### SIGNATURE PAGE

Country: Azerbaijan

**UNDAF Outcome(s):** 

<u>UNDAF Outcome 1:</u> By 2015, non-oil development policies result in better economic status, decent work opportunities and a healthier environment in all regions and across all social groups

Expected CP Outcome(s):

<u>CP Outcome 1.3.</u> Relevant national strategies, policies and capacities strengthened to address environmental degradation, promote a green economy and reduce vulnerability to climate change

**Expected CP Output(s):** 

<u>CP Output 1.3.5:</u> Priority ecosystems and/or economic sectors vulnerable to climate change are identified and strategies for improving their resilience are in place

**Executing Entity/Implementing Partner: Implementing Entity/Responsible Partner:** 

Ministry of Ecology and Natural Resources Ministry of Ecology and Natural Resources

Programme Period:	2011-2015	
Atlas Award ID:	00060785	
Project ID:	00076682	
PIMS #	4589	
Start date:	2012	
End Date:	2014	
Management Arrangements:	NEX	
PAC Meeting Date	May 18, 2011	

	esources required llocated resources:	USD 520,000 USD 520,000
•	Other: O GEF	USD 480,000
٠	In-kind  O Government	USD 40,000

Agreed by (Government of Azerbaijan):

Huseyn Baghirov (Minister of Ecology and Natural Resources)

Date/Month/Year

Agreed by (UNDP):

Fikret Akcura (Resident Representative)

Date/Month/Year



### **Acronyms**

APR Annual Project Review
AWP Annual Work Plan
COP Conference of Parties

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CPAP Country Programme Action Plan
CPD Country Programme Document
INC Initial National Communication

IPCC Intergovernmental Panel on Climate Change

GEF Global Environmental Facility
GHG Greenhouse Gas Emissions

LOA Letter of Agreement

MDG Millennium Development Goals

MENR Ministry of Ecology and Natural Resources

NAMA National Action Plan on Mitigation NAPA National Action Plan on Adaptation NCSA National Capacity Self-Assessment

NEX National Execution
NPD National Project Director
PAM Policies & Measures

PIR Project Implementation Report

PPR Project Progress Report

PRECIS Providing Regional Climates for Impact Studies

PSC Project Steering Committee
RCM Regional Climate Model
RTA Regional Technical Advisor

SBAA Standard Basic Assistance Agreement SNC Second National Communication

SOCAR State Oil Company of the Azerbaijan Republic

SPPRSD State Programme on Poverty Reduction and Sustainable Development

SSC State Statistical Committee
TNC Third National Communication

TOR Terms of Reference

UNDAF United Nations Development Assistance Framework

UNDP United Nations Development Programme

UNECE United Nations Economic Commission for Europe

UNEP United Nations Environment Programme

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFCCC UN Framework Convention on Climate Change UNIDO United Nations Industrial Development Organization

WHO World Health Organization

WMO World Meteorological Organization

### 1. Situation analysis

Azerbaijan is a young nation that has successfully handled a number of existential challenges in its 20-year history, and achieved a high economic growth rate that propels it forward. From 2005 GDP growth largely driven by export of hydrocarbon resources has been extremely strong, and Azerbaijan has joined the group of middle-income countries. Accelerated economic growth has enabled the country to generate employment, especially in infrastructure, reduce poverty and increase investment in human capital. By the end of the first decade of the new millennium, the country declared its intention to diversify its economy beyond hydrocarbon exports and pay special attention to its human resources.

To ensure multi-dimensional and balanced progress the Government has approved a number of national and sectoral state policies, such as the State Programmes on Sustainable Development and Poverty Reduction (SPPRSD), State Programme on Socio-Economic Development of Regions, State Programme on Renewable and Alternative Energy and others.

As a cross-cutting issue sound environmental management remains a priority area for the Government. The main umbrella programme aimed at improved environmental management is the National Programme on Environmentally Sustainable Social and Economic Development for the period 2003-2010, which was endorsed by the 2003 Presidential Decree No.1152 approving National Programmes on Ecology. The National Programme covers the environmental aspects of the country's overall development strategy and is accompanied by an action plan covering the years 2003-2010. The action plan focus on five major areas, namely environmental protection and use of natural resources, global environmental problems, industrial complexes, agriculture and tourism and education, science and culture.

The National Programme and its action plan were further complemented by the Comprehensive Action Plan on Improvement of the Environmental Situation for the period 2006-2010, which dealt with improving the environmental situation in Baku and adjacent territories and other parts of Azerbaijan.

At the same time, there are sectoral programmes focused on specific environmental areas, namely, State Strategy on Hazardous Waste Management; Hydrometeorology Development Programme; State Programme on Summer/Winter Pastures, Effective Use of Meadows and Desertification Prevention; National Biodiversity Strategy and Action Plan; State Programme on Reforestation and Aforestation. The latter remains as one of the successful environmental interventions, which resulted in increase of forest cover by 0.4% in just a few years. A new Action Plan for 2011-2014 on Improving Environmental Situation in Azerbaijan is pending approval.

The country also actively pursues state strategy on alignment of national legislation with international standards in all spheres, including the environment. To this end, Azerbaijan ratified the UN Framework Convention on Climate Change (UNFCCC) in 1995 and the Kyoto Protocol in 2000. Azerbaijan is signatory to around 30 international environmental conventions and commitments to these conventions are incorporated into national laws and programmes. Increasing environmental emphasis in the legal and policy frameworks is translated into on-the-ground interventions addressing biodiversity loss, combating desertification and other global environmental challenges within the frame of above-mentioned programmes.

To address the environmental challenges facing the country, the Republic of Azerbaijan cooperates with a number of the UN agencies and associated bodies – UNDP, UNEP, UNESCO, UNIDO, WMO and WHO.

UNDP has pledged to support the Government of Azerbaijan in the field of sound environmental practices and environmental protection and natural resource management is reflected under one of the UNDAF (2011-2015) national priorities. UNDP Country Programme envisages strengthening of relevant national strategies, policies, and capacities s to address environmental degradation, promote a green economy, reduce vulnerability to climate change.

As leading state agency in the field of sound environmental and natural resources management, Ministry of Ecology and Natural Resources (MENR) has been partnering with UNDP and GEF towards implementation of the Initial and Second National Communications projects.

SNC contains information on national circumstances, the amount of emissions from greenhouse gases sources, analysis of the present and future climate change scenarios, the assessment of vulnerability of the economic sectors and ecosystems to climate change effects and adaptation measures to these effects.

As a party to the UNFCCC, Government of Azerbaijan is committed to continue the reporting and monitoring of climate change trends with the aim of enabling adequate programmes and policies. Preparation of the TNC of Azerbaijan will build on the achievements of the SNC and at the same time will address the existing gaps, for example, uncertainty in climate change scenarios, impact on ecosystems, adaptation and etc. The project will strengthen country's technical and institutional potential for integration of climate change concerns in sectoral and national development priorities.

### 2. Strategy

This project will support UNDP Country Programme (CP) 2011-2015 Outcome 1.3.: "Relevant national strategies, policies and capacities strengthened to address environmental degradation, promote a green economy and reduce vulnerability to climate change". The major purpose of this output is to render assistance to the Government of Azerbaijan to further the improve interventions aimed at adaptation and mitigation of climate change risks.

Within this framework, this project will enable Azerbaijan to prepare its Third National Communication to the Conference of Parties in accordance with the Articles 4 and 12 of the UNFCCC. The project will also contribute to meeting of obligations of the Government of Azerbaijan undertaken before the international community on continuous reporting under the Convention.

The project will seek to support national environmental objectives in several ways: (1) It will further enhance the ability of Azerbaijan to actively address the global environmental threat of climate change; (2) It will strengthen the capacity of national experts in climate-change related research and analysis; (3) Reports, findings and analyses produced by the experts can then be used by the decision-makers for preparing and execution of environmentally sound plans, policies and programmes in the areas that include, but are not limited to energy, agriculture, water resources, tourism and transportation, etc. All these initiatives will directly contribute to the achievement of Millennium Development Goal (MDG) 7 by integrating sustainable development principles in national development strategy. The Government of Azerbaijan has a strong motivation to support the project, as the preparation of the TNC is mandated under the UNFCCC.

UNDP has a strong comparative advantage in supporting the preparation of the TNC because of its implementation of the National Communications Support Programme (NCSP), which has worked in partnership with more than 130 countries, providing technical and policy support for over a decade. To this end, UNDP and Government of Azerbaijan achieved an exemplary partnership in the preparation of the Initial and Second National Communications. Considering this, the project approach will build on the work done under Azerbaijan's first two communications and will involve the key experts and institutions responsible for compiling the most recent NC in order to maintain integrity in the NC preparation process. Additional experts and institutions will be consulted as needed, particularly international experts with experience in the specific aspects of preparation of NCs for non-Annex I countries.

### Overall the project will focus on 3 directions:

- 1. The initial emphasis of the project will be on developing GHG inventory for years 2006-2010 and analyze the abatement measures of GHG in Azerbaijan. Building on results of these studies, the options to mitigate climate change will be analyzed and reviewed in the light of the country's development context.
- 2. Secondly, the project will assess the climate change impacts on the most vulnerable sectors in Azerbaijan and the ways to overcome its threats by addressing agriculture, forestry, coastal areas, water resources, health, transport, and tourism as the main vulnerable areas to the ongoing and expected climate change, and identify required adaptation measures and policies.
- 3. Finally, the project will contribute to enhancing general awareness and knowledge on climate change related issues in Azerbaijan, and strengthening the dialogue, information exchange and cooperation among all the relevant stakeholders including governmental, non-governmental, academic, and private sectors in accordance to the Article 6 of the UNFCCC and Implementation of Buenos Aires Plan of Action.

### **Project Outcome, Outputs and Activities**

**Project Outcome**: To enable Azerbaijan to prepare and submit its TNC to the CoP of the UNFCCC in accordance with its commitments as a non-Annex 1 Party to the Convention (as mandated by Articles 4 and 12 of the UNFCCC). The project will also result in increased capacity to produce subsequent NCs that meet all guidelines established by the CoP and that can serve as a source of information for national policies and measures in climate change and in key economic and social sectors.

Outcome 1: Updated GHG inventory prepared and capacity to collect this information on an ongoing basis for future NCs enhanced

### Output 1.1: GHG inventory team and data collection analysis process maintained and strengthened

- Activity 1.1.1. Identify and mobilize national experts in targeted sectors and areas of relevance
- Activity 1.1.2. Review the existing information on previous GHG inventories already archived and documented
- Activity 1.1.3. Identify specific training needs for enterprises in data collection (particularly for those in key source sectors that are major point sources of emissions)
- Activity 1.1.4. Review and update the current QA/QC plan

Activity 1.1.5. Prepare a series of recommendations for institutionalizing the data collection process and for harmonizing the process with national statistical data collection processes

### Output 1.2: GHG inventory data collected and methodologies confirmed and strengthened

- Activity 1.2.1. Identify new sources of activity data for key source categories and priority sectors not included and investigated within other programmes
- Activity 1.2.2. Identify new activity data needed for estimates of GHG emissions, incorporating UNFCCC in-depth review team recommendations where applicable
- Activity 1.2.3. Utilize IPCC good practice methodology to fill in data gaps
- Activity 1.2.4. Identify data sources for source categories (international bunker, solvents, industrial processes) not covered by the SNC

### Output 1.3: Completed national inventory of anthropogenic GHG by sources and removals by sinks for 2010 following the deadlines adopted by COP (17/CP8) developed

- Activity 1.3.1. Estimate technical possibilities for inventory of new gases (HFCs, PFCs, SF<sub>6</sub>) and identify the data sources
- Activity 1.3.2. Assess applicability of IPCCC'06 default emission factors and develop the national emission factors for key source categories where appropriate
- Activity 1.3.3. Re-estimate GHG emissions inventory for 2000- 2005 as provided in the SNC
- Activity 1.3.4. Develop key sources analysis and inventory (for the year 2010) and sensitivity analysis as guided by IPCC GPG
- Activity 1.3.5. Carry out GHG inventory for all sectors and all gases considered in IPCC'06 guideline for the year 2006-2010
- Activity 1.3.6. Train experts in GPG

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- Activity 1.3.7. Organize national workshop to present findings from the GHG inventory exercise and obtain additional comments
- Activity 1.3.8. Implement uncertainty analysis for all sectors considered under the inventory
- Activity 1.3.9. Implement QA/QC procedures for key sectors/source categories

### Output 1.4: GHG inventory finalized and archived

- Activity 1.4.1. Prepare and archive GHG inventory
- Activity 1.4.2. Prepare the national inventory report for 2006-2010
- Activity 1.4.3 Revise GHG national inventory strategy
- Activity 1.4.4. Raise public awareness among the decision makers at data source institution
- Outcome 2: Updated assessment of climate changes, vulnerability to CC, and measures to adapt to CC prepared; capacity to collect information on an on-going basis for future NCs strengthened

### Output 2.1: Current climate changes in Azerbaijan described and analyzed

- Activity 2.1.1. Confirm and collect all new supporting data needed for updating the climate change scenarios, particularly socioeconomic data
- Activity 2.1.2. Compile updated climate information for time period post-dating the SNC, including temperature and precipitation data, and conduct trend analysis for this data

Activity 2.1.3. Update section in the NC on changes in mountain glaciers and include recent data from the glacier observation system

Activity 2.1.4. Update the long-term climate change scenarios including updated climate data, socio-economic data, and updated long-term assumptions regarding socio-economic development. Utilize improved modeling capacity and build upon cooperation with the Hadley Centre (Met Office UK)

Activity 2.1.5. Incorporate updated information into the discussion section of the TNC chapter on V&A and into recommendations on adaptation

### Output 2.2: Vulnerability to climate change in Azerbaijan described and assessed

Activity 2.2.1. Review information on vulnerability and impacts provided in the SNC and re-confirm gaps in data collection and analysis for all areas, with special emphasis on the following 7 areas designated by Government as priority areas for the TNC:

- Agriculture (assessment of expected agro-climate resources' impact on agricultural production in northern slope of the Lesser Caucasus, summer and winter pastures);
- Forestry (Impact of climate change in difference of forest patterns in the southern slope of the Greater Caucasus: Sheki-Zagatala, Shamakhi-Ismayilli, Oghuz-Gabala)
- Coastal areas (Fluctuation in the Caspian as result of climate change, impact of the changes in the sea level on Absheron peninsula taking into account the location of the capital and main industrial facilities of the country in the peninsula and rehabilitation of oil-polluted areas aligned with climate change impacts)
- Water resources (Re-assessment of vulnerability of water resources to climate change in line with new regional climate scenarios based on realistic forecast obtained as result of dataexchange)
- Health (Malaria- assessment of potential for malaria in the territory of Azerbaijan, preparation
  of endemic malaria zones of existing and possible future stretch of malaria in the country,
  impact of heat waves on human health, impact of extreme weather conditions on human health
  (strokes, infarction, etc.))
- Transport (impact of climate change on transport infrastructure)
- Tourism (first ever initial assessment of impact of climate change in the country on development of tourism)

Activity 2.2.2. Develop a data collection and analysis plan for 7 priority areas, one for sub-regional analysis of the northern slope of the Lesser Caucasus region and one for remaining areas

Activity 2.2.3. Analyze data, document data sources, models used, and assumption

Activity 2.2.4. Incorporate updated information into discussion section and vulnerability and impacts into recommendations on adaptation

### Output 2.3: National Programme on Adaptation to Climate Change Prepared

Activity 2.3.1. Conduct feasibility study for the preparation of the draft National Programme on Adaptation to Climate Change

Activity 2.3.2. Prepare the draft National Programme on Adaptation to Climate Change through consultative process

Activity 2.3.3. Prepare cost-analysis for the National Programme on Adaptation to Climate Change to be submitted to the Government for consideration

### Output 2.4: Chapter on Vulnerability and Adaptation (V&A) completed

- Activity 2.4.1. Review time lines and outer bounds for medium-term and long-term scenarios for all sections and research in priority areas of the V&A chapter, check and adjust for comparability where possible; and cross-check and adjust with respect to other long-term forecasts (i.e. in the inventories and PAMs chapters) where possible.
- Activity 2.4.2. Develop the draft chapter of the V&A incorporating new research and analysis from Outputs 2.1 and 2.2.
- Activity 2.4.3. Circulate the draft chapter of V&A for internal review and comments
- Activity 2.4.4. Circulate the draft chapter of V&A for external peer review and comments
- Activity 2.4.5. Receive comments and incorporate them into the document.
- Activity 2.4.6. Organize a national workshop to highlight findings from the V&A study and get more comments
- Activity 2.4.7. Finalize the V&A chapter to be submitted as a part of Azerbaijan's TNC
- Activity 2.4.8. Archive and document all the V&A related studies and estimates
- Outcome 3: Updated report on policies and measures to mitigate CC prepared and capacity to collect this information on an ongoing basis for future NCs strengthened

### Output 3.1: Necessary data and relevant information for scenario development collected, analyzed, and used in the scenario development

- Activity 3.1.1. Consider estimates of GHG inventories for the base year 1990 which will serve as starting point for the analysis of the GHG emissions towards 2015-2030
- Activity 3.1.2 Develop a comparative analysis of figures /estimates obtained under the GHG Inventory for the Initial Inventory Report to those figures forecasted for the same year (2000) under SNC. Define the uncertainty level for such a case and take it into account for the scenario development/update. Discuss any changes in the uncertainty level as reported in the SNC
- Activity 3.1.3. Collect all relevant macro-economic data and set assumptions to be made for the purpose of emission—scenario development. This data should include data from the new energy balance and from all recent sectoral economic plans, particularly the Energy Sector Development Plan, Transport sector Development Plan, Industry Sector Development Plan, and Agriculture sector Development Plan
- Activity 3.1.4. Identify any difference/change to the Business as Usual (BAU) scenario developed under Azerbaijan's SNC and explain the reasons for such differences
- Activity 3.1.5. Process the collected data, format them for entry, and enter them as required by the software that will be utilized for the purpose of generating scenarios. Include updated forecasts of energy output using new government projections and modeling software that is well suited to Azerbaijan's status as a net energy exporter
- Activity 3.1.6. Crosscheck scenario outputs for consistency in sectors and time lines with inventories data from Output 1, and policies and measures data from Output 3.2

### Output 3.2: Reporting and analysis of policies and measures (PAMs) to mitigate climate change updated, strengthened, and incorporated into scenario development and reporting in the TNC

Activity 3.2.1. Assess the status of the PAMs reported in the SNC and add any additional relevant PAMs

- Activity 3.2.2. Review the status of the relevant policy and legal framework, State Programme on Poverty Reduction and Sustainable Development, State Programme on Development of Energy Update the list of macroeconomic forecasts and plans provided in the PAMs chapter of the SNC and the forecast of GNP dynamics
- Activity 3.2.3. Incorporate updated information into PAMs discussion section and into data for scenarios
- Activities 3.2.4. Assess financial barriers for each priority sector and identify the ways for their elimination

### Output 3.3: Analysis of PAMs completed for the period through 2015 and beyond if possible, incorporating new data and new assumptions that postdate the SNC

- Activity 3.3.1. Develop the draft chapter on PAMs, including a summary comparison of PAMs and a concluding sub-section that identifies priorities for action
- Activity 3.3.2. Circulate the draft chapter on PAMs for internal review and comments
- Activity 3.3.3. Circulate the draft chapter on PAMs for external peer review and comments
- Activity 3.3.4. Receive comments and incorporate them into the document
- Activity 3.3.5. Organize a national workshop to highlight findings from modeling and analysis of PAMs and get more comments
- Activity 3.3.6. Finalize the PAMs chapter to be submitted as a part of Azerbaijan's TNC
- Activity 3.3.7. Prepare proposal for National Action Plan for Climate Change Mitigation
- Activity 3.3.8. Archive and document all related studies, model runs, assumptions, and estimates for the PAMs chapter
- Outcome 4: Updated information in national circumstances and other areas required under the UNFCCC (education, training, public awareness, and technology transfer) prepared and all project-related information synthesized in the publication of the TNC

### Output 4.1: Updated account of National Circumstances prepared and capacity to collect this information on an ongoing basis for future NCs strengthened

- Activity 4.1.1. Include new developments in the National Circumstances section of the NC, such as the current government institutional arrangements for addressing obligations under the UNFCCC, which have become more comprehensive since the SNC, the formulation of recent sectoral development plans, government measures to address solid waste disposal subsequent to the publication of the SNC, and any other developments that post-date the stock-taking analysis
- Activity 4.1.2. Establish links to get new data and information, such as the re-formulated Energy Balance and updated demographic and socioeconomic data, such as population growth and sectoral economic growth and employment statistics from statistical yearbooks updating the figures from 2006-2008 used in the SNC. Commission and conduct any supplementary research on economic output deemed necessary
- Activity 4.1.3. Collect data and information identified in Activities 4.1.1 and 4.1.2 from different sources in the course of the project implementation, incorporating any comments from the IPCC indepth review team if applicable
- Activity 4.1.4. Fill the gaps, update and add the new information in accordance to the TORs for National Circumstances section of the Azerbaijan's TNC

- Activity 4.1.5. Ensure that the national circumstances sections cover all areas identified as priorities for mitigation and adaptation (listed in Outcomes 2 and 3) and all branches of industry providing information for the GHG inventory; commission any additional data necessary to support those areas
- Activity 4.1.6. Draft the National Circumstances section under the TNC in compliance with the guidelines set by 17CP/8
- Activity 4.1.7. Circulate the National Circumstances section for comments, receive comments and incorporate them into the report
- Activity 4.1.8. Finalize the National Circumstances section under the TNC
- Output 4.2: The information considered relevant to Article 6 of the UNFCCC (education, training, and public awareness), Article 4 (technology transfer), and Article 5 (climate research and systematic observation) for non-Annex I parties compiled and synthesized
- Activity 4.2.1. Collect information on steps taken to integrate climate change into socio-economic and environmental policies in Azerbaijan
- Activity 4.2.2. Collect, update, synthesize and provide information on how Azerbaijan is addressing activities related to the transfer of, access to environmentally sound technologies and know-how
- Activity 4.2.3. Collect, update, synthesize and provide information on the research and systematic observation systems as described in the UNFCCC and subsequent CoP decisions
- Activity 4.2.4. Collect, update, synthesize and provide overall information relevant to the Article 6 activities in education and public awareness with an emphasis on recent activities designed to improve sustainable development capacity
- Activity 4.2.6. Incorporate comments to the above draft chapter and finalize it as part of the Azerbaijan's TNC

### Output 4.3: TNC prepared, translated, submitted and disseminated

- Activity 4.3.1. Compile a draft of Azerbaijan's TNC with the structure and scope of the report designed as guided by relevant CoP decisions
- Activity 4.3.2. Circulate the draft for comments and review and incorporate them
- Activity 4.3.3. Ensure that all recommendations from IPCC in-depth reviews of the SNC are incorporated into all aspects of the TNC and that a time-table and plan are established to address any comments that cannot be fully covered
- Activity 4.3.4. Finalize Azerbaijan's TNC
- Activity 4.3.5. Commission translation and technical editing of the TNC where necessary
- Activity 4.3.6. Publish Azerbaijan's TNC in English and Azerbaijani
- Activity 4.3.7. Prepare e-copies of Azerbaijan's TNC in CD-ROM format
- Activity 4.3.8. Prepare and launch the web-site for TNC
- Activity 4.3.9. Ensure official submission of Azerbaijan's TNC to the CoP of the UNFCCC as necessary
- Activity 4.3.10. Organize a national workshop to launch and present the findings of Azerbaijan's TNC
- Activity 4.3.11: Launch the TNC and present major findings in a side event during a CoP /Subsidiary Body session

Project Management: Project activities coordinated, ongoing communication with all stakeholders maintained, and quality of project activities monitored and evaluated

### **Output PM 1: Activities and staff coordinated**

Activity PM 1.1.Identify and hire appropriate international and local experts to manage activities and conduct research

Activity PM 1.2. Establish regular meetings for Team Leaders and with individual Team Leaders and the experts in their area

Activity PM 1.3. Hold an inception workshop and finalize the timetable for all project outputs and activities.

Activity PM 1.4. Procure equipment and office facilities for the project as needed.

Activity PM 1.5. Conduct an initial overview of the data and parameters for project scenarios and research in order to ensure that scenarios, estimates, and other project research are internally consistent within the NC.

Activity PM 1.6. Coordinate training to be provided in project areas and oversee sharing of experience gained by individual experts during trainings and workshops in Azerbaijan and abroad

### Output PM 2: Communication among project experts, project stakeholders, and the general public coordinated

Activity PM 2.1. Include project stakeholders and project experts in the Project Steering Committee and convene the committee at least once a year and on an ad hoc basis as necessary.

Activity PM 2.2. Prepare press releases and other information regarding the project status and findings as necessary and respond to press queries regarding the project.

Activity PM 2.3. Maintain a project website, updating information on a regular basis (web host to be determined during project inception discussions with the implementing agency).

Activity PM 2.4. Conduct awareness raising campaigns among the public

### Output PM 3: Project activities, outputs, and outcomes monitored and evaluated

Activity PM 3.1. Compile documentation for the Annual Project Review/Project Implementation Review (APR/PIR) that conforms with UNDP-GEF requirements and CO specifications.

Activity PM 3.2. File other regular reporting documents as required by UNDP-GEF and/or UNDP Azerbaijan, including Quarterly Operational Reports (QORs) with corresponding updates in the Atlas Risk Log if necessary.

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## 3. Project Results Framework

This project will capacities strength	contribute to achieving the ened to address environmental	This project will contribute to achieving the following Country Programme Outcome as defined in CPD: Relevant national strategies, policies and capacities strengthened to address environmental degradation, promote a green economy and reduce vulnerability to climate change	ne Outcome as defined in momy and reduce vulnerabili	CPD: Relevant nation ty to climate change	onal strategies, policies and
Country Program	ame Outcome Indicators: Nur	Country Programme Outcome Indicators: Number of national/sectoral strategies incorporating adaptation and mitigation measures	s incorporating adaptation ar	d mitigation measure	s
Primary applicab	ole Key Environment and Sus	Primary applicable Key Environment and Sustainable Development Key Result Area: Mainstreaming environment and energy	Ilt Area: Mainstreaming env	ironment and energy	
Applicable GEF	Strategic Objective and Progr	Applicable GEF Strategic Objective and Program: Enabling Activities: Climate Change	change		
	Indicator	Baseline	Targets End of Project	Source of verification	Risks and Assumptions
Project Objective Prenaration of	Preparation and submission of the TNC	Azerbaijan has completed its SNC	The TNC will be endorsed and submitted to the UNFCCC	UNFCCC Documentation	Strong government support for the preparation of the
the Third National Communication					
Outcome 1	GHG inventory uses	• Tier 1 data was listed for	GHG inventory uses	• Project	• Enterprises will be
GHG Inventory strengthened	Tier 2 and where applicable Tier 3 data	all key sources in SNC	Tier 2 and where applicable Tier 3 data	documentation	willing and able to share data on their emissions
	for key sources (y/n)		for key source	<ul> <li>Government</li> </ul>	with the project team
	• Complete inventory	Data collected on an ad hoc hasis when NC is	emissions	reports	• Cooperation with the
	or.	iled.	•	• External expert	relevant state-managed
	(n/n)		chapter is prepared for the TNC	review	entities contributing to GHG will be further
				• TNC	
Outcome 2	jo		1 15	• Project	• There is a need to use
Vulnerability	scenarios that reflect	upgraded software, newer	red	documentation,	more than one climate
and Adaptation Assessments	current intormation and modeling techniques	input data	incorporate current data and modeling	including training records	change scenario models in order to reduce the
Prepared			techniques	and procurement	level of uncertainties
	• Number of	reflected in the SNC bear	Key components of	S C C C C C C C C C C C C C C C C C C C	
	papua	high degree of uncertainty	the V&A section are	<ul> <li>Expert review</li> </ul>	
	adaptation measures		updated at least in 6		
	that reflect current best		sectors vulnerable to	• TNC	
	plactices		VIIII CII CIIII E		

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2.4.00	Complete V&A chap (y/n)	;		**************************************	
Outcome 3 Policies and Measures	<ul> <li>Solid scenarios for mitigation incorporating the current data and</li> </ul>	new p ts since	least 1 f trainec upgrade		Further integration of climate change risks mitigation and
(FAM) Analysis completed	modeling techniques are in place (y/n)	publication of the SNC affecting scenarios	ror mitigation scenarios	training records and technical reports	adaptation in the state policies and plans is expected
	• Economic cost analysis of NAPA and NAMA prepared (y/n)	No economic cost analysis of adaptation and mitigation plans, policies and programmes are in	Economic cost analysis for NAPA and NAMA prepared and submitted to the	Expert review     TNC	
	Complete PAM chapter that incorporates expert review (y/n)	Description     Current version of modeling software may not be suitable.	MENR  • Complete PAM is prepared for the TNC		
Outcome 4 National circumstances;	Presence of all required chapters in TNC not covered by previous	Chapters on national circumstances, education, public awareness in SNC	All required chapters for TNC are prepared, reviewed, amended	Project documentation	• It is assumed that public awareness raising campaigns will be
Constraints & gaps, related	outcomes in place (y/n)	do not reflect recent developments	and submitted	• Expert review	systematically followed up by the MENR at the
financial, technical, & capacity needs; Other relevant	• TNC is translated into English for official submission to the UNFCCC (y/n)	Public awareness raising campaigns on climate change issues remain un-	<ul> <li>TNC is translated and available in Azerbaijani and English</li> </ul>	· • TNC website	end of the project
information for	Number of awareness raising campaigns conducted through-out the project cycle	sustainable  There is no NC web-site in Azerbaijan	<ul> <li>TNC is published and distributed in hard- copy and CD-ROM formats</li> </ul>		
	• TNC website is created and functional (y/n)		At least 10 public awareness raising campaign are launched during the project cycle		
			• TNC web-site is launched		

## 4. Total budget and work-plan

Award ID:	00060785 Project ID: 00076682
Award Title:	PIMS 4589 CC EA Azerbaijan "Enabling Activities for the Preparation of Azerbaijan's Third National Communication to the UNFCCC"
Business Unit:	AZE10
Project Title:	PIMS 4589 CC EA Azerbaijan "Enabling Activities for the Preparation of Azerbaijan's Third National Communication to the UNFCCC"
PIMS no.	4589
Implementing Partner (Executing Agency)   Ministry of Ecology and	Ministry of Ecology and Natural Resources of the Republic of Azerbaijan

GEF Responsible Outcome/Atlas Activity Agent	Fund	Donor Name	Atlas Budgetary Account Code 71200	ATLAS Budget Description International Consultants	Amount Year 1 (USD)	Amount Year 2 (USD)	Amount Year 3 (USD) 7,000	Total (USD) 7,000
	62000	GEF	71600	Local Consultants Travel	5,000	5,000	8,500	48,500 12,000
MENR			72100	Contractual Services- Companies	4,000	0	0	4,000
			74500	Miscellaneous Expenses	1,000	1,000	200	2,500
				Total Outcome 1	30,000	26,000	18,000	74,000
	0000	Ţ	71200	International Consultants	0	0	5,000	5,000
	0700	435	71300	Local Consultants	20,000	35,000	10,000	65,000
MENTO			71600	Travel	0	7,000	8,000	15,000
MENK			72500	Supplies	1,000	2,000	0	3,000
			74500	Miscellaneous Expenses	1,000	1,000	200	2,500
				Total Outcome 2	22,000	45,000	23,500	90,500
	0000	į	71200	International Consultants	0	0	3,000	3,000
	00070	135	71300	Local Consultants	20,000	35,000	10,000	65,000
MENR			71600	Travel	0	6,000	6,000	12,000
			74500	Miscellaneous Expenses	0	1,000	500	1,500
				Total Outcome 3	20,000	42,000	19,500	81,500

				71200	International Consultants	0	0	3,000	3,000
		62000	GEF	71300	Local Consultants	10,000	15,000	20,000	45,000
				72100	Contractual Services- Companies	5,000	8,000	2,000	18,000
OTTEC SAR				74200	Audio Visual and Printing Production Costs	10,000	10,000	12,000	32,000
Notional circa				74500	Miscellaneous Expenses	1,000	200	200	2,000
Conts. & gans.				75700	Seminars	0	5,000	5,000	10,000
financial, tech,	MENR				Total Outcome 4	26,000	38,500	45,500	110,000
& capacity needs; Other				71400	Contractual Services – Individual	36,000	36,000	36,000	108,000
relevant info for TNC completed		62000	GEF	72100	Contractual Services –	2,000	0	2,000	4,000
				72800	Information Technology Equipment	5,000	0	0	5,000
				74100	Professional Services	0	0	4,000	4,000
				74500	Miscellaneous Expenses	1,000	1,000	1,000	3,000
					Total Management	44,000	37,000	43,000	124,000
					PROJECT TOTAL	142,000	188,500	149,500	480,000

Summary of Funds:

	Amount Year 1	Amount Year 2	Amount Year 3	Total
GEF	142,000\$	188,500\$	149,500\$	480,000\$
Government in-kind	20,000\$	10,000\$	10,000\$	40,000 \$
TOTAL	162,000 \$   198,500 \$	198,500 \$	159,500 \$	520,000\$

### 4.1. Work-plan

		Vear				, A	Veer 2			V	Voor 3	
Outhouts/Activities	ō	02 103	33	70	36	٥	20	90  20  90		010	On One	210
Implementation arrangements and project inception:	١	<u>.</u>	,		}	2	ž	2 2				
1. Contract the project office staff	×							L				
2. Establish the technical teams	×	×										
3. Form the PSC	×											
4. Organize project inception workshop	×						L					
Output 1: Updated GHG inventory prepared and capacity to collect this information on	n on a	an ongoing basis for future NCs enhanced	d guic	asis fo	r futu	re NC	s enh	anced				
1.1. GHG inventory team and data collection analysis process maintained and strengthened	×	×										
1.2 GHG inventory data collected and methodologies confirmed and strengthened	×	×	×	X	×							
				×	×	×	×	×	×	×		
1.4 GHG inventory finalized and archived					×	×	×	×	×	×	×	
Output 2: Updated assessment of climate changes, vulnerability to CC, and measures to adapt to CC prepared; capacity to collect information on an on-	res to	adapt	5 C	} preg	ared;	capa	ity to	collec	t info	rmatio	n on a	n on-
going basis for future NCs strengthened												
2.1 Current climate changes in Azerbaijan described and analyzed			X	X	×							
2.2 Vulnerability to climate change in Azerbaijan described and assessed			X	X	X	X	X					
2.3 National Programme on Adaptation to Climate Change prepared			•	X	X	×	X	×				
2.4 Chapter on V&A completed							X	×	×	×		
Output 3: Updated report on policies and measures to mitigate CC prepared and capacity to collect this information on an ongoing basis for future NCs	capac	ity to	ollect	this i	nform	ation	оп ап	ongo	ng ba	sis for	future	NC.
strengthened												
3.1 Necessary data and relevant information for scenario development collected,		X	×	X	X	×						
analyzed, and used in the scenario development												
3.2 Reporting of PAMs updated and strengthened					X	×	×					
3.3 Analysis of PAMs completed through 2015							X	X	X	X	X	
Output 4: Updated information in national circumstances and other areas required under the UNFCCC prepared	under	the U	NFCC	C pre	pared							
4.1 National circumstance completed		X	X	X	X	X	X	X	X	X		
4.2 Other relevant information completed			X	X	X	X	X	X				
4.3 TNC prepared, translated, submitted and disseminated									X	X	X	×
Project Management												
PM 1 Activities and staff coordinated	X	X	X	X	X	X	X	X	X	X	X	X
PM 2 Communication and outreach	×	×	X	X	X	×	×	×	X	X	X	×
PM 3 Monitoring and Evaluation	×	×	X	X	X	×	×	×	×	×	×	X

### 5. Management Arrangements

This project will use National Execution (NEX) implementation modality and will be implemented by the Ministry of Ecology and Natural Resources. The Ministry is the lead agency on climate change in Azerbaijan and houses the Operational Focal Point for the GEF and Focal Point for the UNFCCC. MENR will make its respective staff available for consultation and will ensure appropriate access to project sites, relevant data, records, agencies and authorities.

UNDP support services will include procurement, contracting and payment services in accordance with the relevant UNDP Rules and Procedures for procurement and human resources management. The UNDP Country Office will render the following services to support the project in accordance with the established norms on rendering such services: hiring and administering project personnel contracts; procurement of works and services; financial monitoring and reporting; processing of direct payments;, monitoring of the project implementation and support in outcome and impact assessment..

The project's management structure will be as follows:

Steering Committee, chaired by a Project Director nominated by the Ministry of Ecology and Natural Resources and co-chaired by UNDP, will be established to provide strategic guidance and take decisions related to the project implementation including approval of project plan, budget and revisions. Other stakeholders can be included into the Steering Committee as required. The Steering Committee will meet twice a year, or more frequently, if deemed appropriate at the start-up phase, to build common understanding and to ensure that the Project is initiated properly.

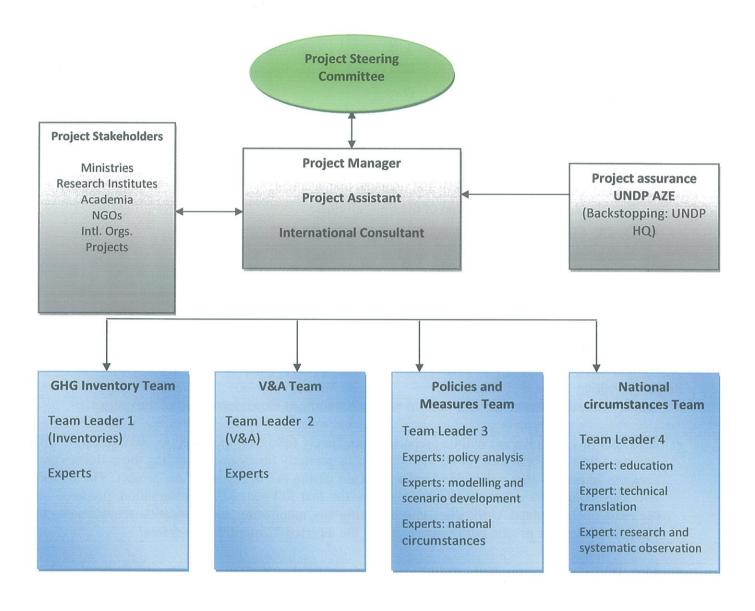
The <u>Project Director</u> will have the overall responsibility for proper project management. The Project Director will ensure political support on behalf of the Government of Azerbaijan, as well as represent the interests of the project within the Ministry and ensure relevance and contribution of the project to the national capacity building work and implementation of national commitments under UNFCCC.

<u>Project Assurance.</u> UNDP will designate a Development Advisor to provide independent project oversight and monitoring functions, to ensure that project activities are managed and milestones accomplished.

<u>Project Management Team.</u> The National Project Manager, supported by a Project Assistant, will be recruited and tasked with the day-to-day management of project activities, as well as with financial and administrative reporting. He/she will be responsible for project implementation and will be guided by Annual Work Plan. Project Manager's prime responsibility is to ensure that the project produces the planned outputs by undertaking necessary activities specified in the project document to the required standard of quality and within the specified constraints of time and cost. Local and international consultants will be recruited, as deemed necessary for executing certain project activities.

<u>Project Support.</u> UNDP will provide financial and administrative support to the project including procurement, contracting, travel and payments.

### **Project Governance Structure**



### Summary of inputs to be provided by Government of Azerbaijan and UNDP

### Government inputs:

- Free and functional office premises for project related activities and access to any information necessary for the project staff and consultants to complete their tasks;
- Participation in selection of project personnel, consultants and equipment suppliers; Overall support in organization of project events

### **UNDP** inputs:

- Support services in selecting international/local training consultants and staff to be recruited under the project;
- Support services in procurement and financial management;
- Participation in the organization of training activities;
- Quality control over the project outputs.
- Organization of study tours

### 6. Monitoring Framework and Evaluation framework

In accordance with the programming policies and procedures outlined in the UNDP Programme and Operational Policies and Procedures, the project will be monitored through the following:

### **Project Inception**

- Project Inception Workshop will be held within 2 months of the endorsement of the project.
- A Project Inception Report will be prepared immediately following the Inception Workshop. It will include a detailed First Year Work Plan divided in quarterly timeframes detailing the activities and progress indicators that will guide implementation during the first year of the project. The Report will also include the detailed project budget for the first full year of implementation, prepared on the basis of the Annual Work Plan, and including any monitoring and evaluation requirements to effectively measure project performance during the targeted 12 months time-frame.
- 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 affect project implementation.
- As part of the Inception Report, the project team will also 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 PIR/APRs. Technical Reports may also be prepared by external consultants and should be comprehensive, specialized analyses of clearly defined areas of research within the framework of the project. These technical reports will represent, as appropriate, the project's substantive contribution to specific areas, and will be used in efforts to disseminate relevant information and best practices at local, national and international levels.

### Annually

- Annual Review Report. An Annual Review Report shall be prepared by the Project Manager and shared with the PSC. As minimum requirement, the Annual Review Report shall consist of the summary of results achieved against pre-defined annual targets at the output level.
- Annual Project Review. Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. This report will be submitted in the format designated by the GEF under its Project Implementation Report (PIR) guidelines, as the reports are now fully harmonized. In the last year, this review will be a final assessment. This review is driven by the PSC and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.
- Audit. Project will be subject to internal UNDP audit

### **End of Project**

During the last three months, the project team will prepare a brief terminal report. This brief report will summarize the results achieved (objectives, outcomes, outputs), lessons learned, problems met and areas where results may not have been achieved. It will also lay out recommendations for any further steps that may need to be taken to ensure sustainability and replicability of the project's results.

M& E Workplan

The of MET edicitiv	Responsible Parites	Time frame
Inception Workshop and	Project Manager	Within first two months of project
Report	<ul> <li>UNDP CO, UNDP GEF</li> </ul>	start up
Measurement of Means	<ul> <li>Oversight by Project Manager</li> </ul>	Annually prior to ARR/PIR and to the
of Verification for	■ Project team	definition of annual work plans
Project Progress on		
output and		
implementation		
ARR/PIR	Project manager and team	Annually
	■ UNDP CO	
	■ UNDP RTA	
	<ul> <li>UNDP EEG</li> </ul>	
Periodic status/ progress	<ul> <li>Project manager and team</li> </ul>	Bi-annually (second and forth quarter
reports		- the latter as part of the annual
		ARR/PIR)
Project Terminal Report	■ Project manager and team	At least three months before the end
	■ UNDP CO	of the project
Audit	■ UNDP CO	In compliance with LOA on provision
	Project manager and team	of support services

### 7. Legal Context

This document together with the CPAP, which is incorporated by reference, constitute together a Project Document as referred to in the SBAA signed between the Government of Azerbaijan and UNDP on January 6, 2001 and all CPAP provisions apply to this document.

Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the implementing partner and its personnel and property, and of UNDP's property in the implementing partner's custody, rests with the implementing partner.

The implementing partner shall:

- a) put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried;
- b) assume all risks and liabilities related to the implementing partner's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement.

The implementing partner agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999).

The list can be accessed via <a href="http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm">http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm</a>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

### 8. Appendices

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

### Description of the process of stocktaking exercise

The objective of the self-assessment exercise is to identify and validate the critical priorities for UNFCCC implementation in Azerbaijan through a highly consultative and participatory process involving stocktaking and stakeholder consultation. This activity was implementing in accordance with procedures (GEF/C.22/Inf.16) for preparation of NC for Non-Annex 1 Parties.

Stocktaking helped to evaluate the previous activities, make inventory of ongoing or planned activities relevant to the Third National Communication (TNC), identify existing gaps and critical priorities for further in-depth studies during the preparation of the SNC.

As shown in 17/CP8 stocktaking covers all thematic topics of the TNC. The following instruments were used while implementing stocktaking: desktop review of the documents related to the theme, conducting consultations with stakeholders, survey on priority areas, conducting workshops.

The process started in January 2011 and was implemented by UNDP and the Ministry of Ecology and Natural Resources on behalf of the Government of the Republic of Azerbaijan in close cooperation with other relevant Ministries and organizations and under the leadership of UNFCCC Focal Point for Azerbaijan. UNDP/GEF focal point, the Ministry of Industry and Energy, Ministry of Economic Development, the Ministry of Transport, the Ministry of Agriculture, National Academy of Sciences, State Oil Company, "Azerenergy" Open Joint-Stock Company, Baku Executive Power, NGOs and representatives of other organizations related to climate change were invited to be a Party to the Self-Assessment Coordination Group. At the meetings of Coordination Group the institutional structure of the project was agreed, work plan was discussed and priority criteria were identified.

In order to ensure more effective implementation of stocktaking exercise the Project Coordinator created 5 main groups of coordination: 1) greenhouse gases inventory, 2) mitigation of impact, 3) current climate change assessment and climate scenarios, 4) vulnerability and adaptation, 5) public awareness. The group leader was responsible for preparation of a report on each thematic area. At the next stage the Project Coordinator made synthesis of the 5 reports and the final document was developed. The activities were implemented in accordance with the UNDP/GEF Support Programme for Preparation of NC, User Manual, Technical instructions, documents and consultations. At the same time experience of other countries was reviewed and taken into consideration.

The specialists engaged in the SNC and INC were invited to review gaps, constrains and main achievements of previous studies and projects. 2 main documents were reviewed: SNC, regional project for improvement of greenhouse gases inventory in CEA/CIS (RER/01/G31). Results of this analysis are presented in the introductory section of each output planned in the TNC.

Institutional structure of project implementation was agreed upon, work plan was developed and draft criteria for selection of the priority sectors were identified at the initial meeting of the relevant stakeholders. The second meeting was dedicated to decision making on priority areas and sectors for the TNC. 27 experts from 12 governmental, non-governmental and academic institutions (Ministry of

Ecology and Natural Resources, Ministry of Industry and Energy, Ministry of Agriculture, Ministry of Transport, State Statistics Committee, Ministry of Economic Development, State Agency of Amelioration and Water Management, State Committee on Land-use and Cartography, National Academy of Science, NGOs Ecoil, Ecores, Ecosfera, Ruzgar) dealing with the problem of climate change were invited to provide the stakeholders' participation process. Special questionnaire was developed and disseminated for identification of the priorities of these stakeholder institutions in the TNC. Individual explanations and clarifications were provided to each of experts and high-level representatives of involved institutions. The responses to the questionnaire were reflected in this project proposal. The list of stakeholders and their role in the TNC is presented in the Summary Table below.

Workshop to take final decision on priority areas and activities for the TNC was held. Members of the previous two meetings, all experts and consultants, who were invited for stocktaking, attended the meeting. Comments from stakeholders were integrated in the final proposal. The criteria for assessment of each sphere were selected. The following outputs have been discussed during the workshop: GHGs national inventory; vulnerability & adaptation; national circumstances; measures for mitigation of climate change; gaps and financial needs assessment and other information with regards to the project proposals for adaptation and mitigation measures, methodological issues, relevant activities related to access to information.

### Main outcomes of the stocktaking and priorities identified

### 1. National Circumstances

Each thematic area referred to in the National Circumstances Section of the SNC was assessed and critically analyzed during implementation of stocktaking. Thematic areas of the National Circumstances section of the SNC covered climatic, geographical parameters, population, natural resources and some socio-economic parameters in Azerbaijan.

The economy of Azerbaijan is mainly represented by oil and gas production, chemical and petrochemical, metallurgical, mechanical engineering, textile and food industries and by wheat, cotton, vine, fruit, tobacco, tea, vegetable growing and cattle breeding in the agricultural sector. Part of industrial and agricultural goods produced in the country including oil and oil products, electrical energy, cotton and silk fibers, wine and other products are exported to a number of countries. GDP increased from 4718,1 million manats in 2000 to 34575,7 million manats in 2009.

At present more than half of the national revenue of the Azerbaijan economy is made up of income from oil industry.

Similar to many other countries, in recent times a great attention in Azerbaijan is allocated to issues of environment protection and rational use of natural resources. With a view to enhance environmental protection and to form a basis of the environmental policy a number of important laws, normative legal acts compatible with the European legislation have been adopted since 1997. However, it was not feasible to resolve environmental problems that had piled up throughout years at Azerbaijan's own resources during the transition period. As a result of an increased impact of anthropogenic activities the trend towards the depletion of biodiversity has been observed as a result of

It is anticipated that the TNC will elaborate in detail on natural resources and economic sectors (especially energy, transport, agriculture, land degradation, forestry, biodiversity, health, improvement of information management system and etc.) taking into account the accelerated observation of climate

change impact, large-scale ongoing reforms, sustainable use of natural resources. Approved state strategies and plans for poverty reduction and economic development, as well as sound environmental management will be considered and as necessary referred to (National Programme on Environmentally Sustainable Social Economic Development- State Programme on Socio-Economic Development of Regions 2009-2013- and Resolution of the President on the Approval of Complex Action Plan for 2006-2010 on the Improvement of State of Environment in Azerbaijan).

Geography and population profiles of the TNC require only minor corrections. At the same time, the climate profile will undergo changes in relation to the increased frequency of natural disasters and extreme events. In a view of the adoption of "National Programme for the Reforestation and Expansion of Forests" aiming to address forestry issues and ensure forestry development, natural recourses profile should be improved. Appropriate changes related to reforms conducted in agriculture and amelioration will be included in this profile as well. Due to decisions and development programs adopted in the field of energy (State Programme on Development of Fuel and Energy Complex in Azerbaijan in 2005-2015, State Programme on Use of Alternative and Renewable Sources of Energy in Azerbaijan) the mentioned profile will be made more comprehensive. At the same time information on infrastructure will be covered.

Information collection and analysis undertaken under the SNC will be expanded in the TNC. More detailed study of existing sectoral, national, international and regional programmes, including integration of the climate change issues into these programmes will be considered in further details. Reports and researches made by various organizations will be the main source of information.

### 2. Greenhouse Gas Inventory

Information for development the GHG national inventory in the SNC was obtained from the national and international statistical reports and relevant organizations. GHG inventory developed in 1995-2005 was conducted in accordance with IPCC instructions revised in 1996. SNC covers non-methane volatile organic compounds, which directly (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O) or indirectly contribute to greenhouse effect (NO<sub>x</sub>, CO). Inventory conducted under the SNC enables to supplement data on GHG emission sources and sinks, address methodological, organizational, scientific and technical issues in order to improve the quality of inventory.

The process of National GHG inventory in Azerbaijan is not systemic and mainly depends on the NC and other assistance programmes. The main shortcomings of initial National Inventory are: documentation of the process is done in inappropriate and unsystematic manner, inexpediency of application of IPCC software for GHG archiving and reporting due to its late availability, incomplete research of new gases (HFC, PFC, SF<sub>6</sub>) emissions.

The data on GHG calculation is available at the State Statistical Committee. Since 2000 information on fuel-energy balance of the Republic is being issued on annual basis. Nevertheless in some sectors information does not meet IPCC requirements. The data obtained from different sources about production and consumption does not concur.

Similar problems in the field of agriculture related to selection of emission factors for calculation of methane emission, which is produced by cattle wastes.

Under the UNDP/GEF regional project RER/01/G31 national strategy for improvement of inventory process and structure of GHG national inventory report have been developed. Effective practice

training was conducted for sources categories of transport, solid wastes, fugitive and internal fermentation.

Such sections as improvement of information collection system on road transport, solid wastes, internal fermentation and fugitive emission were selected as priorities for development of national or regional emission factors in Azerbaijan in the framework of the regional project.

Under the TNC, it is anticipated to conduct analysis of main sectors such as energy, transport, agriculture and solid wastes, analysis of uncertainties and implementation of DA/DC procedures, assessment of technical capacities for new gases inventory (identification of sources, their importance, involvement of experts) and international bunkers, which were not covered in SNC.

### 3. V&A

Azerbaijan possesses considerable oil and gas energy reserves of global importance. The energy sector of Azerbaijan includes oil and gas mining and processing, production of electric energy and heat, maintenance of systems for storage and transportation of energy sources.

The prognosis of economic development on the different spheres given in the INC till 2025 were based on the state of natural resources, scientific-technical potential and world market requirements in separate spheres; analysis of power demand for fuel and energy complex (oil and gas industry), power industry and heating system, industry development, transport, agriculture, forestry, wastes, different spheres of economy was conducted. At the same time based on the economic development and energy use forecasts till 2025, calculations of GHGs emissions (CO<sub>2</sub>, CN<sub>4</sub> and N<sub>2</sub>O) in the categories of energy, industry, agriculture, wastes were calculated and forecasts were given. The common potential to decrease emissions of GHGs in mentioned categories was assessed.

In SNC, energy sector was further analyzed, state programs and plans for on energy sector was reviewed, baseline GHG emissions until 2030 was calculated. The possibilities to reduce GHG emission in different economic spheres and increase the number of sinks (forest sector) were considered during the SNC. The list of measures on CO<sub>2</sub> reduction at energy category was developed.

Unavailability of socio-economic development scenarios along with the restricted access to reliable economic data and absence of emissions trends forecasting software should be considered as main barrier to the elaboration of successful, cost-effective measures for climate change mitigation policy in SNC.

Some prognosis was made on the basis of sector development potential and expert judgment. These results were not fully taken into account in following researches and feasibility studies

All sectors covered in the SNC will be reviewed and criteria for priority identification will be updated. Such economic sectors as Industry (energy efficiency in buildings), agriculture (change in landuse) that were not covered in the mitigation measures section of the SNC will be assessed under TNC. Under the NCSA special attention is paid to afforestation/reforestation, which is identified as special priority and cross-cutting issue.

At present, several alternatives for future socio-economic development have been prepared. These targeted programmes propose solutions to the problems in the industrial, agricultural, social and environmental areas. Implementation of these strategic tasks, provision of stable energy supply, high

speed of economic reforms and enabling environment for investments, creates favorable conditions to implement projects on technology transfer.

It is expedient to prepare national statistical report on GHG emissions, create information-analytical system for GHGs assessment, data on sources and sinks, stimulate import of environmentally sound technologies, which enables to use thermal and electric energy from solar, wind and biogas, elaborate measures to prevent delivery of obsolete transport means, develop models for existing GHG forecasting, data base, environmentally sustainable and economically sound projects.

At the same time, it is expected to cooeprated with other relevant projects existing in Azerbaijan namely, UNEP/GEF Global Technology Needs Assessment Project (2011-2012).

### 4. PAM

The assessment of vulnerability to climate change and adequate adaptation measures were developed based on information contained in the INC and SNC on agriculture, Caspian Sea littoral territories and human health. Expected climate changes were assessed on the basis of PRECIS 1.4 regional model.

According to emissions scenario and boundary conditions of PRECIS model climate scenarios for 2021-2050 and 2071-2100 was calculated.

Relevant analysis in the field of water resources and water use, present status of water resources of the country, water resources impact assessment and adequate adaptation measures, assessment of agroclimate resources, warming resources, moisture resources, agro climatic resources, agriculture (cotton, winter wheat, vine summer pastures, autumnal harvest, viticulture, winter pastures), human health, the Caspian Sea littoral territories were conducted under INC and adaptation measures were developed. The assessment of forest resources has been conducted under INC that dates back to 1999 and was not carried out in SNC. Therefore the assessment with application of new climatic regional models is planned under TNC as well.

In order to study gaps in SNC and identify priorities for the TNC specialists of relevant organizations such us Ministry of Ecology and Natural Resources, National Academy of Science NGOs were involved.

Activities in the field of vulnerability assessment and adaptation were conducted in accordance with IPCC guidelines and on the basis of original researches, analysis and expert judgment. Information on various spheres was collected from related organizations and analyzed by experts. But it should be mentioned that expert group faced with different difficulties while obtaining some systematic information. Lack of reliable information, information gaps and lack of material for quantitative observation are the main reasons of uncertainties. At the same time, experts faced many uncertainties produced by the regional PRECIS model. This particularly was evident in the area of precipitation. Considering the experience obtained in the preparation of the SNC, more realistic climate change scenario calculation models will be used in the TNC. In order to reduce the uncertainty the experts also highlighted the importance of data sharing on regional and international levels. In order to yield more quality and realistic results information exchange seminars are key to success.

Another issued raised was the elaboration of climate scenarios taking into account results of IPCC forecast by the experts who prepared previous Communications. Socio-economic scenarios weren't

prepared and considered in SNC. Lack of these scenarios led to unsystematic and equivocal approach in vulnerability assessment. In addition, economic impact of expected changes for vulnerable systems was not assessed (positive or negative) and tourism sectors were not taken into account. The common adaptation measures were shown in SNC without cost-recovery and profitability analysis for every system. Assessment of future economic impact of these measures plays an important role for local authorities and international organizations, which should be considered in the TNC.

One of TNC priority directions in Azerbaijan will be the assessment of climate change impact on various vulnerable systems (the water resources, Caspian Sea littoral areas, agriculture, forest resources, land degradation, human health, biodiversity), as well as improvement of climate change scenarios prepared in SNC.

For more detailed assessment of selected systems vulnerability the following criteria have been used in priority identification: high risk of expected climate change and related extreme events (drought, landslide); expected high vulnerability of ecosystems, vulnerable regions and economic sectors; expected economic losses; specific status of state strategic priorities (protected areas, mountainous region, occupied territories, tourist zones, regions with cultural heritage); population in vulnerable regions and the area of vulnerable lands; vulnerability study and existing capacity for adaptation measures (human and technical resources, infrastructure, stakeholders awareness and etc.); feasibility of adaptation measures; national and international projects.

Identification of real scenarios is being planned in TNC by using Regional Climate Model – RCM software models and taking into account 4 IPCC Assessment Report and local features. It is also anticipated to use international technical support in selection of the most appropriate condition model in Azerbaijan. Also in order to provide the most exact information in vulnerability assessment it is anticipated to conduct researches in separate zones: Small Caucasus, Greater Caucasus, Subtropical region, low-land regions and etc. Special attention will be paid to the priority economic regions of Azerbaijan and the most vulnerable systems (littoral territories, mountainous and desertification hit areas). Vulnerability of water resources (especially Kura river water basin) will be assessed.

All sectors covered in SNC will be revised and reassessed on the basis of climate change and socioeconomic scenario in appropriate manner. Special attention will be paid to development of socioeconomic scenario.

Integration of adaptation measures in Poverty Reduction, Combating Desertification, Biodiversity Conservation and other development programmes play an important role. The ways and means of integration of adaptation measures in national development programmes and sectoral strategies should be prepared and implemented. Coordination of relevant Ministries and organizations while developing and implementing adaptation project provides maximum involvement of stakeholders and process transparency. Assessment measures of National Adaptation Program should be prepared taking into account analysis of profitability and financial potential, awareness-raising of decision-makers and stakeholders.

According to decisions of UNFCCC Conference of the Parties (COP16) the Non Annex 1 countries should prepare National Programs on Adaptation (NAPA). Therefore in the course of preparation of the given component these two processes- preparation of TNC and NAPA- will supplement each other.

### 5. Other information

One of the main and, probably, most important activities implemented in the area of environment protection and mitigation of climate change effects is public education and awareness raising. Certain work has been done and is being done in Azerbaijan in this area.

Thus, before starting the preparation of the SNC relevant information on the preparation of the National Communication was provided to a number of media agencies and workshops and consultations were held with participation of representatives of ministries, committees, other government agencies and non-government organizations. Experts and specialists from various ministries, committees, state and private institutions including non-government organizations were involved in the preparation of the Second National Communication.

Environmental subjects have been included into the country's educational system that comprises primary, middle, vocational and higher schools and environmental subjects are taught in middle and higher schools. Specialists on climate studies and scientific basics of climate change are educated at Geographic faculty of the Baku State University. Subjects on environment protection are also taught in other universities and institutes, particularly in technical universities and institutes.

Discussion of climate change issues at higher international for in recent times raised an interest in this topic in Azerbaijan as well. Climate change issues are addressed almost by all means of mass media of the country. Specialists of MENR engaged in this area and NGOs representatives put forward for the public's feedback interesting ideas and proposals on resolutions of this problem.

A number of companies have already started to take close part in public education and awareness raising in this area. In May 2009 International Conference on Climate Change and Management of Greenhouse Gases in Azerbaijan was organized by SOCAR under the support of MENR and the World Bank. In addition, BP, Statoil and other companies held various trainings and seminars on raising the public awareness about work carried out by these companies in this area.

In recent time, a rise of interest among the population to climate change issues points to an increased role of the public and mass media in public education and awareness-raising.

<u>Preparation of TNC will revive attention and interest of the state organizations, NGOs, private sector and general public to the problem and will enhance awareness-raising.</u>

For example, Azerbaijan does not conduct monitoring of CO<sub>2</sub> concentrations, increase of biomass, and forest massifs. The trends in this field (National Development Programme on Hydrometeorology) will be reflected in the TNC. Efforts will be undertaken to attracting attention to development prospects through the prism of climate and climate change.

At the same time as assessment of technologies for mitigation of impact and adaptation to it in various sectors of economy was not conducted and was not integrated into NAPA, NAMA. There will be efforts to rectify the situation in these fields.

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

Despite the fact that uncertainties related to economic forecast were mentioned in the SNC, elimination of constraints related to GHG emission reduction measures, application of new technologies, and other

issues were not emphasized. While SNC proposed a list of some priority measures on adaptation to climate change, proposals to remove constraints in GHG reduction and adaptation will be included into the TNC.

On the whole it is anticipated to consider constraints and gaps at each component of TNC (GHG Inventory, mitigation of effect, adaptation and etc.) and related financial and technical needs and propose how these needs should be addressed.

At the same time it is expedient to propose the projects to assess future effects that would take into consideration additional expenses related to identification and elimination of financial, technical, methodological, and other constraints and gaps under Article 6 of the Convention as well as use of technologies, equipment, to reduce GHGs emissions. Analysis of local capacity building and development and new technologies requirements will be conducted.

# Summary Table for stakeholder consultations and validation process

	Nome of Institution/spainaling	Sinitalinities interests	Resonitoringn	स्किप्टि भा भार अस्ति।
	[ted]	पिका कर mandate		SINGILL DIRECTO
, Jay				ത്വാവില്യിത്. ഉപ്പെല്യിത്.
1				वर्षि वीन्तरीः विकृतम्, विध्या सम्बन्धानम्
1	Ministry of Industry and Energy	Implementation of state policy in industry and	Co-operation for the integration of	Preparation of draft report
		energy sector and its management	nge issues in ener	4
			strategy & industry programmes	
			Resources "	
2.1.	National Monitoring Department	Implementation of monitoring of atmospheric	of anthropo	Preparation of draft report
		air, precipitations, surface waters and trans-	emission sources in the GHG	
		y transportation	inventory	
2.2.	Forest Development Department	Forestry management and undertaking measures in the field of conservation of forest	Assessment of Climate Change impact	Preparation of draft report
		resources and reforestation, rational use of		
		sources, forest function for	•	
		protection, water conservation, nature		
		conservation, cultural and recreative		
		functions, conservation of biodiversity and		
		fauna species diffused in forest		
2.3.	National Department for Hydrometeorology	Carrying out meteorological, hydrological	Preparation of database for the	Preparation of draft report
		observations and observations in the field of	assessment of Climate Change trends	
		ogy and environmental pollution (la	sir projection in t	
		preparation	y, preparation	
		prognosis and foresights and provision of	proposals for improvement of	
		related organizations, media mass and public,	observation network.	
		assessment of climate, agro climate and water		
		resources, studying their dynamics.		
		Implementation of the state policy in the field of Hydrometeorology.		
2.4.	Center for Climate Change and O-zone	Provision of support to the State Commission	Preparation of GHG inventory,	Preparation of draft report
		established for fulfillment of obligations under	assessment of climate change impact,	
		UNFCCC	development of measures on mitigation	
2.5	Scientific-research Institute of Forestry	Studving of forest from scientific view and	Assessment of vulnerability forest	Consultations
i i		on of proposals in this field	erbaijan to climate ch	
			preparation of adaptation proposals.	
2.6.	Department of Bio-diversity Conservation	Implementation of state policy in the field of	Assessment of climate change impact	Preparation of draft report
1				

		biodiversity conservation, restoration, management of national parks	on biodiversity and ecosystems, preparation of adaptation proposals	
ent of Envirc	Department of Environmental Protection	Waste management, state control on application of chemicals	Assessment of wastes and chemicals in anthropogenic emission of GHG	Consultations
State Committee Cartography	on Land-use and	Preparation of the programme in the field of sustainable use and protection of land resources, rehabilitation and reproduction of soil fertility, land surveying, geodesy, topography and cartography and their joint implementation with relevant institutions; protection of soils from erosion, salinization, salification and various anthropogenic and man-caused pollution; development of the projects soil fertility conservation jointly with relevant organizations and control on implementation of these projects; conducting state land cadastre, land monitoring, organization of works and measures on implementation of land-surveying; assessment of land resources, cartography	Assessment of climate change impact on natural and anthropogenic land degradation processes and preparation of adaptation proposals.	Preparation of draft report
		4. Ministry of Agriculture		
mistry and £	Agro-chemistry and Soil Fertility Department	Working out and implementation of State programs in the agrarian sector including producing and processing agricultural products, rendering services for producers, amelioration and water management, veterinary, plant conservation and quarantine, sustainable use of lands	Assessment and researches in relevant fields of agriculture	Preparation of draft report
Agrarian Scientific Center	enter	Conducting scientific researches in the field of agriculture, application of invention and exploration	Assessment of dependence between climate change and GHG emission in land/land use and preparation of adaptation proposals	Preparation of draft report
State Agency on Ameli Resources Management	State Agency on Amelioration and Water Resources Management	Water supply in different sectors of economy, irrigative water distribution, water use and protection, water resources assessment, state water management and exploitation of reclamation objects, disposal of salty waters from ameliorative lands, undertaking combat measures with mudflow waters, water supply of winter pastures, exploitation of amelioration and water management objects, execution of functions by new facilities, scientific technical development on the basis	Assessment of climate change impact on water resources and preparation of adaptation measures	Preparation of draft report

		of the field of modern scientific technique and		
		progressive technology, projection of		
		gement faciliti		
		implementation of state policy in the field of		
		conducting appropriate reforms n amelioration		
		and water management		
•	Ministry of Transport	Development and implementation of state	ation for the integ	Preparation of draft report
		strategy in transport sector	climate change issues in transport sector development strategy &	
			mmes.	
7.	Ministry of Health	Study of the impact of climatic and		Preparation of draft report
		geographical tactors on munan meatin.	cumate change and elaboration or adaptation measures to the changing climatic conditions.	
∞ <b>i</b>	State Statistic Committee	The Committee is responsible for state	Data provider for GHGs inventory,	Preparation of draft report
		statistics and reporting of aggregated data for different sectors.	n and mitig	
		O National Academy of Science		
9.1		Assessment of links between climate and Investiga	Investigation of past and on-going	Preparation of draft report
	•	(natural	in Azerba	•
_		fluctuations and the	assessment of its anthropogenic	
		environment		
			on natural and anthropogenic	
			landscape in the country, Assessment	
			of the Caspian sea	
			fluctuation on human health and	
			tourism development, development of	
			relevant adaptation measures in order	
			awareness on climate change effects	
9.2.	Institute of Botany	Study of natural vegetation cover resilience to	Assessment of natural ecosystems	Consultations
		climate change	vulnerability and elaboration of	
			adaptation measures to climate change	
9.3.	Institute of Soil Sciences and Agro-chemistry	Studying climate change impact on top-soil	0	Consultations
			degradati	
			on and etc.)	
			fertility, elaboration of adaptation	
	and a state of a state of the s			
9.4	Institute of Zoology	Climate change impact on fauna	nent of fauna vulnerability	Consultations
			climate change and preparation of adaptation measures	

Preparation of the draft report	Consultations	Consultations	Consultations	Consultations
Integration of climate change issue into different development programmes and strategies and integration assessment, preparation of proposals in the field of GHG emission reduction	Preparation of proposals in the field of improvement of legislative base of UNFCCC and Kyoto Protocol	Provision of information on GHG inventory in motor transport	Cooperation in the field of integration of implemented measures on Climate Change into state financial policy	Cooperation in assessment of state in the field of ecological education, water use, desertification and problems of littoral zones
Identification of socio-economic development strategy in the Republic of Azerbaijan and main directions, preparation of economic programmes and provision of their implementation; identification of regulation ways of socio-economic activity on the basis of economic situation analysis; coordination of central and local executive powers in the field of implementation of economic reforms	Implementation of state policy in the field of legislative acts management	Implementation of state policy in the field of motor transport means	Implementation of state policy in the field of financial resources	Consideration of different issues in the field of environmental protection (oil industry, the Caspian sea, sustainable development), including ecological-public inventory and monitoring, ecological information exchange, organization of ecological-public movement
Ministry of Economic Development	Ministry of Justice	Ministry of Internal Affairs, Department of State Road Inspections	Ministry of Finance	NGOs mentioned above
10.	11.	12.	13.	14.

### Appendix B: Technical Specifications and Methodology

### 1. GHG inventory

### Gaps in previous GHGs inventory and priorities for TNC

The very first GHGs inventory was conducted in Azerbaijan during 1998 to 2000 as part of the project on Initial National Communication of the Republic of Azerbaijan for UN Framework Convention on Climate Change under the financial support of Global Environmental Facility and UN Development Programme. The GHGs inventory covered the period of 1990 to 1994.

In order to enhance the quality of GHGs inventory a regional project was implemented under the support of UNDP and GEF in 2003 to 2006 and as part of this project GHGs inventory covering years 1990 to 2003 was conducted.

With a view to registration of GHGs emissions from industries "Data on Level of Emissions of GHGs from Industrial Operations" form was developed and included into reports of State Statistics Committee. Presently, these data are published in official reports of State Statistical Committee.

GHGs inventory was conducted as part of the Second National Communication, which has been prepared since July 2006 under the support of UNDP and GEF.

Taking as basis Global Warming Potential value the level of GHGs emissions and removals in CO2 equivalent (CO2 eq) was calculated.

Emissions in 2005 constituted 70,6% of 1990 taken as the baseline year.

Main sources of CO2 emissions in Azerbaijan are energy and industrial sectors and sinks are represented by agricultural, forestry and land use change sectors.

CO2 emission sources in the **Energy sector** come form the burning of fuel (production of energy, oil and gas extraction, transport, human settlements and so on). In total the level of CO2 from stationary sources in 1990 equated to 45120 Gt and in 2005 it was at the level of 31375 Gt. The level of CO2 emissions resulting from the use of energy by human settlements constituted 114% of the baseline year level. The level of CO2 emissions in other sectors accounted for 76,4% from the energy production sector and 71,9% form the industrial sector.

The level of CO2 emissions in the transport sector changed from 4341 Gt in 1990 to 3632 Gt in 2005. Emissions most of all increased in aviation and vehicles sectors. Notably, the level of CO2 emissions in the domestic aviation increased about twice as much and accounted for 302 Gt in 2005. Major sources of emissions from the **Industrial operations and materials use sector** belong within mineral materials production and metallurgy industry categories. As opposed to mineral materials production there was a considerable decline in the operations of the metallurgical sector and it started to grow again only after 2004. Of mineral materials only cement production is continued. The production of lime was practically ceased and has been resumed in recent times. CO2 emissions from cement production accounted for 478 Gt in 1990 and equated to 391 Gt in 2005.

The amount of emissions calculated from international aviation and international shipping that are part of the International bunker was not included in the National cadastre. Emissions there increased and

accounted respectively for 431 Gt and 31 Gt in 1990 and 1375 Gt and 47 Gt in 2005. The expansion of international relations causes the increase in emissions in aviation.

Forests mainly represent CO2 sinks in Azerbaijan. In addition, sinks appear while changing the land use. Here the amount of emissions varied slightly (3438 Gt in 1990, 3769 Gt in 2005).

CH4 emissions are generated almost by all sectors. This type of emissions most of all increased in the agricultural sector due to fermentation and manure produced by domestic animals and in the wastes sector due to human settlements. Thus, in 2005 the increase in the agricultural sector constituted 121,6% (4265 GtCO2 eq in the baseline year). In total, CH4 emissions accounted for 20036 Gt CO2 eq in 1990 in 1990 and 14433 Gt CO2 eq in 2005.

N2O emissions declined in comparison with the baseline year. In 2005, N2O emissions reduced by 64% from 992 GtCO2 eq in 1990.

Emissions of perfluorocarbons, hydrofluorocarbons and sulfur hexafluorides belonging within halogen substances are insignificant.

The greenhouse gas national inventory conducted by Azerbaijan in 1990-2005 within the SNC was carried out according to the IPCC 1996 revised guideline. Both direct (CO2, CH4, N2O) and indirect (NOx, CO, SO2) greenhouse gases and non-methane volatile organic compounds (NMVOC) were covered in SNC. The inventory, conducted within the SNC gave us the possibility to complete picture of greenhouse gas emission sources and removals by sinks. It also revealed the problems of methodological, institutional, scientific and technical nature. The analysis of these issues and design of the most appropriate solution are important to improve the quality of inventory.

It is worthwhile to mention that the GHGs national inventory process is still unsustainable in Azerbaijan and depends at large on the NC or other donor programmes. The gaps identified in the first GHGs national inventory process are as follows:

- 1) Process has not been documented at the appropriate and systematic basis;
- Statistics and its format were insufficient to analyze inventory data on second and third levels of IPCC Good Practice methodology in several sectors and the prioritization of sources has been based on available data and experts' judgment;
- Solvents have not been addressed by the national inventory team at all as according to experts' opinion the contribution of this source category in total national emissions is negligible in Azerbaijan;
- 4) New gases (HFCs, PFCs, SF<sub>6</sub>) emissions have not been studied thoroughly;
- 5) IPCC default emission factors and reference (top-down) approach have been used for all sectors (energy sector, industrial processes, agriculture, land use, land-use change and forestry).
- 6) The sources of International Bunker are international aviation and international shipping.
- 7) The amount of emissions calculated from these sources is not included in the National cadastre.

2006 IPCC Guidelines for GHG Inventories will be used for GHG inventory in the TNC.

Most of these gaps will be covered by the TNC. Three main criteria have been used for identifi

Most of these gaps will be covered by the TNC. Three main criteria have been used for identification of sectors and sources for improvement of the activity data gathering systems:

 sectors/source categories (international bunker, solvents, industrial waste) not covered in the SNC and RER-01/G31;

- sectors/source categories (transport, agriculture, waste, forests) with high uncertainties;
- key sources/priority for country (energy, agriculture, waste, forests).

Higher tiers of the IPCC methodology according to the GPG will be addressed in the TNC for key sectors such as energy, transport, agriculture and solid waste. Uncertainties analysis and QA/QC procedure are planned for these key sectors.

Estimation of technical possibilities (identification of sources, their significance, experts' availability, etc) for inventory of new gases was covered by the SNC is also planned within the TNC.

Stakeholder consultations and self-assessment exercise have revealed that improvement of data management systems for key and priority source categories is a higher priority for the country rather than the development of national emission factor.

Compiling a GHG inventory is a step-by-step process, stemming from above, following activities are planned for TNC:

# **Methodology**

- ➤ IPCC 2006 and GPG will be used as a basic methodology for GHGs inventory in the TNC. However, assessment and implementation of other methodologies (solvents-CORINAIR and transport-COPERT) is also planned in order to improve the results. Higher Tiers (bottom -up) are planned for key/priority source categories such as energy, transport, agriculture and waste.
- > The Handbook developed by UNDP/GEF NCSU on "Management of the National Greenhouse Gas Inventory" should be used as methodological manual.
- > IPCC software and GHGs reporting tables developed by the UNFCCC Secretariat will be used for archiving the data and reporting of inventory results.

#### 2. V&A

#### Gaps in previous assessments and priorities for TNC

Timely development of a national strategy on adaptation and integration of climate change aspects to development programmes, including relevant national sectors is one of the important issues.

Assessment of the observed climate change, study of adaptation measures in ecosystems and economy were conducted in the framework of SNC of UNFCCC.

Temperature data analyzed by stations of National Hydrometeorology Department of MENR for 1991-2000 as part of climate change assessment showed that for the period of 10 years the mean temperature rose by  $0.41^{\circ}$ C. This increase is higher than that of the period 1961 to 1990 (for the period of 30 years the increase constituted  $0.34^{\circ}$ C) which means that the increase for the period 1991 to 2000 has speeded up by three times. This finding is consistent with the results derived from climate modeling.

Climate Change and Ozone Center of the Department analyzed average annual temperature and precipitation anomaly for the period 1991 to 2000 in 7 country regions (Kura-Araz, Guba-Khachmaz, Shaki-Zagatala, Ganja-Gazhakh, Lankaran-Astara, Nakhchivan, Absheron). Data taken from 28 stations were used for the assessment of average annual temperature and rainfall anomalies.

Climate scenario for 2021-2050 and for 2071-2100 was conducted. According to emissions scenario and boundary conditions of PRECIS model the average annual temperature increase in 2021-2050 constitutes about  $1,5^{\circ}\text{C}$  - $1.6^{\circ}\text{C}$ , temperatures simulated for 2071-2100 rise by  $3^{\circ}\text{C}$  - $6^{\circ}\text{C}$  while in most parts of the country's area it rises by  $5^{\circ}\text{C}$  compared to temperatures in 1961-1990

Under SNC adaptation measures on the key sectors of economy were developed and appropriate work was done on the following areas:

- > Water resources and water use (present status of water resources of the country, trend of floods in 1999-2008, glaciers, adaptation measures)
- Agriculture (cotton, Winter wheat, vine production, and pastures);
- > Caspian coastal areas. Area of inundated lands at two different levels of the Caspian sea by zones
- > Human health (extremely hot weather and human health, infectious diseases and transmission, malaria, General acute gastrointestinal infections)

Experts implemented in compliance with IPCC Guidelines and on the basis of original researches, analysis and assessment activities on vulnerability assessment and adaptation. Data on different areas were obtained from relevant organizations and analyzed by experts. However it should be noted that expert group were facing with different obstacles in getting systematic information. At the same time, it should be noted that the experts face problems due to the high degree of uncertainties in climate change scenarios obtained from using regional PRECIS model, particularly in the area of precipitation. Taking this into account, all sectors analyzed in the SNC will be re-visited and re-assessed taking into account the new scenarios. As for the time being, conducted analysis shows that expected climate change in Azerbaijan will result in serious after-effects in the following main areas:

- > Caspian coastal areas exposed to flood, rare and valuable coastal ecosystems facing with danger;
- ➤ Land degradation;
- > Increase of adverse impact on human health;
- > Increase of adverse impact on ecosystems, especially biodiversity;
- Increase of impact on water resources;
- > Increase of impact on forestry;
- Increase of impact on agriculture.

#### Thus, the above-mentioned areas were selected as priority trends under TNC.

The climate vulnerability assessment of will be structured around the following indicators: for climate component – temperature and precipitation (according to months, seasons), wind, air humidity, quantity of solar hours; for energy sector – population, GDP, energy efficiency, carbon efficiency and GHG emission per capita with CO2 equivalent; for forest sector- loss of forest density, land degradation, biomass increase rate; for agricultural sector - irrigation systems, tillage, quantity of cattle according to species, poultry-keeping, for tourism – temperature indicators, humidity, ecological capacity of the area, impact on ecosystems according to different climatic zones, fluctuation of the Caspian Sea level; effect on human health – repetition of hot and cold waves, stress temperatures and other discomfort stress weather conditions.

The following criteria for prioritization of regions or systems have been used during the stocktaking exercise in order to carry out more detailed assessment of vulnerability: high risk of expected climate change and extreme measures (drought, landslides); high vulnerability of ecosystems, regions or economy sectors; expected economic losses; special status of country's strategic priorities (protected areas, mountainous area, occupied territory, tourism zone, regions of cultural heritage); number of population in vulnerable regions, the territory of vulnerable lands, existing needs for vulnerability

study and planning of adaptation measures (human and technical resources, infrastructure, awareness of stakeholders, others); feasibility of adaptation measures, outcomes of related national or international projects and programmes.

Improvement of the climate change scenario elaborated for Azerbaijan in the SNC and reassessment of climate change impact on vulnerable systems are one of the most important tasks of the TNC. Identification of most realistic scenarios using the software models and considering the 4 IPCC Assessment Report and the local peculiarities is planned within the TNC. International technical assistance to choose the acceptable for Azerbaijan's conditions model is envisaged as well. Conducting researches separately on each natural area - Lesser Caucasus, Greater Caucasus, Kura-Araz lowland, etc. - will increase the reliability of vulnerability assessment. Special focus will be made on development of priorities for Azerbaijan's economic regions and the most vulnerable systems (coastal and other mountainous areas and areas prone to desertification). Vulnerability of water resources (the Kura basin) from the economic point of view will be re-assessed.

All sectors overlooked within the SNC will be re-assessed according to the revised climate change and the developed socio-economic scenarios. Development of socio-economic scenarios is of special importance.

Elaboration of adaptation measures should be the next step after comprehensive assessment of vulnerability and revealing the most vulnerable systems and regions in Azerbaijan. The most vulnerable areas of forestry sector, agriculture, water resources, coastal areas should be taken as a government priority for adaptation.

Coastal areas: The researches on implementing adaptation measures will be conducted. The results of ongoing researches show that in case of rise in the level of the Caspian Sea at 150 cm another 87.7 thousand ha of the coastal zone of Azerbaijan will be exposed to flood and this area constitutes 1.6 percent of the whole area of the country. As a result of rise of the Caspian Sea level to expected point oil pollution will take place that will lead to loss of bio-resources in the flooded areas. Water quality in coastal zones and the spawning places in shallow coastal areas will deteriorate. Development and implementation of relevant adaptation strategy for coastal areas are urgent to prevent ecological disasters and economic losses. Moreover coastline infrastructure (ship repairing plants, ports, constructions, beaches, water-pipe system, sewage and others) should be adapted to rising sea level and development of tourism industry in the future. Conducting researches in this field is of common benefit and interest to the Caspian littoral states. Meantime this problem is in the focus of the Caspian Environment Programme established with international support (UNDP, UNEP, World Bank and EU TACIS Programme) and participation of the Caspian littoral that is addressing sustainable management of the Caspian Sea.

It can be useful for making relevant comparisons and revealing general features of vulnerability to the expected climate change or for development of regional adaptation activities. At the same time the role of Azerbaijan, as a state with economy in transition, in ongoing and planned international projects is increasing. In this sense the proposed work would acquire a definitely expressed regional significance.

<u>Forestry sector:</u> Decrease of forest-covered area and species content of forests, trend to density loss of existing forests is going on. Not preventing these processes timely will result in serious ecological disasters, erosion processes, landslides and mudflows in mountainous areas, snowdrifts, danger of drying of springs and rivers.

<u>Water resources</u>: Water resources of Azerbaijan are limited. 30 percent of waters are forming within the country, 70 percent – on the area of neighboring countries. Highly polluted waters of Kura, Araz and other trans-boundary rivers flowing through the territory of Azerbaijan are the reason of socioecological tensions. The most part of water resources of Azerbaijan are trans-boundary that is a problem for producers in water supply from quantity and quality point of view.

Implementation of environmental projects is expedient in a view of development of activities directed to improve water management, create drought-monitoring system, enrich plant cover and abate GHG emissions.

Integration of climate change adaptation measures in the national development programmes such as poverty reduction, Combat desertification, Biodiversity conservation, etc. is vital for their further implementation along with the establishment of monitoring system on climate change impact. The ways and means for effective integration of adaptation measures into national development and sectoral strategies should be elaborated and the process of implementation should be promoted. Coordination among relevant Ministries and organizations during the preparation and implementation of adaptation projects will ensure the maximum participation of stakeholders and transparency of the process.

Lack of national experts with appropriate experience for developing the adaptation policy framework is deemed as the main barrier, making the role of National Communications Support Unit and the guidance from APF so important.

Elaboration of adaptation measures aiming at stage-by-stage implementation of short, medium and long-term strategies, which should take into account important socio-economic implications, is planned under the TNC. Preparation of stage I adaptation measures including study of possible impacts of climate change and identification of particularly vulnerable regions and sectors towards this change, elaboration of different options of adaptation policy and consideration of possibilities of their implementation is considered as the short-term strategy framework.

The next stage of adaptation measures for priority areas should include: engagement of stakeholders; investigation of socio-economic conditions and prospects; measuring and enhancing adaptive capacities; planning research works necessary for implementation process and raising awareness among policy makers. On the basis of obtained results the next stage of measures will be implemented in accordance with the UNFCCC Article 4.1 and 4.4.

#### **Methodologies**

- To base trends in the mentioned areas on UNFCCC and GEF Guidelines:
- > Software of IPCC climate scenarios will be used, scenarios of expected impacts will be assessed by means of MAGICC/SCENGEN software, most realistic scenario for Azerbaijan will be selected. Socio-economic scenarios as the main component for vulnerability and adaptation assessment will be specially considered.
- "IPCC Special Report on Emission Scenarios" developed by UNDP/GEF NC Support Unit can be considered as a guidebook for development scenarios taking into consideration local circumstances, regional, national and local priorities and development plans.
- > To utilize Adaptation Policy Framework guidance to formulation the adaptation strategy;
- > Stakeholder involvement process, selection of proxy values to represent important elements of socio-economic conditions, etc.
- Methodologies and tools offered by IPCC will be mainly adapted for the country's condition.

> Consideration of existing regional and international experience will improve the quality of studies carried out in TNC.

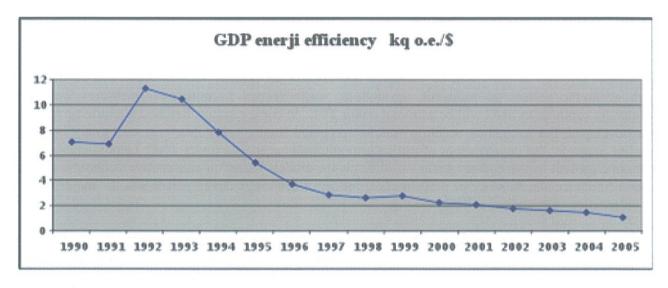
#### 3. PAM

## Gaps in previous studies and programmes implemented and priorities for TNC

The key objective of the economic policy of the Azerbaijan is to bring selected methods in compliance with existing ecological standards and interests by promoting sustainable socio-economic development. This is first of all efficient use of natural resources, use of renewable energy sources (solar, wind, biogas, etc.) and environmentally sound technologies in existing thermal electric stations.

GDP energy efficiency was also analyzed within the framework of SNC. As can be seen from the below figure in line with sustainable energy policy pursued by the Government of Azerbaijan there is a positive trend in energy efficiency in Azerbaijan.

But power intensity of the most technologies still is considerably higher than those in the developed countries.



The opportunities of both GHGs emissions reduction from different economic sectors and increasing of the sinks (forest sector) have been considered in SNC.

Taking into account the situation in energy sector of Azerbaijan national energy development programme strategy up to 2015 has been developed and its directions have been identified.

- Reconstruction in most of thermoelectric power stations and hydro power stations in order to replace run during 30-35 years and physically obsolete equipment with equipment which meets modern requirements
- Development of hydro-electric engineering using renewable energy sources for improvement of energy production structure
- Construction of several stations with power of 220-330 KV in order to reduce energy losses in network and improve energy supply in regions
- Installation of test facilities for use of unconventional power

Azerbaijan has favorable potential for use of renewable power sources taking into account its geographical location, climatic conditions and economic infrastructure. There is a huge potential to use hydropower, as well as solar, wind, geothermal and bio-energy. As a proof, Government of Azerbaijan has started a new state programme on development of sustainable and alternative energy starting from 2004.

At present several alternatives for future socio-economic development have been prepared. These purposeful integrate addressing industrial, agricultural, social and ecological problems. It emphasizes performing duties, state stable energy supply, high speed of economic reforms and favorable conditions for investments and thus enables to implement projects on application of environmentally appropriate technology, which reduce emission of hazardous wastes in the country.

Analysis of sector strategies and plans while preparing SNC project showed that the issues of sustainable development and climate change weren't covered enough in these documents.

Unavailability of socio-economic development scenarios along with the restricted access to reliable economic data and absence of emissions trends forecasting software should be considered as main barrier to the elaboration of successful, cost-effective measures for climate change mitigation policy in TNC. Some of software facilities such as Long Range Energy Alternatives Program (LEAP), Economic and Environmental Power Planning Software (EEPPS) still the country face the problem with data base compilation process.

All sectors covered in SNC will be reviewed and criteria for priority identification will be updated. Such economic sectors as transport, agriculture, waste related to mitigation measures were not adequately captured in SNC will be assessed under TNC. In energy sector, baseline scenario up to 2030 was developed, but mitigation scenario was not prepared. Considering this, new cost analysis of the baseline scenario and development of mitigation policies is proposed under TNC. Unpredictably rapid economic growth in the country makes it difficult for models based on consecutive economic data to predict future trends. Absence of mathematical model of economic development was the major barrier for preparation of mitigation GHG.

It is necessary to prepare national statistical report on GHG emissions, create information-analytical system for GHGs assessment, data on sources and sinks, stimulate sound technology transfer to enable the use of thermal and electric energy from solar, wind and biogas, elaborate measures to prevent delivery by obsolete transport means, develop models for existing GHG forecasting, data base, environmentally sustainable and economically sound projects.

Environmental projects that will support sustainable development of the country and include costbenefit analysis have to be prepared. Efforts on coordination of the projects with national and sectoral development strategies and plans will be made.

#### Methodology:

- > To base trends in the mentioned areas on UNFCCC, Kyoto Protocol and GEF Guidelines;
- > IPCC 4 assessment report is being considered as a guideline methodology for development of socio-economic scenarios and planning of measures to mitigate climate change;
- > Use of forecasts d to GHGs future trends at national and sectoral source;
- > Software accepted by IPCC will be adapted to Azerbaijan's circumstances

4. Other information considered relevant to the achievement of the objective of the Convention

#### Gaps in previous assessments and priorities for TNC

One of the commitments under UNFCCC (Article 6) is to promote awareness on expected impacts of climate change among population (decision makers, government personnel, students, representatives of the private sector, different communities and others) and to train scientific-technical staff in this field.

During elaboration process of the SNC different workshops, training courses were organized in order to raise awareness of population, experts, media of different areas on expected climate change.

Environmental subjects have been included into the country's educational system, which comprises primary, middle, middle technical and higher schools and environmental subjects are taught in middle and higher schools. Specialists on climate studies and scientific basics of climate change are educated at Geographic faculty of the Baku State University. Subjects on environment protection are also taught in other universities and institutes, particularly in technical universities and institutes

Comments of experts, interviews, analysis and researches held under NCSA project and SNC project show that various groups of population are not sufficiently informed about expected climate change concept, scale, reasons, expected losses and ways of their elimination. And this can be referred to the different fields (efficient use of energy resources, forests protection, construction of industrial and household objects, development perspectives of agriculture, human health, etc.) of climate change.

Thus, preparation of the TNC in Azerbaijan, closer involvement of various Ministries, Committees, companies, heads of management boards, representatives of private sector, mass media and society, further participation public and private institutes, scientists and other stakeholders can create a basis for cooperation, for preparation and implementation of the National Action Plan on Public Awareness on climate change.

In compliance with Article 5 of UNFCCC Azerbaijan puts a special stress on the development of climate observing system, however some forms of ground-based observations related to climate change were not arranged. For instance, observations of CO2 flow, expansion of biomass and forestland are not conducted. The Republic of Azerbaijan adopted National Programme on Hydrometeorology in 2004. Thus, the tendencies in this field will be also addressed under TNC, the efforts to devote more attention to future development perspectives in the field of climate and climate change will be made.

At the same time impact mitigation and assessment of possible technologies on adaptation have not been conducted in different sectors of economy and not addressed in sectoral and national strategies and action plans.

#### Methodology

- > Preparation of climate change issues will be conducted the guidelines of the UNFCCC and GEF;
- > Study of national and regional institutions and programmes dealing with the climate change will be conducted through collection, compilation and synthesis of existing information, individual interviews or group discussions with appropriate stakeholders.

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

## Gaps in previous assessments and priorities for TNC

Though uncertainties related to economic forecasts were mentioned in the SNC special emphasis was put on elimination of gaps concerning activities on reduction of GHG emissions, application of new technologies and other issues. At the same time the list of some priority activities on adaptation to climate change was suggested, but proposals on elimination of barriers to adaptation and GHG reduction measures will be addressed in TNC. Generally barriers and gaps on each components and related financial and technical needs will be considered in TNC.

## Methodology

- ➤ Involvement of stakeholders: close cooperation of governmental agencies, academic institutions, NGOs and private sector;
- > Review of existing international, regional, national and sectoral programmes;
- > Study of ongoing activities related to assessment of new technology application through collection, compilation and synthesis of existing information, site visits individual interviews or group discussions;
- > Base trends in the mentioned sector on the guidelines of the UNFCCC and GEF.

# **Appendix C: Terms of Reference**

# 1.TOR for National Project Manager

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

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

## **Qualifications And Experience**

- Master's degree preferably in environment studies and other related disciplines;
- Good understanding of Azerbaijan's environment/development issues as well as the three thematic areas under investigations;
- At least 6 to 8 years experience relevant to the project;
- Excellent communication (Written and Oral) Skills;
- Demonstrated experience in project management;
- Expertise in putting together costed, results-oriented action plans:
- Demonstrated experience in working with government, donors and the United Nations system;
- Substantial knowledge of methodologies for inventories (IPCC Revised 1996 Guidelines and Good Practice Guidance, LEAP etc);
- Familiarity with international negotiations and processes preferrably under the UNFCCC;

- Familiarity with computers and word processing;
- A demonstrated ability in managing projects, and in liaising and co-operating with all project personnel including government officials, scientific institutions, NGOs, and private sector;
- A very good knowledge of Azerbaijani, English is absolutely necessary;
- Good knowledge of Russian is an asset

## 2. TOR for National GHG Inventory Team Leader

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

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

## Qualifications and experience

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

#### 3. TOR for Policies and Measures Team Leader

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

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

## Qualifications and experience

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

#### 4. TOR for V&A Team Leader

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

- Assists the NPM in establishing the team of experts for performing the V&A;
- Prepares a detailed work-plan for V&A on the basis of the overall project work plan;
- Provides periodic progress report to the NPM on the V&A thematic area;
- Develops the scope of work and respective terms of reference for the team members;
- Leads the data and information collection process for performing the V&A study.
- In consultation with NPM decide on approaches (not concluded under stocktaking phase) to be used
  if necessary;
- Leads and oversees the development baseline climate and socio-economic scenario and impact of climate change.
- Organize the scheduled consultations/workshops and ensure their success;
- Ensures synergy with other relevant projects

- Ensure the timely and effective management of the activities as scheduled;
- Incorporates comments received from the review process.
- Drafts the V&A Report and respective chapter of Azerbaijan's TNC along with the respective part of executive summary.
- Oversees the documentation of the studies made and archiving.

#### Qualifications and experience

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

#### 1. TOR for Project Assistant (Administrative and Finance Assistant)

The Administrative and Finance Assistant will work under the direct supervision of the National Project Manager and provide assistance to project implementation in the mobilization of inputs, the organization of training activities and financial management and reporting.

The Administrative and Finance Assistant will be responsible of the following duties:

 Prepare all payment requests, financial record-keeping and preparation of financial reports required in line with NEX financial rules and procedures;

Assistance to the recruitment and procurement processes, checking the conformity with UNDP and the Government rules and procedures;

- Assistance to the organization of in-country training activities, ensuring logistical arrangements;
- Preparation of internal and external travel arrangements for project personnel;
- Assistance in project related procurement issues;
- Maintenance of equipment ledgers and other data base for the project;
- Routine translation/interpretation during projects meetings and drafting of correspondence as required;
- Maintain project filing;
- Other duties which may be required

#### Qualifications and Experience

- University Degree, some training in business and/or administration desirable (finance or accounting);
- At least five years administrative experience;
- Good organizational skills;
- Good computer skills, including spread-sheets and database;
- Excellent knowledge of English, Russian and Azerbaijani.

## 6. TOR for Project Steering Committee

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

- Provides assistance and guidance to the National Project Director, National Project Manager and national experts and counterparts during the implementation process of all project activities.
- Receives information on regular basis on the status of the implementation of the project activities and any risks therein.

# Rules under which PSC operates:

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

In principle, the PSC shall operate on the basis of consensus. If consensus cannot be reached, then the case under discussion might put to a vote.

# **Appendix D: Endorsement letters**

# AZƏRBAYCAN RESPUBLİKASI EKOLOGİYA VƏ TƏBİİ SƏRVƏTLƏR NAZİRLİYİ



# MİNİSTRY OF ECOLOGY AND NATURAL RESOURCES OF REPUBLIC OF AZERBAİJAN

Az 1073 Azərbaycun, Buka, B. Ağayev Kuç, 100A Tel: (9V412) [492-59-07, Faks (99412) 492-59-07

No 4/1036-01-08

B. Aghayev Str. 100A, Az 1973 Bohn, Azerbaijan Tal: (99412) 492-59-67, Fax (99412) 492-59-67

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Mr. Fikret Akeura Resident Representative UNDP Azerbaijan

Subject: Approval and co-financing of the Third National Communication of Azerbaijan to the UNFCCC

Dear Mr. Akcura,

In my capacity as GEF Operational Focal Point, I hereby endorse the "Enabling Activities for the Preparation of Azerbaijan's Third National Communication to the UNFCCC" project.

It is known that the total financing from GEF is USD 500,000, including USD 20,000 allocated for the preparation of the project. The project will be executed according to NEX management arrangements with support services provided by UNDP Azerbaijan.

As co-financing of the above-mentioned project from Azerbaijan, the Ministry of Ecology and Natural Resources will provide the office space for the project team in Baku, which is estimated as USD 13,300 annually (total of USD 40,000 over the project duration).

We are satisfied with the cooperation with UNDP and would like to confinue our partnership in the preparation of TNC of Azerbaijan to UNFCCC.

4. Fine

Sincerely,

Hussein Bagirov

Minister

GEF Operational Focal Point



# AZƏRBAYCAN RESPUBLİKASI EKOLOGİYA VƏ TƏBİİ SƏRVƏTLƏR NAZİRLİYİ MİLLİ HİDROMETEOROLOGİYA DEPARTAMENTİ

AZ 1	1154 Azərbaycan, Bakı, Heydər Əliyev prospekti 50	Tel/fax: (+994 12) 567 17 06		
No/S	3	« Pl »	may 201 f ci il	

Mr. Fikret Akcura Resident Representative UNDP Azerbaijan

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Re: Approval of the Third National Communication of Azerbaijan to the UNFCCC

Dear Mr. Akcura,

In my capacity as UNFCCC Focal Point, I hereby endorse the "Enabling Activities for the Preparation of Azerbaijan's Third National Communication to the UNFCCC" project.

It is known that the total financing from GEF is USD 500,000, including USD 20,000 allocated for the preparation of the project. The project will be executed according to NEX management arrangements with support services provided by UNDP Azerbaijan.

Being the National Focal Point for UNFCCC in Azerbaijan I approve that:

 a) Project document corresponds to the National priorities of Azerbaijan and commitments of Azerbaijan to the UNFCCC; and

b) Project document was discussed with stakeholders, including responsible persons and agencies for global environmental conventions of the UN.

Sincerely yours,

Umayra Tagiyeva UNFCCC Focal Point

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