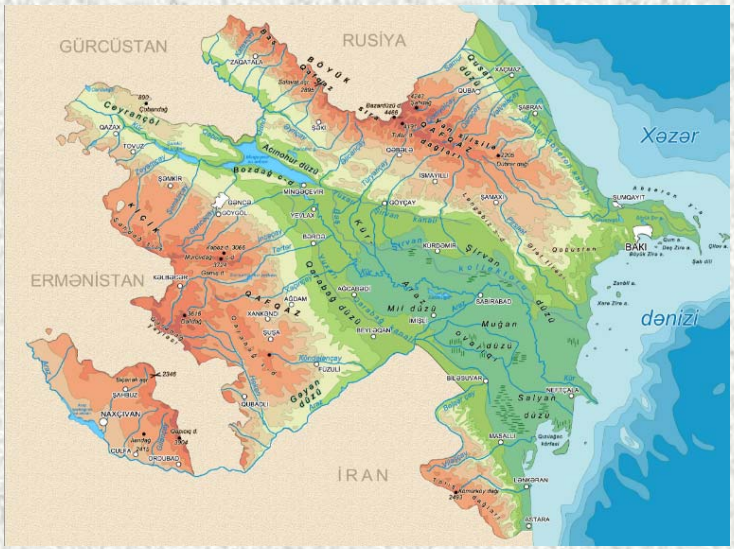
First workshop for the facilitative sharing of views under the international consultation and analysis process

First Biennial Update Report, Azerbaijan



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Structure of Biennial Update Report (BUR)

- Introduction
- National circumstances
- GHG inventory and emission trends
- Mitigation analyses
- Assessment of financial, technological and capacity needs
- Domestic MRV: current situation and assessment of future activities

Introduction

Azerbaijan has ratified United Nations Framework Convention on Climate Change (UNFCCC) in 1995 and its Kyoto protocol in 2000, and included to Non-Annex I Group.

In the of the framework UNFCCC, Azerbaijan has committed to prepare and submit national reports, to develop, implement and publish national and regional programmes which would include mitigation measures, as well promote public awareness on climate change. Following UNFCCC guidelines, Azerbaijan has submitted Initial, Second and Third National Communications, as well its First Biennial Update Report (in 2015) to the Convention secretariat.

As additional information, in 2015, Azerbaijan has submitted its INDC and signed Paris Agreement and currently started ratification process.

National circumstances

Geographical position

Located at the crossroads of Europe and Asia, Azerbaijan has a unique geopolitical and geographical position with its importance to the global economic and cultural ties from the ancient times up to now.

Demography

Azerbaijan's population is about 9477.1 thousand people according to information as of 2014. 53.2% of its population is urban, while the remaining 46.8% is rural population.

Economy

The territory of the Republic of Azerbaijan has favorable natural and climatic conditions and rich natural resources. Economy of the country is driven mainly by oil and gas production, where as non-oil economic sector such as processing industry and food processing, as well the agricultural sector are important and developing sectors. Total GDP of Azerbaijan has amounted by 75.2 billion US dollars in 2014.

National circumstances (cont.)

Climate change policy

Main targets for climate change policy of Azerbaijan has been identified in "*Azerbaijan-2020: look to the future*" Development Conception.

Within this Conception Azerbaijan has identified ambitious target to approximate the amount of energy used for the production of one unit of GDP and the amount of carbon dioxide in line with the appropriate indicator of OECD member countries.

Mitigation and adaptation strategies of the country are also reflected in a number of long-term sectoral State Programmes.

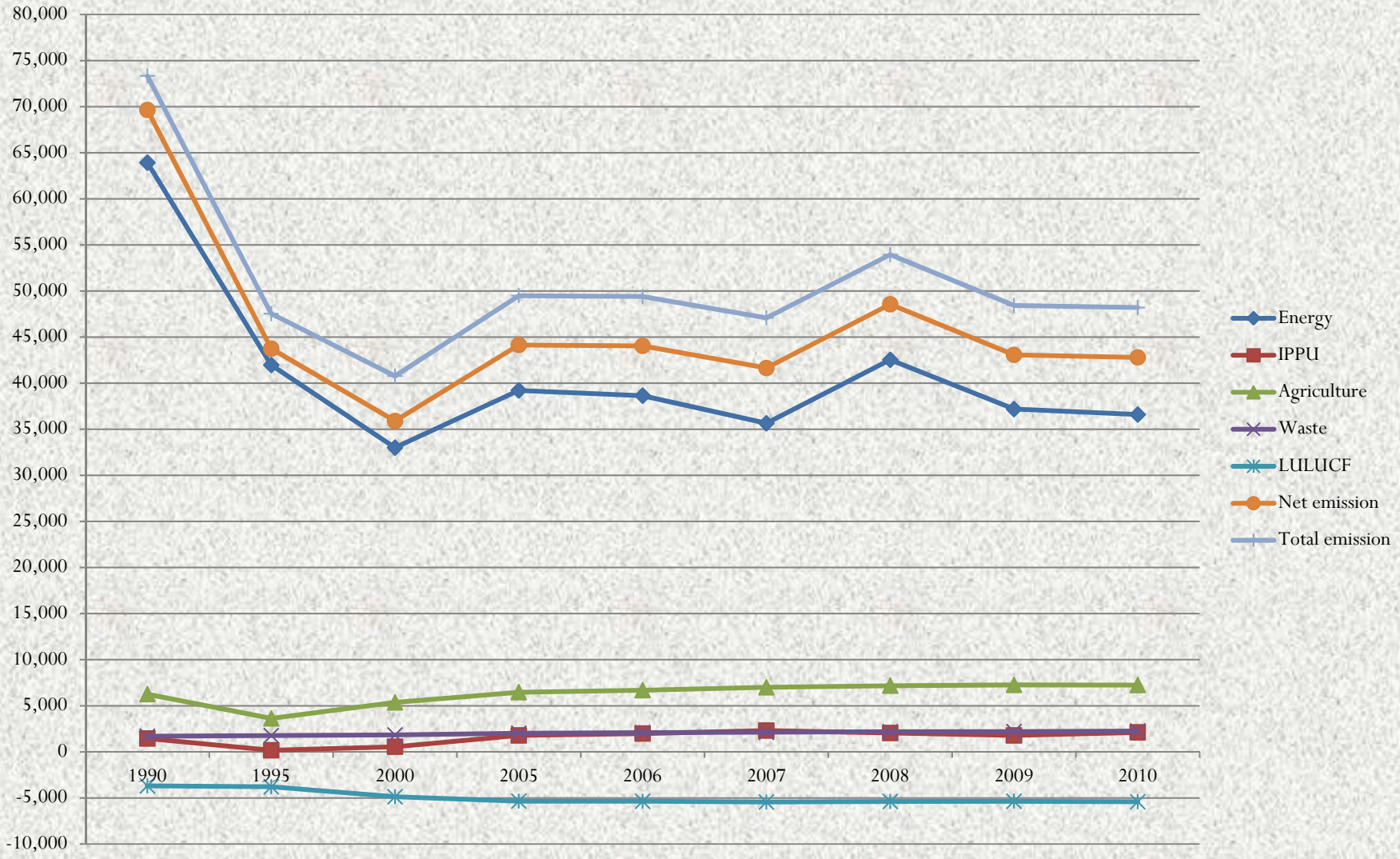
Despite of fact that Azerbaijan has not taken any quantitative obligations under the Kyoto protocol as non-Annex I country, during recent years it was implemented a number climate change mitigation related actions in the country that contributed to a global emission reduction efforts.

GHG inventory results

In the framework of FBUR, it was recalculated the results of the inventories carried out for the period from 1990 to 2005 and it was conducted GHG inventory for the period from 2006 to 2010 using revised 1996 IPCC methodology for all sectors, expect Energy sector for which it was used IPCC 2006 guidelines. It is planned to shift to application of IPCC 2006 guidelines for the inventory process since next reporting period.

	GHG emissions/removal (Gg CO_2 eq.)							
	1990	**2000**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Emissions								
Energy	63 928	33 006	39 216	38 642	35 655	42 543	37 192	36 596
Industrial processes	1 447	554	1 781	1 986	2 303	2 043	1 780	2 108
Agriculture	6 261	5 368	6 469	6 689	7 003	7 175	7 266	7 244
Waste	1 694	1 837	2 023	2 084	2 130	2 182	2 199	2 260
Total emissions	**73 331**	**40 774**	**49 490**	**49 401**	**47 091**	**53 943**	**48 437**	**48 209**
Removal								
LULUCF	-3690	-4870	-5349	-5353	-5438	-5383	-5360	-5410
Net emissions	**69 641**	**35 904**	**44 141**	**44 048**	**41 653**	**48 560**	**43 077**	**42 799**

GHG emission trend, 1990-2010, Gg CO_2 eq.



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GHG inventory results analysis

The significant reduction of the GHG emissions over the 1990–1998 period was mostly as a consequence of the deep transformation processes characteristic of the transition from a centralized economy to a market economy, specifically after the collapse of Soviet Union and the declaration of Azerbaijan's independence.

From 1999 to 2008, a continuous increase in GHG emissions was noted in Azerbaijan, followed by a decrease in 2009, mostly due to the global economic crisis.

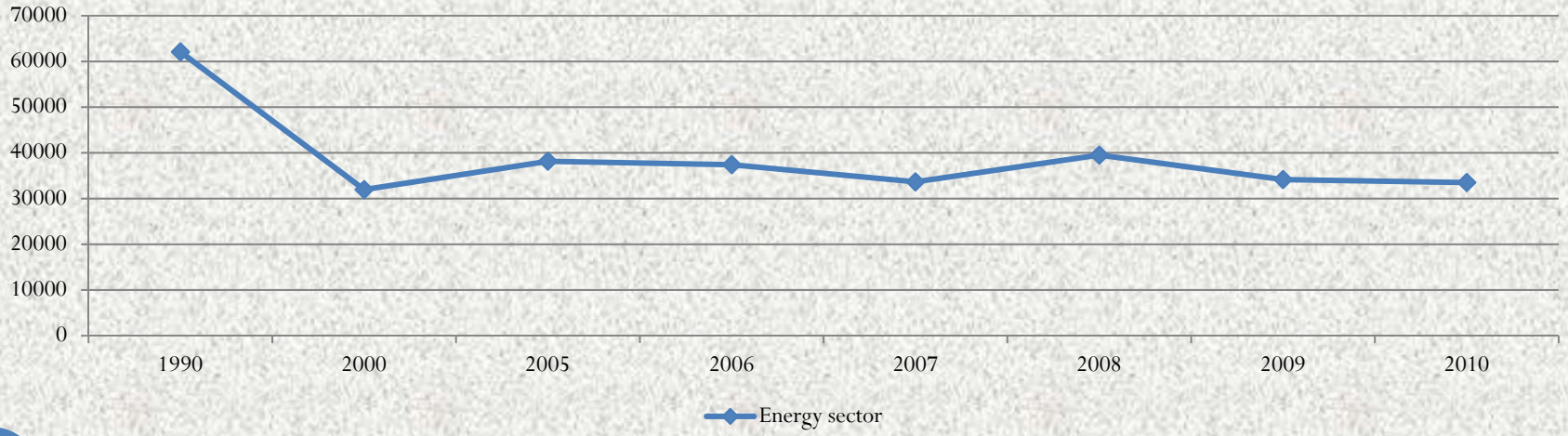
In 2010, the GHG emission level in Azerbaijan was slightly (less than 1 per cent) below the previous year's level.

GHG inventory results by sectors

Energy sector

Based on the GHG inventory, carried out within the framework of this Report, the energy sector was responsible for 75.6% of the overall national emissions during 2010.

As illustrated in below diagram, GHG emissions have been decreasing during the past years in Energy sector During 1990-2000, the decrease in GHG emissions was due to decreased utilization of oil and oil products. After 2000, the reduction was related with introduction of new technologies, capturing of associated gas in production facilities, replacing of oil products with natural gas in electricity generation plants, and other mitigation efforts.



GHG inventory results by sectors

Industrial processing and production use sector

According to the GHG inventory carried out within the framework of this report, industrial processes accounted for 4.7% of the overall emission volume in 2010.

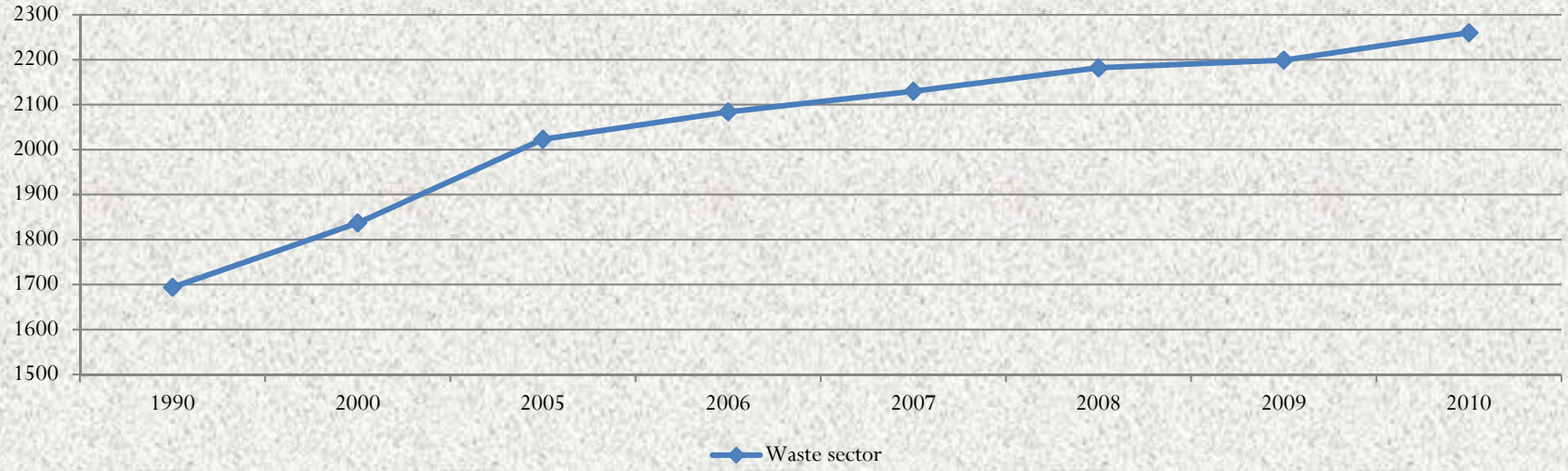
During 1990-2000, emissions decreased by about 3 times. The main sources of emissions during this period consisted of the following: outdated technology and equipment in industrial enterprises, frequent errors in production networks, mismanagement of waste disposal equipment in production facilities, and lack of taking note of environmental aspects of industrial facilities.

GHG inventory results by sectors

Waste sector

According to the GHG inventory carried out within the framework of this report, the waste treatment sector accounted for 5% of the overall emission volume in 2010.

As illustrated in below figure, GHG emissions have been on a steady increase in the waste management sector. This could be explained by the increase in the number of population (annually around 1%) and economic growth during the recent years. .

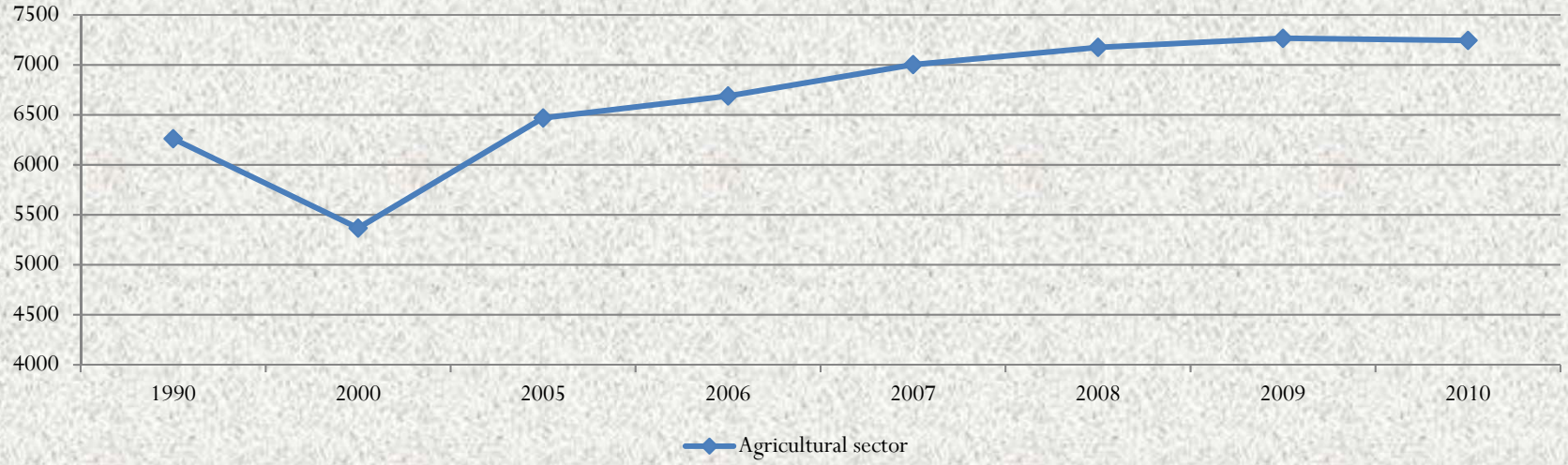


GHG inventory results by sectors

Agricultural sector

According to the GHG inventory carried out within the framework of this report, the agriculture sector accounted for 16% of the overall emission volume in 2010.

It should be mentioned that in comparison with other sectors, less activities have been carried out in the agriculture sector, in regards to mitigating the effects of climate change. The private sector started to emerge after the completion of the land reform in 1997. However, this sector suffered from lack of skills and knowledge in regards to mitigating the effects of climate change.



GHG inventory results by sectors

Forestry sector

According to the GHG inventory carried out within the framework of this report, in 2010, in the forestry sector carbon removal level has reached -3942 tons of CO_2.

It should be mentioned that CO_2 removal level decreased during 1990-1995, due to shrinking forests around the country. However, measures aimed at expanding the existing forests and planting new forests during the following period helped increase CO2 absorption.

Mitigation analysis

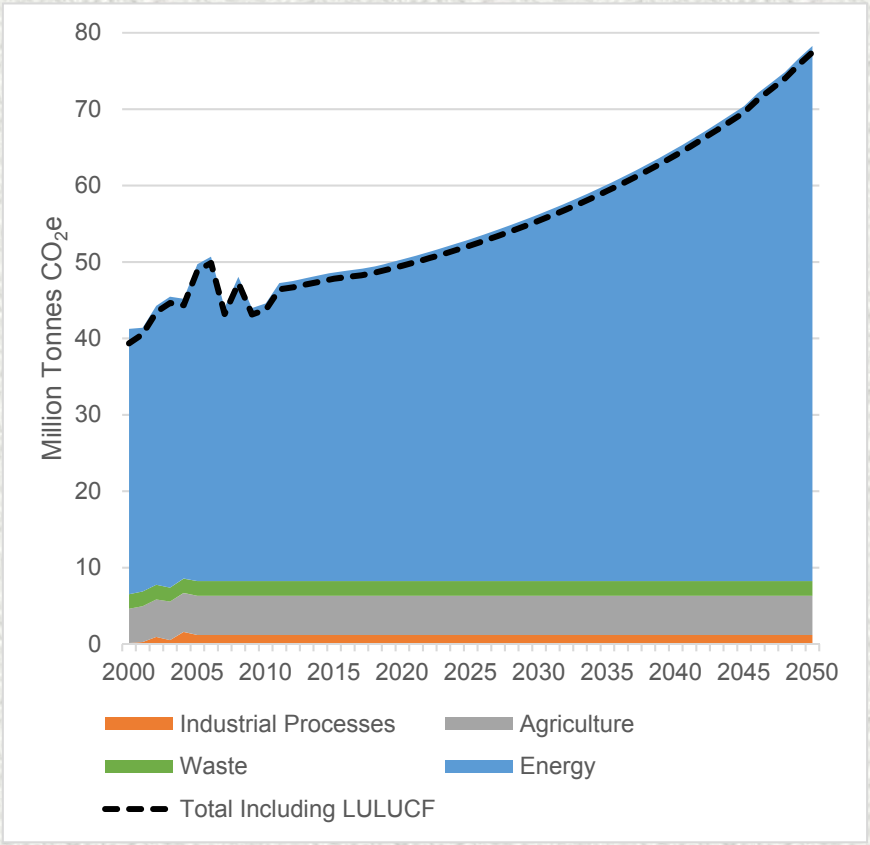
Despite the fact that Azerbaijan has not undertaken quantitative obligations in regards to GHG emissions reductions, a number of significant mitigation measures have been implemented in the country during recent years, including measures such as introduction of low-carbon, energy efficiency, renewable energy, efficient waste management, technologies, as well expansion of forest areas. Implemented measures has lead to significant decrease in GHG emissions and increase in removals from the base year to reporting period.

In addition to national initiatives on mitigation, Azerbaijan is successfully cooperating with a number of international organizations through implementation of various projects. Thus, during reported period it was implemented more than 30 projects related to introduction of climate change mitigation technology and capacity building in this field.

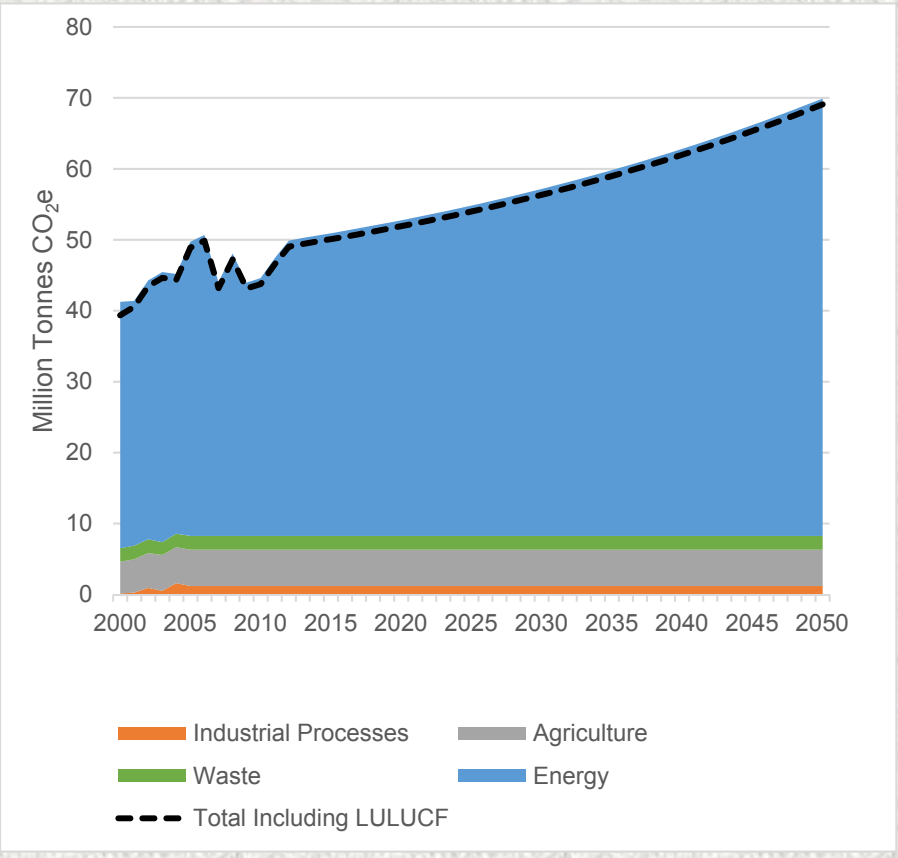
In the framework of BUR, it was also provided GHG emissions prognosis analysis for Energy sector under pilot project initiatives using LEAP model. It is envisaged to use the same model during next reporting period for all categories.

GHG emissions prognosis

BAU Scenario



Reference Scenario



Technological , financial and capacity building needs

Technological needs

The technological needs of climate change in Azerbaijan cover a wide spectrum of issues related to mitigation and adaptation technologies in different sectors of the economy, such as: energy-efficient technologies to reduce GHG emissions in various sectors of economy, residential and commercial sectors, renewable energy technologies, efficient use of water, soil, forests and other natural resources, and prior adaptation technologies for food security and so on.

In order to enable the application of low carbon modern technologies there is a need for continuous cooperation with international organizations and institutions, assessment of best international practices and implementation of different projects and programmes in this direction.

Technological , financial and capacity building needs (cont.)

Financial needs

Notwithstanding that Azerbaijan as Non-Annex I country of the Convention has not taken any quantitative commitments on reduction of GHG emissions, a number of climate change mitigation activities has been implemented in the country during recent years. Almost all of these mitigation activities have been implemented at the expense of own resources of the country through provided investments based on low-carbon technology in energy production and use, renewable energy, oil and gas industry, transport and waste sectors, as well in forestry sector.

While implementation of different projects it was successfully cooperated with relevant international donor organizations by involving necessary funds for the effective implementation of considered activities. Azerbaijan also intends to effectively use related financial mechanisms (Green Climate Fund, Adaptation Fund) within UNFCCC for development of low-carbon technologies in future.

Technological , financial and capacity building needs (cont.)

Capacity building needs

After joining the Convention, in Azerbaijan it was implemented a number of actions to increase capacities on climate change related issues at the national level. Nevertheless, in regards of changing Convention mechanisms and formulation of modern mechanism, methods and approaches it is important to implement additional actions and for this, there is a need for additional capacity building to improve related skills.

Especially, there is a need increase capacity of national stakeholders on development of relevant climate change policy, low-carbon sustainable development strategies, on preparation of NAMAs and NAPs, to create necessary capacities on MRV, as well increase awareness on climate change of local communities, the private and non-governmental sector, local authorities and so on. Azerbaijan collaborates with relevant international organizations to implement necessary capacity building actions in order to explore more efficient international practices in the field of climate change.

Domestic MRV

Azerbaijan understands the importance and intends to establish its domestic MRV system which will underpin national GHG data quality and help to better identify national priorities related to climate change, as well as challenges and opportunities.

Subsequently, there is a need to develop a robust institutional framework that encompasses the relevant institutional entities as well as the necessary staff, systems and processes, for an effective and nationally appropriate MRV system.

In this regards, the “Action Plan on improvement of ecological situation and efficient use of natural resources in Azerbaijan Republic” covering period till 2020, which is currently in the process of inside-state approval procedures, implies the development of domestic MRV system.

There are already implemented pilot initiatives in Azerbaijan in the framework of international projects (supported by GEF, EU) considering MRV elements at sectoral levels and such collaboration will be continued in future.

Challenges and needs

Major challenge during preparation of BUR was short time period allocated for report preparation.

Other main challenges encountered during report preparation could be listed as below:

- the lack of coordination and collaboration between governmental agencies involved to climate change related issues;
- insufficient mechanism for collection of inventory data or information;
- the lack of procedures for conducting quality assurance and quality control;
- low level of awareness and weak capacity of national stakeholders on NAMAs and MRV related issues, as well on mitigation and adaptation technologies;
- limited skills of national experts on IPCC 2006 inventory methodology and LEAP modelling

Azerbaijan intends to further develop institutional arrangements relevant to the preparation of national GHG inventories and continuously improve the transparency, consistency, comparability, completeness and accuracy of it according to new emerging Convention decisions.

Thank you for attention!