating the environmental financial policies and applications in Turkey.
- 5 local and 2 international flights [(7 flights x \$200) + (4 flights x \$1000): \$5400] - The consultants are expected to work in Ankara and any other necessary city. Therefore the travel costs of the consultants needs to be covered.
- \$ 9000 is budgeted for workshops including, meeting space, meals and hotel accommodation of guests. (3 workshops x \$3000: 9000 USD) - The outcome of the review process will be shared

with national and international counterparts including the members of the CBCC and Ministry of Environment Forestry to develop possible adaptive measures through a series of meetings

- \$700 is budgeted for miscellaneous expenses. The precise costs of the workshops are difficult to anticipate. The project will look for cost-savings wherever possible, particularly in relation to travel.

8. Review of national education, training and public awareness activities in Turkey.

- 8 Man/weeks of local short term consultant support (8 M/w x \$ 1500: \$12000) – the consultant will be hired to prepare a summary report on general policy towards education training and public awareness.
- 10 local flights (10 flights x \$200): \$2000 - The consultant is expected to work in Ankara and any other necessary city. Therefore the travel costs of the consultants needs to be covered.
- \$18000 is budgeted for workshops including, meeting space, meals and hotel accommodation of guests. (6 workshops x \$3000: 18000 USD) - The report will be prepared together with national and international counterparts including the members of the CBCC and Ministry of Environment Forestry through several working group meetings.

9. Preparation of the SNC of Turkey and submission to the UNFCCC

- 2 Man/weeks of international short term consultant support (2 M/w x \$ 3500: \$7000) – The consultant will be hired for to guide the PMU and the national consultant throughout the report writing process in line with the UNFCCC requirements.
- 10 Man/weeks of local short term consultant support (10 M/w x \$ 1500: \$15,000) – The consultant will be hired for to draft the SNC Document according to the UNFCCC Guidelines including compilation, drafting chapters and any other necessary actions. This person will also act as the Project Manager.
- 10 local and 1 international flights [(15 flights x \$200) + (1 flights x \$1000): 4000] and 15 days of DSA (15 days x \$ 200: \$3000). The consultants are expected to work in Ankara and any other necessary city. Therefore the travel costs of the consultants needs to be covered.
- \$5000 is budgeted for printing of the 2nd National Communication Report
- \$12000 is budgeted for final workshop including, meeting space, meals and hotel accommodation of guests.
- \$6160 is budgeted for the office information technology equipment. This will include 2 laptops, 1 printer (all-in-one), necessary software licenses (MS Office and virus protection), 1 data projector, 2 land phones and 1 cell phone.
- \$1,420 is budgeted for miscellaneous expenses. The precise costs of the workshop are difficult to anticipate. The project will look for cost-savings wherever possible, particularly in relation to travel

10. Monitoring, Learning, Adaptive Feedback & Evaluation (as per the logframe and M&E Plan and Budget)

- 3 Man/weeks of local short term consultant support (3 M/w x \$ 1500: \$4500) – The consultant will be hired to monitor and evaluate the project as per the GEF SEC and UNDP requirements and inform the PMU for guidance.
- \$7000 is budgeted for NIM Audit in line with UNDP Audit requirements
- 11 local flights (11 flights x \$200): \$2200 - The consultant is expected to work in Ankara and any other necessary city. Therefore the travel costs of the consultants needs to be covered.
- \$1000 is budgeted for miscellaneous expenses. The precise cost of the audit exercise is difficult to anticipate. The project will look for cost-savings wherever possible.

11. Project Management

The project team is expected to use UNDP and the Ministry facilities as the office working space. Furthermore, it is required to buy office equipment and furniture. IT equipment will also be purchased for the project staff. The detailed information of the costs is stated below;

3600 USD is budgeted to for office set-up including the equipment, furniture..

Project Assistant are budgeted based as per Non-UN Salary Scale defined for Turkey.

Project Assistant cost is: $\$390 \times 78$ weeks: $\$30420$

$\$15800$ is budgeted for travel by staff of the PMO and UNDP to allow for effective project coordination between the PMO and the different field sites.

DSA Cost: $\$200 \times 59$ days: $\$11800$

Ticket Cost (economy fare flight-round trip): $\$200 \times 20$ flights: $\$4000$

Part 3: APPENDICES

Work Plan

OUTPUTS / ACTIVITIES		Months																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Project Inception and Implementation Arrangements																			
	Assign staff for PMU(Project Management Unit)																		
	Establish project office																		
	Revise the functionality and execution methodology of Coordination Board on Climate Change(CBCC)																		
	Organize initial coordination meeting																		
	Preparation of ToRs for the project and consultants																		
	Contract consultants for identified activity areas																		
	Inception Phase (IP)																		
	Schedule IP activity plan																		
	Submit to CBCC and circulation of those among Stakeholders																		
Output 1 National Circumstances Reviewed and Updated																			
Activity 1.1	Assess National Circumstances, and how NCs effects GHG emissions and removal now and changes in NCs effects GHG emissions and removals over time																		
Activity 1.2	Review and verify historical trends and include disaggregated indicators																		
Activity 1.3	Assess sectoral information with examples of the key drivers for sectors such as: energy, transport, industry, waste, building stock, urban structure, agriculture, forest and others.																		
Activity 1.4	Review and gap evaluation of the national circumstances of Turkey in accordance with governmental structure with special emphasis on climate change, population, geographic, climate and economic profile.																		
Activity 1.5	Develop and review special circumstances, justifications to define and strengthen Turkey's special status in the convention (Decision 26/CP.7) and review the financial resources benefited from for the preparation of this NC.																		
Activity 1.6	Draft report chapter for national circumstances of Turkey																		
Activity 1.7	Circulate draft chapter for review and integrate comments																		
Output 2 GHG Inventory Information Reviewed and Updated																			
Activity 2.1	Collection and estimation of the inventory data related to the emissions and removals of gases; CO2, CH4, N2O, HFCs, PFCs, SF6 and other GHG such as NOx, CO, NM VOCs, and SO2 for the years between 1990 – 2008 (with necessary re calculations and updates) prepared.																		
Activity 2.2	Assess key drivers of the GHG emissions and removals																		
Activity 2.3	Organize working group meetings and discuss the factors underlying the GHG emissions trends for all source sectors/subsectors.																		
Activity 2.4	Compile and draft the related section report																		

Output 8.	Review of national education, training and public awareness activities in Turkey.																	
Activity 8.1	Prepare as summary report on general policy towards education, training and public awareness (ETP).																	
Activity 8.2	Collect information and summarize activities on primary, secondary, and higher education in terms of climate change; public information campaigns and relevant educational materials, resources and information centers; training programs and participation in international activities.																	
Activity 8.3	Assess the involvement of public, private sectors and NGOs in climate change activities.																	
Activity 8.4	Develop and conduct a nationwide survey to assess the level of awareness of public, private sectors, NGOs and citizens in terms of climate change.																	
Activity 8.5	Summarize the actions taken under the New Delhi Work Programme on Article 6 of the Convention.																	
Activity 8.6	Compile and draft the related section report.																	
Output 9.	Preparation of the SNC of Turkey and submission to the UNFCCC																	
Activity 9.1	Draft SNC Document according to the UNFCCC guidelines																	
Activity 9.2	Compile the draft chapters of thematic sections																	
Activity 9.3	Draft the other sector chapters																	
Activity 9.4	Draft the Emission Inventory Tables and conduct review for validation																	
Activity 9.5	Translate and proof-read the final draft document to English/Turkish.																	
Activity 9.6	Register and compile all the reference/background materials used and benefited from during the NC preparation to be submitted to the MOEF.																	
Activity 9.7	Submittal, Endorsement and Presenting the SNC																	
Activity 9.8	Circulation of the draft for comments and review and incorporate comments both in English and Turkish.																	
Activity 9.9	Endorsement of the document by MoEF followed by UNDP Turkey																	
Activity 9.10	Organize a national workshop to launch and present the findings of the Turkey's																	
Activity 9.11	Finalize the Second National Communication of Turkey																	
Activity 9.12	Publish the Turkey's SNC to UNFCCC																	
Activity 9.13	Preparation of CD copies of Turkey's SNC																	
Activity 9.14	Submittal of the SNC officially to UNFCCC																	

Appendix A:

I. Summary of main findings of the FNC consultations

53. The review presented in this chapter is based on the in-country review organized by the UNFCCC Secretariat for the First National Communication of Turkey in October 2008 according to the Decision 19/CP.8. All relevant stakeholders (Ministries, other Governmental Institutions, NGOs, UN Agencies) were actively participated to this process. The UNFCCC Expert Review Team made a detailed review and met with the key experts who were engaged in the preparation of the report. The results of this review study will be an important input for this project.

1.11 National Circumstances:

54. **Baseline:** FNC presented information about Turkey's Government structure, population, geographic, climatic and economic profile, sectoral information for energy, transportation, waste and agriculture and Turkey's special circumstances. FNC presents the brief results of the analysis conducted for the 2006-2020 period for Turkey with explicit recognition of the GHG emission control targets and the implied abatement costs. The study findings demonstrate that Turkey retains special national circumstances with respect to sharing the abatement burden in comparison with the developed countries based on the likely consequences of mitigation policy measures on social welfare, income distribution

55. **SNC Priorities:** This Section needs to be improved to include more detailed information about Turkey's national Circumstances in the areas of economic reforms; and, also should justify its national circumstances based on the Decision 26/CP.7.

1.12 GHG Inventory Information:

56. **Baseline:** First National Communication is providing a simple pattern analysis for greenhouse gas inventory.. Turkey has provided limited description of the factors underlying GHG emission trends, with a simple comparison of the trend of total GHG emissions with the trend in economic development (GDP), primary energy consumption and population growth. More detailed analysis is provided for LULUCF and road transport sector. GHG estimations for the energy sector, industrial processes, agriculture, field burning of agricultural residues, enteric fermentation management, rice cultivation and solid waste are carried out with IPCC Tier 1 method. INC did not estimate the other categories, such as for stationary combustion, fugitive emissions from oil and gas, PFCs from aluminium production, potential emissions of F-gases, and actual emissions of halocarbons (except for HFC-134a) from the industrial processes, all categories in the solvent and other product use sector, N-fixing crops, crop residue, cultivation of histosols, pasture, range and paddock manure and indirect N₂O emissions from agricultural soils in the agriculture sector, wetlands and settlements in the LULUCF sector and Wastewater handling and waste incineration in the waste sector.

57. **SNC Priorities:** Report and analysis of the factors underlying the GHG emission trends should be enhanced. Tier 1 methods used for the key categories which consist 95% of the emissions, including energy, industrial processes, waste, agriculture and LULUCF shall be transposed to Tier 1/2 or Tier 2 methods where requisite data is potentially available. Uncertainty management should be expanded to all sectors which are to be included in the national GHG inventory. Quality Assurance and Quality Control plans and procedures need to be established and implemented systematically. SNC should include a more detailed analysis of the emission trends, including explanations for the evolution of per capita emissions and emissions per GDP.

1.13 Policies and Measures:

58. **Baseline:** The Policies and Measures chapter presented policy making process, energy policies and all direct and indirect measures on GHG abatement by Turkey. Implemented, adopted and planned measures and additional policies and measures are compiled and summarized. These include, Energy taxation, Energy security, Combined heat and power generation, Renewable energy sources, Energy efficiency improvements, Vehicle and fuel taxes, Alternative vehicle fuels, Public transport systems, Integrated

transport planning, withdrawal of old cars from the traffic, Integrated prevention and pollution control, Agriculture Strategy and Agricultural Reform, Introduction of landfill and recycling methods, Turkish National Forest Programme and Afforestation and Soil Erosion Mobilization Action Plan, Support of research and development, Harmonization of Turkish environmental legislation with European Union (EU) laws. Turkey, as an Annex I Party, attaches importance to the implementation of Policies and Measures (PaMs), although it has no emissions limitation target under the Kyoto Protocol. In spite of national circumstances which follow the typical patterns of developing countries, efforts have been undertaken in selected areas to contribute to GHG mitigation.

59. **SNC Priorities:** Efforts that have been undertaken in selected areas to contribute to GHG mitigation is reported in the FNC; however, effectiveness of most measures could not be assessed. The structuring of this chapter should be done according to the guidelines.. The summary table should include all sectors, indicate the status of the policies and measures; should be more consistent for the different sectors; include the effects of emission reductions and linkages with policy measures. Cost Effectiveness analysis must be included in the SNC on how to mitigate Climate Change. A draft Climate Action Plan is presented in INC but in accordance with National Climate Change Strategy, a final Climate Change Action Plan should be prepared during the SNC preparation based on in-depth analysis and continued consultations.

1.14 Projections and the Total Effect of Policies and Measures:

60. **Baseline:** Projections covered the Energy (energy-related emissions in transport, industry, agriculture and in end-consumption for the gases CO₂, CH₄ and N₂O) and Industrial processes (non-energy emissions for only Cement and Iron and Steel production for the gases CO₂, CH₄ and N₂O) on the basis of two scenarios were used: Without measures (as the reference scenario) and With Measures (Demand Side Management scenario). With additional measures scenario is not presented in the FNC. Transport Sector projections were also prepared. However, projections do not cover emissions from agriculture, LULUCF, waste and some industrial processes. Projections of emissions from international bunkers were not reported separately. The different modules of Energy and Power Evaluation Program (ENPEP) such as MAED, WASP, BALANCE and VALORAGUA were used to project GHG emissions, calculate and evaluate the cost and benefits of forecasted measures for the period 2005-2020 with 2003 taken as the base year. Also, a quantitative sensitivity analysis of uncertainties in the input assumptions was not presented in the INC.
61. **SNC Priorities:** Methodology used in the transport projections should be revised to be consistent with the guidelines. Emission reduction potential for agriculture activities and land use change resources will be taken into account in the analysis. The projections which are missing should be included in the SNC. The summary Table which is the core of the policy and measures section must be prepared. The main assumptions used in the projection scenarios should be further explained

1.15 Vulnerability Assessment, Climate Change Impacts and Adaptation Measures:

62. **Baseline:** FNC has provided a very good analysis on historical trends in climate, with very good spatial resolution for the entire territory. But no analysis performed on interannual variability. Also, no consistency checks with data from neighboring countries were done which may enhance the accuracy of the analysis and projections. RegCM3 run based on SRES A2 emission scenario which takes into account of CO₂, CH₄, N₂O, CFC11 and CFC12 variations for the time interval of 2071-2100. A nationwide adaptation strategy is not presented but several adaptation measures in the agriculture and water management sectors have been identified like flood control (dams, afforestation), irrigation (sprinkler and trickle instead of flooding) and Agriculture Drought Action Plan. Several case studies included in FNC assessed other possible vulnerabilities but they are not conclusive due to the lack of available data and studies. Vulnerability analysis was conducted for some regions including Seyhan, Gediz and Buyuk Menderes River Basins.
63. **SNC Priorities:** The climate change projections need to be set for the near future before 2070. Consistency checks with study results from neighboring countries are required to enhance the accuracy of the trend analysis. Also, an inter-annual variability analysis should be conducted. A full vulnerability assessment addressing the impacts of climate change on, for example, hydropower production capacity, increased electricity demand, required investments in water storage and transportation, tourism and forests. A nationwide adaptation plan should be prepared.

1.16 Research and Systematic Observation:

64. **Baseline:** FNC provided a complete report on the status of Research and Systematic Observation in Turkey.
65. **SNC Priorities:** This chapter will be updated with the current status of the Research and Systematic Observation activities in Turkey. Academic research conducted in Turkey should be reviewed and compiled and additional analysis should be conducted on the needed scientific research for inclusion of Turkey's conditions in the upcoming 5. Assessment report of the IPCC.

1.17 Financial Resources and Technology Transfer

66. **Baseline:** FNC presented information on environmental finance policies and implementation in Turkey as well as on international funding and list of activities related to transfer of technology.
67. **SNC Priorities:** This section needs improvement for ensuring the better consistency with the National Communication guidelines and needs to be updated with most recent information. A technology need assessment needs to be included in this chapter. In terms of financing the development and transfer of technologies, an indicative sector specific study on innovative financing options such as incentives, tax exemptions, and low interest credits needs to be conducted.

1.18 Education, Training and Public Awareness:

68. **Baseline:** INC showed great focus on Education, Training and Public Awareness. The INC presents a variety of environmental education programmes in primary, secondary and higher education as well as training programmes and participation in international activities. The strong connection between energy consumption and climate change is used to build issue awareness and promote additional efficiency improvements. A variety of vehicles, including a series of articles in newspapers and journals, and television and radio broadcasts, special events and greater use of web-based communication were used for the education of the general public.
69. **SNC Priorities:** The structure of this chapter shall be further improved in a more organized way as well as updated with the latest information. The more quantitative information shall be provided with respect to achievements among the institutions and the targeted people who benefited from education, training and public awareness activities on climate change.

APPENDIX B – STAKEHOLDERS MATRIX

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
GOVERNMENT BODIES				
Ministry of Environment and Forestry (MoEF)	Ministry in general	<ul style="list-style-type: none"> ▪ MoEF is the main authorized government body responsible for environment and forestry protection in the Republic of Turkey. General field of activities of MoEF as follows: ▪ Legislates and regulates governmental policies, strategies and action plans for environment and forestry protection ▪ Drafts laws, degree of laws and decisions for the protection of the environment and forestry ▪ Follows-up the implementation of laws, by-laws and decisions of the Ministers Council for environment and forestry protection ▪ Coordinates research and development activities through the Research and Development Department of MoEF. ▪ Conducts cooperation between relevant Ministries, local government, research institutions, and NGOs ▪ Plans measures, activities and standards to protect environment and forestry ▪ Prepares and endorse projects for the protection and remediation of environment ▪ Manages government funds and facilities allocated for environment ▪ Raises awareness on environmental protection and related issues; ▪ Issues environmental permission/ license for all impact related activities ▪ Leads the implementation process of all environmental conventions which Turkey is a signatory 	<ul style="list-style-type: none"> ▪ Mandate for establishment of state policy in the field of climate change ▪ Leading governmental agency for all climate change issues in Turkey ▪ MoEF Undersecretary as NPC will be fully responsible for the coordination of the project as coordinator of this exercise and to ensure the intended outputs are achieved within their timetable. ▪ MoEF acts as the national focal point to the UNFCCC ▪ Through CCCB, it cooperates with key stakeholders in stocktaking preparatory process and plans an effective methodology to get the maximum output especially from the Technical Working Groups ▪ Has the responsibility of the GEF Focal Point (Operational /Political) stands under MoEF; ▪ The responsibility of the UNEP and other relative UN Conventions stands under MoEF 	<ul style="list-style-type: none"> ▪ CCCB operates under MoEF and coordinates the stocktaking exercise at national level and responsible in ensuring preparation of the final stocktaking report and the Turkey's INC to UNFCCC. ▪ Coordinates directors, officials and experts of MoEF in order to get feedbacks and inputs to INC preparation process
	Research and	Designs, plans and implements Research	Former coordinator unit of	Supporting and

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
	Development Department	<ul style="list-style-type: none"> ▪ and Development studies, activities in the field of environment and forestry ▪ Develops, proposes and implements new projects related to environment and forestry ▪ Coordinates and supervises Research Development Department. ▪ Coordinates and supervises Research Institutions working under this body in research areas and gets feedbacks and outputs, archives and shares information 	<ul style="list-style-type: none"> ▪ LULUCF Working Group in First INC and LULUCF GHG Inventory ▪ Works in forest monitoring and conduct research. ▪ Estimate forest carbon inventory. ▪ Advisor in policies related to development of forestry sector, land use management. ▪ Main unit climate change impact on forestry. 	<ul style="list-style-type: none"> ▪ improving GHG Inventory on forest area. ▪ Training GHG Inventory on forest area. ▪ Preparing a programme for identification for research needs for estimating carbon stock changes on forest area.
	Department of Foreign Relations and EU	<ul style="list-style-type: none"> ▪ Facilitates the communication and coordination among key partners ▪ Evaluate the reports and provides its guidance on planning future activities ▪ Organize the cooperation among Ministry departments, other national or international institutions and organizations. 	<ul style="list-style-type: none"> ▪ Coordinates and endorse the projects on behalf of GEF Operational Focal Point. 	<ul style="list-style-type: none"> ▪ Assess externally supported projects, proposals and drafts on the basis of Ministry's and GEF strategies.
	General Directorate of Forestry	<ul style="list-style-type: none"> ▪ Develops strategies for sustainable management of forests ▪ Prepares laws and by-laws for management, protection and rehabilitation of forestry. ▪ Monitors forestry. ▪ Allocates required resources for mitigation and response measures in terms of protection and monitoring of forests and pasture lands ▪ Ensures a rational utilization of woods used for energy purposes ▪ Ensures a rational use of fauna and their by-products 	<ul style="list-style-type: none"> ▪ Contributes with technical expertise related to GHG emissions/sinks released/absorbed from the category of Land Use Change and Forestry (LUCF) ▪ Provides technical support along with outcomes of studies in impact assessment to the Forest category and Land ▪ Advisor in policies related to the development of forestry sector, land use management ▪ Government body works in co-operation with UN in the areas of Biological Diversity and Convention on Desertification 	<ul style="list-style-type: none"> ▪ Coordinator body of the working group- VI which is scoped with "Land use, Land Use Change and Forestry" task ▪ Provides data for the activities in LUCF
State Meteorological		<ul style="list-style-type: none"> ▪ The TSMS is responsible for building and operating the precipitation, 	<ul style="list-style-type: none"> ▪ Maintains systematical observation of climate 	<ul style="list-style-type: none"> ▪ Coordinator of the working group-I scoped

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
	Service (TSMS)	<p>climatology, synoptic, and higher atmospheric observation stations, keeping the archives of records of these observations, making weather and sea forecasts based on the evaluation of these observations, and informing the public and the relevant organizations about its forecasts. The TSMS conducts research on the areas related to climate, weather and atmosphere.</p>	<ul style="list-style-type: none"> ▪ Conducts research on climate change and variability 	<p>in the area of “Researching the Effects of Climate Change”</p> <ul style="list-style-type: none"> ▪ Provides information on observed and projected changes in Turkey’s climate and coordinates studies related to climate change impacts. ▪ Provides data on observations.
	General Directorate of State Hydraulic Works (DSI)	<ul style="list-style-type: none"> ▪ DSI is the primary executive state agency of Turkey for Nations overall water resources planning, managing, execution and operation. ▪ Carry out the survey and planning for river basin development ▪ Prepare master plan and feasibility report to determine technically and economically optimal solutions of water resources project in the river basins. ▪ Construct dams (for drinking and industrial water supply, irrigation, energy and flood control) ▪ Build irrigation and drainage systems; ▪ Construct and operate all structures against flood, perform flood forecast surveys; ▪ Perform all studies for surveys, investigation, conservation and utilization of ground water (by the law No 167). ▪ Develop all stages of water supply and water treatment plants ▪ Make basic investigations such as; <ul style="list-style-type: none"> -Stream flow gauging, -Soil classification, -Agricultural economics, -Geological surveys, -Water quality analysis, 	<ul style="list-style-type: none"> ▪ DSI is a member of Coordination Board on Climate Change (CCCCB). ▪ DSI is responsible for the coordination of the “Adaptation”. ▪ Water is cross-sectoral issue for different sectors such as agriculture, health, energy and infrastructure in adaptation planning ▪ Water quality and water budget works ▪ Water supply for drinking and industrial water, and irrigation. ▪ Water saving in agricultural systems ▪ Develop Hydro Electric Power Plants (HEPPs) which are renewable energy sources ▪ Flood control and flood forecast ▪ Erosion and sediment control works 	<ul style="list-style-type: none"> ▪ Coordinator body of the working group- X which is scoped with “Adaptation” task

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
	Technical Activity Group	<p>-Modeling for water structures, TAG members will be constituted of MoEF experts who have been involved in the field of climate change.</p>	<ul style="list-style-type: none"> ▪ Addresses complex problems ▪ Ensures ongoing learning and adaptation and integrates activities at various levels ▪ Enhances affectivity, utilizes skills, abilities and resources, develops relations with external partners, donor agencies in consultation with Project Management Team 	
Coordination Board on Climate Change(CBCC)		<ul style="list-style-type: none"> ▪ Performs and maintains implementation of mitigation and prevention policies against climate change effects ▪ Determines and ensures adaptation appropriate interior and foreign policies in order to enable relevant activities more effectively ▪ Strengthens the dialogue, information exchange and co-operation among all relevant stakeholders including governmental, non-governmental, academic, private sectors on climate change and related issues <p>Cooperates with key stakeholders in stocktaking preparatory process and plans an effective methodology to get the maximum output especially from the Technical Working Group</p>	<ul style="list-style-type: none"> ▪ CCCB is responsible for the preparation of National Communications to the CoP of the UNFCCC stands under the MoEF in accordance with the overall implementation process of UNFCCC 	<ul style="list-style-type: none"> ▪ Coordinates the working groups structured under CCCB and ensures the effective working of those during stocktaking exercise and INC
Ministry of Foreign Affairs(MFA)	In general	<p>Authorized body responsible for execution of foreign policies and strategies of Republic of Turkey and briefly tasked with following activities:</p> <ul style="list-style-type: none"> ▪ Develops and implements foreign strategies and policies of Turkey ▪ Coordinates and facilitates the membership procedures of Turkey to the international 	<ul style="list-style-type: none"> ▪ Provides continuous support, supervision in the process of framework convention in climate change and facilitates the representation of MoEF in the negotiation process 	<ul style="list-style-type: none"> ▪ Member of the working group-VII scoped in the area of "Development of Policies and Strategies" ▪ Provides consultation in respective foreign policies and supervises in facilitating Turkey's adaptation phase

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
		<ul style="list-style-type: none"> conventions, protocols Act as an overall focal point in coordination of the collaboration between homologue ministries of other countries, international institutions and facilitates procedures of participation of Turkey representatives to the international meetings, conferences, training, workshops and seminars 		<ul style="list-style-type: none"> Feedbacks in stocktaking report prepared
Ministry of Energy and Natural Resources (MENR)	General Directorate of Energy Works (EIGM)	Responsible for energy policy formulation and monitoring tasks (e.g. internal energy market), as well as for subsectoral work (eg solid fuels restructuring, nuclear energy, promoting energy efficiency and the use of renewable energy).	<ul style="list-style-type: none"> Develops GHG reduction policies and incentive programs Performs energy demand model studies and make cost-benefit analysis in order to determine convenient adaptation measures and programs Participates in works on GHG emissions inventory and development of projects on their reduction 	<ul style="list-style-type: none"> Coordinator of the working group-IV in scope of "Mitigation of Greenhouse Gasses from Energy Sector" Provides the energy related inventory data and projections for stocktaking report
	Electricity Generation Co. Inc. (EUAS)	Provides services on national scale in electricity generation areas.	<ul style="list-style-type: none"> Ensures adaptation programmes and abatement measures for climate change effects 	<ul style="list-style-type: none"> Provides inventory data in the electricity generation area Proposes strategies and promotes incentive mechanism for future activities in terms of
	General Directorate of Electrical Power Resources Survey and Development Administration (EIE)	Follows up energy consumptions and demands of industry, building and service sectors, monitors and supervises energy efficiency activities in general.	<ul style="list-style-type: none"> Coordinates energy efficiency activities Develops and implements energy efficiency activities in industry, building and service sectors Sets up adaptation programs for GHG reduction 	<ul style="list-style-type: none"> Coordinator of the working group-VIII scoped in "Mitigation of GHG from Industry, Building, Waste Management and Service Sector" Provides data in industry, building, service sectors

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
	Strategic Development Department (SDD)	<p>Have responsibilities for research, planning and coordination activities in energy area. Develops projects and programmes as required.</p>	<ul style="list-style-type: none"> Contributes with research and planning activities in the area of climate change in coordination with other involved MENR bodies 	<ul style="list-style-type: none"> Provides required data by conducting scenario and other relevant studies. Assists to EIGM in planning of adaptation program implementations in energy sector
Ministry of Transport		<ul style="list-style-type: none"> Develops and designs national policies for sustainable development of the transport sector by expansion and enhancement of the transport infrastructure Designs transport master plans for each transport method/ way (road, maritime, air) Designs and implements measures for rehabilitation of road network; Prepared legislations and maintains regulations for the implementation of the polices and measures to the transport 	<ul style="list-style-type: none"> Develops adaptation programs in transport sector Make emission projections due to transport activities through formulated models Advises the sector and regulates mitigation measures for climate change effects Seeks for possibilities of new environmentally sound technologies 	<ul style="list-style-type: none"> Coordinator of the working group-V through the Foreign Relations Department scoped in "Mitigation and Adaptation of Greenhouse gasses from Transportation" Provides stocktaking data of transport sector
Ministry of Public Works and Settlement (MPWS)	General Directorate of Construction Affairs	<ul style="list-style-type: none"> Responsible body for preparing the legislation related to building and construction sector, including construction products and services. Prepares architectural and engineering projects, as well as tendering, controlling and technical acceptance of construction and repair activities of public buildings. 	<ul style="list-style-type: none"> Prepares legislative framework and conducts GHG mitigation actions at residential and building sector Develops and implements programs on the "Implementation of the Energy Performance in the Buildings in existing and new building stock" Certify the buildings according to their energy performance to promote more efficient use of energy in buildings within the framework of the supplementary regulation 	<ul style="list-style-type: none"> Member of the working group-III scoped in "Mitigation of GHG from Industry, Building, Waste Management and Service Sector" Provides information in the settlements and buildings stocktaking

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
	<p>General Directorate of Technical Research and Implementation</p>	<ul style="list-style-type: none"> ▪ Develop the “Integrated Urban Development Strategy and Action Plans” for Sustainable Urban Development. ▪ Determines the legal framework and principals related to buildings, urban, rural and coastal areas planning and regeneration activities. ▪ Describes and determines legal principles and methods for all buildings in their pre-construction, in construction and post-construction process with relation to building licensing and preparation of building projects. ▪ Prepare master plans intended for the public investments 	<p>published on December 5, 2008</p> <ul style="list-style-type: none"> ▪ Integrates comprehensive through of climate resilience, environmentally sound, energy efficient and ecologically balanced strategies to the framework of sustainable urban development policies. ▪ Makes necessary arrangements in the planning legislation in order to promote the use of renewable energy resources in buildings and construction sector ▪ Makes necessary arrangement on legal principles and methods to increase the efficient use of energy and climate resilient, while giving building license and preparation of building projects progress. 	<ul style="list-style-type: none"> ▪ Member of the working group-III scoped in “Mitigation of GHG from Industry, Building, Waste Management and Service Sector” ▪ At Working Group VI – In context of LULUCF , prevention of urban sprawl, protection of rural and forest areas can be included in the spatial planning legislation
	<p>General Directorate of Disaster Affairs</p>	<ul style="list-style-type: none"> ▪ Providing emergency aid and securing coordination among the relevant institutions during and after a disaster, ▪ Implementing the measures to provide temporary shelter immediately after the disaster and undertaking the reconstruction and rehabilitation activities of damaged housing, work places and infrastructural facilities, ▪ Taking measures to realise and coordinate planning, project preparation, implementation, management and control activities in disaster areas as well as in disaster prone areas, ▪ Determining the potential disaster areas 	<ul style="list-style-type: none"> ▪ Adaptation to disasters 	<ul style="list-style-type: none"> ▪ Creating and analyzing a disaster inventory database ▪ Mapping disaster prone areas and if possible taking precautional measures for disaster reduction to form and revise regulations ▪ Preparing avalanche danger maps in 1/25.000 scale ▪ Establishing automatic nivo-meteorological stations to reduce the

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
		<p>and taking the necessary precautions for preventing disasters and minimizing the loss of life and property,</p> <ul style="list-style-type: none"> ▪ Development of seismological and strong ground motion network for the country, establishment of a national information centre of processing of all kinds of earthquake data, such as the preparation of earthquake catalogues and earthquake hazard maps of Turkey, ▪ Establishment of regional centres for the production and storage of prefabricated structural elements aiming at the accommodation of people and coordination of emergency assistance in cases of disasters. 		<p>effects of and forecast the avalanche events</p>
State Planning Organization		<p>The State Planning Organization (SPO), affiliated to the Prime Ministry, develops macro level policies by preparing long-term development plans and annual programmes that are accepted as the basic instruments of government policies in economic and social issues for efficient use of resources. SPO coordinates activities of the ministries and public institutions concerning economic, social and cultural policies, to ensure efficient implementation and advise the government regarding policy issues. SPO also prepares sectoral plans and strategies with due emphasis on economic, social and cultural policies, and approves all investment projects requiring public financing, and external finance (credit, grant and technical assistance). SPO is responsible for the coordination of preparation and realization of annual investment plans.</p>	<ul style="list-style-type: none"> ▪ State Planning Organization prepares National Development Plan, annual Investment Program and Annual Climate Change issue is undertaken with appropriate objectives goals and measures in National Development Program, Annual Program and Annual investment program ▪ SPO is a member of Coordination Board on Climate Change and coordinates working group on finance that formed by CBCC. 	<ul style="list-style-type: none"> ▪ Member of the working group WGVII scoped in “Development Policies and Strategies” ▪ Coordinator of the financial resources working group of the technical coordination committee

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
Turkish Statistical Institute		<p>Authorized state organization in collection, calculation and validation of official information sources in available sectors in order to provide and publicize when required.</p>	<ul style="list-style-type: none"> ▪ The official source of information on sources of GHG emissions and national circumstances ▪ Collection of data on national activity, national circumstances 	<ul style="list-style-type: none"> ▪ Coordinator of the working group-II scoped in “ Inventory of Greenhouse Gasses” ▪ National focal point of UNFCCC for national inventory since 2009 ▪ Calculates, validates and provides overall inventory data for stocktaking report
Ministry of Industry and Trade		<ul style="list-style-type: none"> ▪ Develops and designs national policies for sustainable development of the industry and trade sectors ▪ Prepares legislations and maintains regulations for the implementation of the policies and measures to industry and trade sectors 	<ul style="list-style-type: none"> ▪ Seeks for possibilities of introduction of new environmentally sound technologies by incentive mechanisms ▪ Identifies adaptable mitigation measures in industry and trade sectors 	<ul style="list-style-type: none"> ▪ Activity data provider specially for industrial and trade activities and other related data
Ministry of National Education	In general	<p>Plan, implement, monitor and control education and training services targeted at teachers and students at all levels in educational institutions, to open pre-primary, primary, secondary and all kinds of formal and non-formal education institutions and to meet the accommodation and nutrition requirements of and to give financial support to young people in higher education.</p>	<ul style="list-style-type: none"> ▪ Support for education of youth 	<ul style="list-style-type: none"> ▪ Providing statistical data with regards to education materials with relation to climate change. ▪ Providing support to increase the awareness of youth on climate change.
The Council of Higher Education	In general	<p>The Council of Higher Education was established in 1981. It is a fully autonomous supreme corporate public body responsible for the planning, coordination, governance and supervision of higher education within the provisions set forth in the Constitution (Articles 130 and 131) and the Higher Education Law (Law No. 2547). It has no</p>	<ul style="list-style-type: none"> ▪ Support for academic research and development. 	<ul style="list-style-type: none"> ▪ Providing statistical data with regards to academic materials produced in relation with climate change.

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
Ministry of Agriculture and Rural Affairs	In general	<p>political or governmental affiliation. At present, there are 139 universities in Turkey, 45 of which have foundation status.</p> <p>MARA is the governmental authority for agriculture and food policy in Turkey. Main responsibilities of MARA as follows:</p> <ul style="list-style-type: none"> ▪ Prepares and implements governmental policies, strategies and action plans for development of agriculture and food sector by targets for <ul style="list-style-type: none"> - increasing agricultural, livestock, agro-industrial, fishery production - improvement of market infrastructure; (iii) sustainable management of natural resources; ▪ Conducts standards and propose policies in the respective areas ▪ Designs agriculture and food policies ▪ Drafts laws, by-laws and decisions for development of agriculture and food sector and achievement of the aforementioned targets ▪ Follows-up the implementation of laws, by-laws ▪ Incentives research studies in these areas ▪ Coordinates the cooperation between relevant Ministries, local government, research institutions, and NGOs in terms of the development of Agriculture and Food. ▪ Allocates required resources for mitigation and response measures in terms of protection and monitoring of pasture lands ▪ Ensures a rational use of pastures. ▪ Plan and implement rural development projects <p>An authorized body of MARA, responsible for</p>	<ul style="list-style-type: none"> ▪ Conducts measures on mitigation of climate change adverse impacts ▪ Analyses adaptation process and makes cost-benefit analysis on sector basis such as wheat production, livestock's, i.e. ▪ Conducts research studies for impacts of climate change in agriculture sector and develops mitigation strategies ▪ Impede rural poverty ▪ Soil quality monitoring against climate variability and soil resources in quality and quantity data land use classes according to the IPCC Guideline. 	<ul style="list-style-type: none"> ▪ Member of the working group-VI which is scoped with "Land use, Land Use Change and Forestry" task ▪ Provides data in agriculture and livestock sector
General			<ul style="list-style-type: none"> ▪ Conducts and allocates sources 	<ul style="list-style-type: none"> ▪ Member of the working

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
	<p>Directorate of Agricultural Production and Development (GDAPD)</p>	<p>research, planning and coordination activities in LULUCF</p> <ul style="list-style-type: none"> • Monitors agricultural and pasture lands • Prepares integrated and individual agricultural and rural developments projects, make necessary arrangements for implementation of these projects through the Provincial Directorates of Agriculture. • Prepares application projects to improve the utilization of crop, animal and aquacultural resources, increase productivity, crop diversification, improve quality, • Make proposals to the Ministry for establishment of facilities such as crop processing, cleaning, stations, laboratories, to give support for their establishment and to provide technical assistance. 	<p>for research and planning activities of research institutes of MARA in terms of enabling LULUCF related inventory and adaptation programmes</p> <ul style="list-style-type: none"> ▪ Soil quality monitoring against climate variability and soil resources in quality and quantity data land use classes according to the IPCC Guideline. 	<p>group-VI which is scoped with “Land use, Land Use Change and Forestry” task</p> <ul style="list-style-type: none"> ▪ Provides data in agriculture and livestock sector ▪ Training GHG inventory on agriculture, preparing a programme for identification of research needs for estimating carbon stock changes on agriculture.
	<p>Research, Institute for Agricultural Economy (AERI)</p>	<p>The institute develops and monitors research activities, publishes articles, informative documents for public and agricultural sector.</p>	<ul style="list-style-type: none"> ▪ Assists with research activities in measuring impacts of LULUCF on climate change ▪ Determines gaps and constraints in inventory process related to LULUCF and develops programs and studies to fill these gaps 	<ul style="list-style-type: none"> ▪ Member of the working group-VI which is scoped with “Land use, Land Use Change and Forestry” task ▪ Provides data in agriculture and livestock sector
<p>Ministry of Health</p>		<p>MoH is the highest government body in health policy making in Turkey and some prior duties of the ministry as follows:</p> <ul style="list-style-type: none"> ▪ Produces and regulates national health policies for protection of public health and improvement of public health services ▪ Ensures the implementation of legal framework 	<ul style="list-style-type: none"> ▪ Acts in the working group-I for Researching the Effects of Climate Change which is scoped and responsible for development of health sector and adaptation strategy for this sectors ▪ Takes measures to avoid 	<ul style="list-style-type: none"> ▪ Potential data provider for health sector

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
Turkish Radio and Television Institution (TRT)		<ul style="list-style-type: none"> ▪ Takes necessary measures concerning environmental health by cooperating with local and relevant institutes. ▪ State institution providing broadcasting services continuously every day 	<p>adverse effects of climate change on human health</p> <ul style="list-style-type: none"> ▪ Provides broadcasting service for publicizing news and presentations, programs in climate change issue 	<ul style="list-style-type: none"> ▪ Member of the working group-VIII scoped in “Education and Public Awareness” ▪ Broadens awareness of public in climate change issues
Municipalities		<ul style="list-style-type: none"> ▪ Authorized body for providing municipal services on district and province scale. 	<ul style="list-style-type: none"> ▪ Ensures application of mitigation measures for climate change effects throughout municipalities 	<ul style="list-style-type: none"> ▪ Member of the working group-V scoped with “Mitigation of Greenhouse gasses Transportation” ▪ Provides inventory data in different source categories such as solid wastes, transport, waste water, i.e.
Bank of Provinces (iller Bankasi)		<ul style="list-style-type: none"> ▪ Develops, designs and implements national infrastructure projects receives finance from various resources including government, World Bank and various international development banks 	<ul style="list-style-type: none"> ▪ Considers and apply adaptable mitigation measures for GHG regarding to infrastructure and rehabilitation projects 	<ul style="list-style-type: none"> ▪ Applies recently developed standards and legislation in new infrastructure projects ▪ Provides data in preparation of energy sector inventory
PROJECT MANAGEMENT TEAM				
	Project Steering Committee (PSC)	<ul style="list-style-type: none"> ▪ Chaired by the National Focal Point to UNFCCC and composed of senior official members of the Technical Committee for Climate Change, PSC is to ensure a successful implementation of the UNDP-GEF climate change projects and tasked with the following activities: ▪ PSC provides assistance and support to the UNFCCC National Focal Point, National 	<p>Facilitates co-ordination, participation and sustainability of the results of the stocktaking exercise project</p>	<p>Ensures coordinated operation of the activities through the Technical Committee for Climate Change (TCCC) which consists of MoEF, MENR, MFA, SPO, SIS and MoT</p>

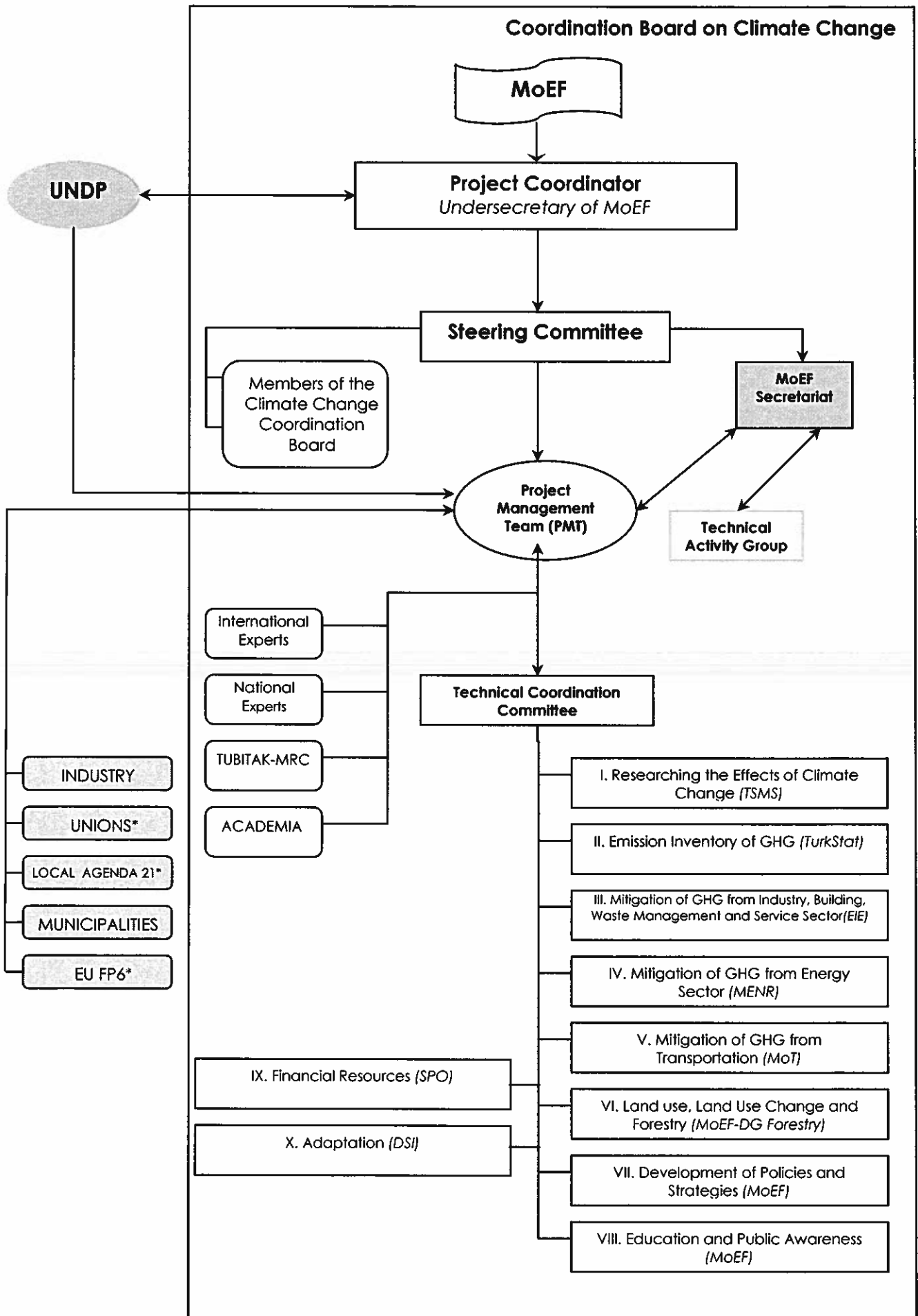
Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
		<p>Project Manager and national experts and counterparts during the implementation process of all project activities</p> <ul style="list-style-type: none"> ▪ PSC will oversee monitoring and evaluation of the project, and make necessary comments on all draft documents ▪ PSC regularly receives information on the status of the implementation of the project activities and problems encountered ▪ PSC meets at least one time during the project lifetime. In special cases the PSC shall meet upon the initiative of the UNFCCC National Focal Point ▪ PSC will operate on the basis of consensus in accordance with its Rules of Procedure agreed on its first session <p>PSC reviews and validates the various components of the Initial National Communication</p>		
Project Management Team (PMT)		See ToR for PMT in Appendix D	See ToR for PMT in Appendix D	See ToR for PMT in Appendix D
TECHNICAL EXPERT GROUP				
		<ul style="list-style-type: none"> ▪ Technical Expert Group (TEG) is constituted of TUBITAK-MRC, academia, national and international experts. TEG will contribute to INC process by providing technical and other expertise assistance in the required areas. The group members will work in consultation with national PMT and will essentially answer the technical expertise needs of TCCC on the base of identified activities of INC process. 	<p>TEG is to provide consultation in the following areas:</p> <ul style="list-style-type: none"> ▪ National Circumstances ▪ GHG Inventory, containing measures to facilitate adequate adaptation to climate change ▪ Programmes containing measures to mitigate climate change ▪ Assessment of Impacts of Climate Change ▪ Constraints and gaps in GHG 	<ul style="list-style-type: none"> ▪ Provides consultation in the required areas for national communications process

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
INTERNATIONAL ORGANIZATIONS				
UNDP	In general	<p>UNDP is government co-operating organization advising the government on policies and institutions to meet development challenges and supervising for working with partners to mobilize talent and resources, and playing the advocacy role through the Human Development Report and the Millennium Development Goals (MDGs).</p> <ul style="list-style-type: none"> The main activity areas constituted of poverty, gender and environment that is mainly covers climate change, biodiversity tasks and alternative energy resources, livelihoods, i.e. 	<p>inventory, e.i.</p> <ul style="list-style-type: none"> UNDP is a mandate body in GEF funded projects as implementing agency Provides technical assistance in the project implementation process 	<ul style="list-style-type: none"> Provides consultation in all steps of stocktaking exercise Validates and feedbacks in stocktaking report of Turkey
	Local Agenda 21s	<p>As part of an international program of UNDP, the Local Agenda 21 activities are organized under the coordination of the IULA-EMME(International Union of Local Authorities, Section for the Eastern Mediterranean and Middle East) in cooperation with the Governor's Offices and municipalities, and with participation of local people and the NGOs.</p> <ul style="list-style-type: none"> targets for a broad participation of different social groups, as well as cooperation and collaboration between the central government, local authorities and the NGOs improves partnerships between the public sector, civil society, and the private sector 	<ul style="list-style-type: none"> Contributes in public awareness activities Assists, supervises in the activities carried in collaboration with local organizations and municipalities 	<ul style="list-style-type: none"> Strengthens relations and co-operations with NGOs and municipalities providing support in stocktaking exercise
OTHER STAKEHOLDERS				
Environmental NGOs	TUCEV(Turkish National Environmental		<ul style="list-style-type: none"> Contributes to public awareness process for climate 	<ul style="list-style-type: none"> Potential data provider on climate change related

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
	<p>I Foundation) DHKD(Turkish Society for the Conservation of Nature) TEMA, i.e.</p>		<p>change</p> <ul style="list-style-type: none"> • Provides information on ongoing relevant activities implemented by the organization • Collaborates with universities, government and NGOs in terms of developing joint projects of relevance 	<p>ongoing activities, projects implemented by NGOs</p> <ul style="list-style-type: none"> • Provide collaboration among the relevant NGOs and governmental organizations.
	<p>Regional Environmental Center(REC) TURKEY</p>	<p>REC office in Turkey is a non-profit organization, has a targets for solving environmental protection problems through promotion of cooperation among NGOs, governmental organizations, business and other stakeholders.</p> <ul style="list-style-type: none"> ▪ REC supports the exchange of free communication and public participation into environmental decision-making ▪ REC works to enhance the public awareness related to the environmental issues. 	<ul style="list-style-type: none"> ▪ Collaborator regarding issues related to raising of awareness for climate change; 	<ul style="list-style-type: none"> ▪ REC is to assist education and public awareness activities in general
<p>Unions and other NGOs</p>	<p>Turkish Businessman Association (TUSIAD), Independent Industrialists' and Businessmen's Association (MÜSIAD), Young Businessmen Association of Turkey</p>	<p>Improves and maintains links between government and private sector, civil society and develops partnerships among those</p>	<ul style="list-style-type: none"> ▪ Collaborates with industry, service and others sectors in order to develop incentive mechanisms for abatement ▪ Strengthens partnerships, promotes developments in projects and programmes for abatement of climate change effects 	<ul style="list-style-type: none"> ▪ Rises climate change awareness in industry and such other sectors

Institution / Organization	Department/ stakeholder/ participant	Responsibility / Field of Activities	Relevance to Climate Change	Role in the SNC
Academia	(TUGIAD), Turkish Union of Chambers and Commodity Exchanges (TOBB), Turkish Confederation of Employer Associations (TISK) and others	<ul style="list-style-type: none"> ▪ Primarily provides academic education; designs and maintains research and development studies and activities 	<ul style="list-style-type: none"> ▪ Develops and implements technical studies in climate change issues ▪ Strengthens existing models, methodologies and analysis in Climate Change field ▪ Provides policy advise in the development and adaptation of climate change programs ▪ Prepares project proposals and publications and articles in climate change issues 	<ul style="list-style-type: none"> ▪ Collaborates with the respective government bodies involved in INC process and contributes with consultation service and data inputs for stocktaking exercise
TUBITAK Marmara Research Center (TUBITAK – MAM)	In general	<ul style="list-style-type: none"> ▪ To contribute to the increase of the Global Competitive Power of Turkey using Science and Technology. 	<ul style="list-style-type: none"> ▪ Conducting research and development studies for environmentally friendly and low emission technologies. 	<ul style="list-style-type: none"> ▪ Provide input about the recent trends in research and development with regards to low emission technologies to be used in industry and private sector.
EU FP7 (European Union - Seventh Framework Programme)		<ul style="list-style-type: none"> ▪ Supervises national institutions/organizations for EU FP7 in order to promote project proposals for EU adaptation programs and allocates resources for implementation 	<ul style="list-style-type: none"> ▪ Submits and endorses project proposals of climate change activities financed by EU Commission particularly in terms of adaptation of EU directives and standards 	<ul style="list-style-type: none"> ▪ Facilitates the stocktaking process with outputs of the relevant projects financed under EU FP7 structure

APPENDIX C – INSTITUTIONAL FRAMEWORK for the PROJECT



* : The organizations recently included in the revised diagram

() : Abbreviations illustrated in the parentheses stand for coordinator institution title of working group

APPENDIX D - Terms of References (TORs)

1. TORs for National Project Coordinator

The National Project Coordinator is assigned by Ministry of Environment and Forestry to oversee the project progress and activities.

Duration: 18 months

Duties and Responsibilities

- The National Project Coordinator ensures the coordination of project inputs and outputs between the Ministry of Environment and Forestry (MoEF) and UNDP.
- Maintains close contacts with UNDP indicating foreseeable changes in work-plan and proposing realistic amendments and budget revisions
- Ensures suitable working conditions maintained at the duty station and allocates available facilities enabling PMT to perform on accordance with their job descriptions
- Monitors progress of the project according to the work-plan and informs UNDP in time of any anticipated delays
- Ensures that project activities are conducted and concluded in a timely, satisfactory and coordinated manner
- Ensures compliance with UNDP's NEX procedures
- Facilitates procurement of goods and services and recruitment of project personnel
- Develops and oversees monitoring and evaluation efforts

Qualifications and Experience

- A medium or high level representative from the Climate Department of Ministry of Environment and Forestry.
- A demonstrated ability in managing projects, and in liaising and co-operating with all project personnel including government officials, scientists institutions, NGOs and private sector
- A good knowledge of English is absolutely necessary
- Substantial experience in Government and in inter-departmental procedures preferred
- Familiarity with international negotiations and process under the UNFCCC preferred
- Familiarity with computers and word processing
- Fluency in the government official language

2. TORs for Project Manager

Project Manager (PM) is responsible for day-to-day management, co-ordination and supervision of the implementation of the above described project. Specifically, his/her responsibilities are but not limited to the following:

Duration: 18 months

Duties and Responsibilities

- Supervises and ensures the timely and effective implementation of the project activities in accordance with the working plan
- Prepares a detailed work plan for the project (in consultation with the PSC and UNDP)
- Coordinates, oversees and executes the preparation of outputs of the SNC when required
- Prepares technical, policy and briefing paper as requested
- Compiles the scope and content of the overall SNC report and relevant sections in consultation with TEG and the working groups.
- Arranges and controls the scheduled consultations/workshops and ensure their success

- Ensures preparation of the progress reports of the activities performed
- Develops the scope of the work and TORs and other procurement documentation required to identify and facilitate recruitment of experts and consultants
- Coordinates and supports the work of all consulted experts
- Facilitates and moderates the meeting of PSC
- Identifies and hire/subcontract the national consultants and institutions (in consultation with the PSC and UNDP)
- Supervise project support staff national consultants who are recruited to provide technical assistance
- Develops synergy with the relevant ministries, national and international research institutes, NGOs, and other relevant institutions in order to involve their financial and personnel contributions in project activities
- Facilitates cooperation with other projects on the areas of combating desertification, preservation of biodiversity, energy efficiency and energy saving, expanded use of renewable energy resources
- 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 extent possible;
- Finalizes the Second National Communication of Turkey along with the government personnel and national consultants
- Ensures that the 2nd NC process is in the line with guidance provided by the COP
- Define the role & responsibilities of the stakeholders
- Ensure identification of national priorities

Qualifications and Experience

- A minimum of 10 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, scientists institutions, NGOs and private sector
- A very good knowledge of English is absolutely necessary
- Substantial experience in Government and in inter-departmental procedures preferred
- Familiarity with international negotiations and process under the UNFCCC preferred
- Familiarity with computers and word processing
- Fluency in the government official language

3. TORs for Project Assistant

Duties:

The SNC project assistant should work in consultation with and under the guidance and supervision of the Project Manager. Specifically, his\her responsibilities are but not limited to the following duties:

Duration: 18 months

Duties and responsibilities:

- Assists in organization of relevant training and workshops.
- Prepares periodic progress reports
- Assists in developing the scope of work and respective terms of reference for experts ;
- Leads the data collection process and follows up the updates
- Ensures synergy with related projects
- Assists in procurement of items and maintains overall budget control
- Assists in process of hiring experts
- Ensure the timely and effective management of the activities as scheduled;
- Incorporates comments received for the draft report

- Preparation of progress reports and final project report reflecting results, lessons learned strategy for further steps to prepare national communications on continuous base.
- Facilitates studies and group work activities between stakeholders and international, local consultants
- Assists with PM in preparing and translating documents and reports related to the project
- Communication with groups experienced in preparation of national communications in different countries and other contacts

Qualifications and experience

- Extensive experience with computers, electronic networks and software used for data management and scientific work
- Experience with world wide web and preparation of the information for presentation on web
- Good presentation and communication skills
- Familiarity with environmental issues and international sources of information on climate change related issues
- Ability to speak, read and write in English

4. TORs for Senior Project Advisor

Senior Project Advisor (SPA) is responsible for co-ordination and supervision of the implementation of the project. Specifically, his\her responsibilities are but not limited to the following:

Duration: 18 months

The National Project Manager will:

- Coordinate, oversee and execute the preparation of outputs of the INC when required,
- Provide advisory services for technical, policy and briefing papers as requested,
- Compile the scope and content of the overall SNC report and relevant sections in consultation with Coordination Board on Climate Change and working groups,
- Arrange and control the scheduled consultations/workshops and ensure their success,
- Develop the scope of the work and ToR's
- Coordinate and support the work of all consulted experts,
- Facilitate and moderate the meeting of PSC
- Supervise project staff national consultants who are recruited to provide technical assistance,
- Develop synergy with the relevant ministries, national and international research institutes, NGOs and other relevant institutions in order to involve their financial and personnel contributions in project activities,
- Facilitates cooperation with other projects on the areas of combating desertification, preservation of biodiversity, energy efficiency and energy saving, expanded use of renewable energy resources,
- Summarize and synthesize the results of the project,
- Identify the follow up activities and mobilize other resources at the extent possible,
- Finalize the Second National Communication of Turkey along with government personnel and national consultants,
- Ensure that SNC process is in the line with guidance provided by COP,
- Define the role and responsibilities of the stakeholders,
- Ensure identification of national priorities.

Qualifications and Experience:

- A minimum of 10 years of working experience in the area of relevant projects, including but not limited to environmental projects,
- A demonstrated ability in managing projects and in liaising and co-operating with all project personnel including government officials, scientist institutions, NGOs and private sector,
- Familiarity with international negotiations and process under the UNFCCC,

- At least a masters degree university degree on environmental sciences, engineering, political science and business administration. PhD in environmental engineering/politics is an asset.
- Substantial experience in government and in inter-departmental procedures,
- Fluency in governmental official language.
- Familiarity with computers and word processing,
- A very good knowledge of English is absolutely necessary,

4. TORs for Project Steering Committee

In order to ensure a successful implementation of the UNDP-GEF climate change projects, the Ministry of Environmental and Forestry, acting as a UNFCCC focal point Ministry and the Executive Agency of this Project, will agree on establishment of the Climate Change Project Steering Committee (PSC), to be chaired by the National Focal Point to UNFCCC and composed of senior officials members of the Technical Committee for Climate Change.

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

Stand for authorized body regarding project expenditures in accordance with operational principles of UNDP and national implementation

PSC provides assistance and support to the UNFCCC National Focal Point, National Project Manager and national experts and counterparts during the implementation process of all project activities.

- PSC will oversee monitoring and evaluation of the project, and make necessary comments on all draft documents;
- PSC regularly receives information on the status of the implementation of the project activities and problems encountered;
- PSC meets at least one time during the project lifetime. In special cases the PSC shall meet upon the initiative of the UNFCCC National Focal Point;
- PSC will operate on the basis of consensus in accordance with its Rules of Procedure agreed on its first session;
- PSC reviews and validates the various components of the Initial National Communication.

UNDP country office support services to national execution

1. Recruitment of Project Personnel
 - Assist in conducting search for suitable candidates (advertisement, website, rosters)
 - Assist in preparing ToRs
 - Involve in interviewing candidates
 - Assist in issuing contracts (when necessary)
 - Authorize salary/consultancy fee/missions
 - Assess performance
2. Sub-contracting/Procurement
 - Assist in identifying suitable subcontractors (advertisement, website, posters)
 - Assist in preparing ToRs
 - Assist in evaluating bids
 - Assist in issuing contracts (when necessary)
 - Assess sub-contractors work
 - Ensure inputs as per contract ToR's
 - Ensure payments are made accordingly
 - Ensure milestones are met
 - Critical review of sub-contractors performance
3. Financial Management and Accountability
 - Making direct payments and ensuring flow of funds for project activities
 - Training of staff of implementing agency on financial disbursement and reporting
 - Financial monitoring and record keeping
 - Financial reporting
 - Budget revisions
 - NEX Audit exercise
4. Training/Workshop
 - Making appropriate arrangements for the logistical and technical support of the training and workshop activities
5. Equipment
 - Review specifications
 - Identify suppliers of goods and services
 - Approve specifications
 - Assist in evaluating contract
 - Assist in awarding contract (when necessary)
 - Undertake Customs clearance
 - Authorize payment

APPENDIX E: REFERENCES

1-Reference Reports and Publications

- Turkey's First National Communication on Climate Change (MoEF, 2006)
Turkey's National GHG Inventory Reports (MoEF, TurkStat, 1990-2006)
Protection of the Atmosphere and Climate Change (Türkes et al 1992)
Energy and Technology Güner Tezcan 1992
National Climate Programme (NCP) 1993,
Declaration of Turkey and Greenhouse Gas Emissions, (FCCC/CP/1997/MISC.3) COP.3
Turkey National Report on Climate Change (ME, 1998), COP.4
The Environmental Success Report of Turkey (1999) of the OECD
The Environmental Profile of Turkey (1999) of the Environment Foundation of key (EFT), combined with the data of (SIS),
National Programme for the adoption of the EU acquis, 2001
9th Development Plan (2007 – 2013),SPO, 2006
Turkey's National Assessment Report on Sustainable Development for the World Summit on Sustainable Development Johannesburg in 2002
Emissions Outlook until 2025 for GHGs and Other Pollutants Turkey, GHG Mitigation, pollution abatement, environmental policies, World Bank Energy and Environment Review
Vizyon 2003 (Tübitak)
ULUSAL ENERJİ REHBERİ, T.C. Enerji ve Tabii Kaynaklar Bakanlığı
ANONYMOUS 1997 (Ministry of Forestry/World Bank); Biodiversity Assessment, Strategy and Action Plan - Turkey, May 3, 1997 draft, Ankara
ECSN (EUROPEAN CLIMATE SUPPORT NETWORK) 1995; Climate of Europe: Recent Variation, Present State and Future Prospects, European Climate Support Network, Nijkerk.
EFT 1995: Environmental Profile of Turkey, Ankara
IEA (INTERNATIONAL ENERGY AGENCY) 1997; CO2 Emissions from Fuel Combustion (1972-1995), Paris.
IEA 1997; Energy Environment Update No.6, Energy/CO2 Forecasts, Paris.
IEA 1997; Energy Policies of IEA Countries Turkey 1997 Review, Paris.
MENR (Ministry of Energy and Natural Resource) 1997; 1970-1996 Energy Balances (Communication to SPO), July 1997
MOE (MINISTRY OF ENVIRONMENT) 1992; National Report to United Nations Conference on Environment and Development (UNCED), Ankara
Turkey National Environmental Action Plan, SPO 1998
COUNTRY BASELINE STUDIES MEDITERRANEAN REGION WATER,WETLANDS AND CLIMATE CHANGE TURKEY BASELINE REPORT ON CLIMATE CHANGE Prepared by: Zinet Selmin BURAK
The TEFER Project (Turkey Emergency Flood and Earthquake Recovery):
Conservation of Biodiversity and Sustainable Development TÜDAV: Turkish Marine Research Foundation
Climate Change and Sustainable Development TTGV: The Technology Development Foundation of Turkey
National Report on Climate Change, (Ministry of Environment November 1998)
National Report on Sustainable Development, (Ministry of Environment, UNDP, July 2002)
Özgüler, H., (Global Climate Change and Possible Impacts on Turkey's Water Resources-DSI Bulletin, June 2002)
Türkes, M.; Possible Impacts of Global Climate Change on Agriculture and Water Resources-Panel on the Impacts of Climate Change on Agriculture, June 2001)
Türkes M.,(Climatic Change Studies and Activities in Turkey; Advanced Zaragoza, 25-29 September 2000)
İklim Değişikliği Özel İhtisas Komisyonu Raporu, DPT, 2000).

