

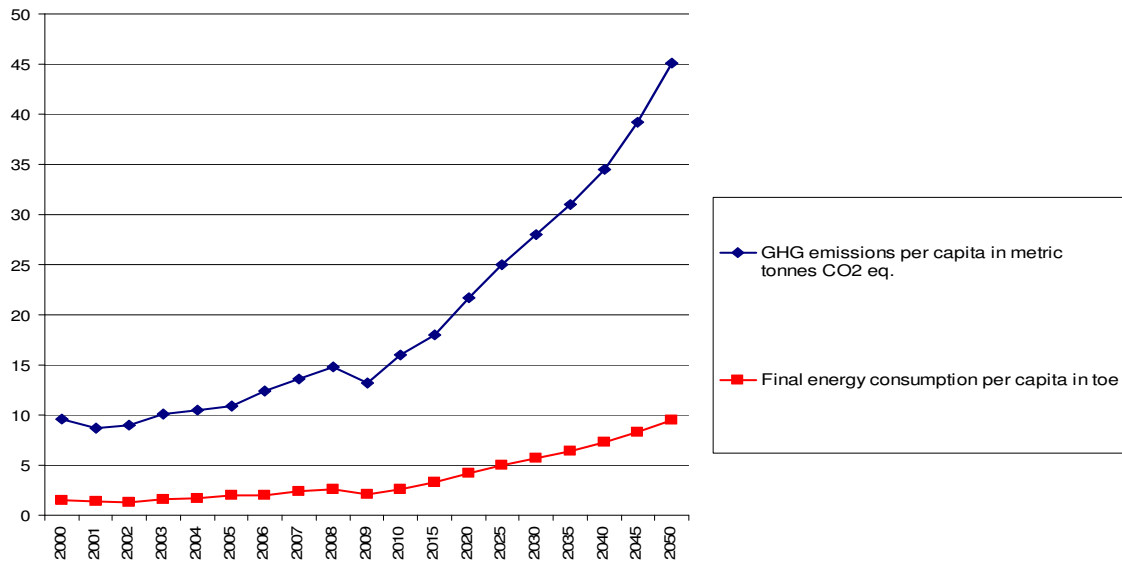
General Information

Table 2: Emission Trading

GIS / CDM / JI: none

National Emission Trading Schemes

Project priorities Development of a low carbon economy
 Improve energy efficiency
 Increase a share of RES
 Creation of a market mechanism which will help enterprises to modernize their production processes and facilities



Graph 3: Trends of national indicators (Current policy mixture)

National Contact Points

Ministry of oil and gas www.memr.gov.kz
 Ministry of Environment protection www.eco.gov.kz
 Ministry of of Industry and new technologies www.mit.kz

Coordinator of PROMITHEAS-4

Prof. Dimitrios MAVRAKIS
 National and Kapodistrian University of Athens
 Energy Policy and Development Centre (KEPA)
 Tel.: +30 210 72 75 732, +30 210 72 75 809
 URL: <http://www.promitheasnet.kepa.uoa.gr>

Kazakh partner

Prof. Sergey INYUTIN
 SRC Kazhiminvest
 Turan – Astana University
 Kazakhstan

Fact Sheet author

Ms. Eleni – Danai MAVRAKI, M.Sc.
 KEPA
 Hellas
edmavraki@kepa.uoa.gr



The FP7 funded project PROMITHEAS – 4, with three (3) years duration, aimed at the development and assessment of Mitigation / Adaptation climate change policy portfolios for 12 countries with developing economies. In close cooperation with the governments of the beneficiary countries, scientists from their academic institutions, located in 14 countries, developed policy mixtures based on the existing official policies and data, and further to that, gained and transferred know – how among scientists, policy and decision makers and market stakeholders.

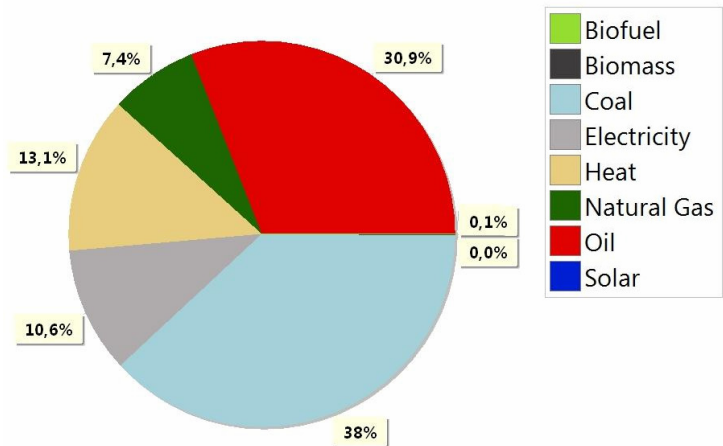


Country Overview (2010)

Surface area: 2.727.300 km²
 Population (in million): 15,828
 Growth rate of GDP real: 107%
 GDP per capita (in EUR): 57,5
 GHG emissions per capita (in million metric tones CO₂ equivalent): 258,6
 Gross inland consumption per capita (in toe): n/a

Abbreviations

- CDM:** Clean Development Mechanism
- EE:** Energy Efficiency
- FP7:** Seveth Framework Programme
- GHG:** Green House Gas
- GIS:** Green Investment Scheme
- GDP:** Gross Domestic Product
- Ji:** Joint Implementation
- Km:** kilometers (1.000 meters)
- M/A :** Mitigation / Adaptation
- RES:** Renewable Energy Sources
- Toe:** tonnes of oil equivalent
- UNFCCC:** United Nations Framework Convention on Climate Change



Graph 1: Fuel percentages in Final Energy Demand (2010)



Climate Change Policy

Ratified international agreements

UNFCCC –May 1995

Kyoto Protocol - March. 2009

National Targets

GHG: As an Annex I Party, Kazakhstan has taken at the end of 2012 the 5% commitment to reduce its GHG emissions towards 1990 under the Kyoto Protocol for the period 2013-2020

RES: more than 3% share of RES in the total energy mix by 2020.

EE: none

Other: none

Policy instruments implementation

Mitigation sector

Buldings: instatllation of heat metering equipment for 100% of buildings; improved energy efficiency regulation, training managers and energy auditors to monito energy consumption

Industry: energy management in big industrial consumers, enerug audits, allocate incentives of environmental tax exempion

Transport: euro-3 standards, improved transport infrastructure and modes, vehicles replacement

Energy: Economic instruments - Subsidy

Adaptation sector

Agriculture, Forestry, Water Management: none

Table 1: Sectors with perspectives for RES and EE

	Energy	Residential	Construction	Industrial	Service	Agriculture	Transport
RES	-	-	-	-	-	-	-
EE	X	X	-	X	X	-	X

Policy Mixtures

During PROMITHEAS – 4 project, three (3) scenarios were developed, Business as Usual (BAU), Optimistic (OPT) and Pessimistic (PES), that concluded to three policy mixtures, the Current, Enhanced and Conservative.

Current

This mixture concerns policy instruments that were implemented before 31 December 2010. It is a pure mitigation policy mixture and it is structured taking into consideration the national targets mentioned earlier.

According to the national data provided by the Ministry of Environment Protection in the “National report on GHG Inventory for 1990-2009”, issued in 2011, the UNFCCC database for the GHG emissions of Kazakhstan, the country has reduced its national emissions, in particular the GHG emissions of 2009 without LLUCF are 75, 3% compared to those of the base year 1990. Emissions per capita were 17.3 tons of CO₂ (2009).

Conservative

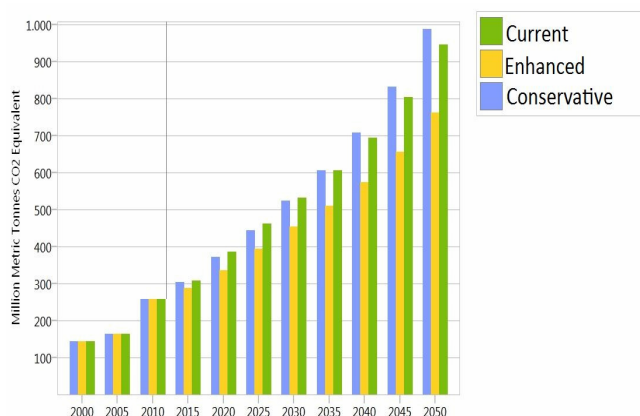
It concerns the time evolution of an enhanced Mitigation/Adaptation policy portfolio that Kazakhstan will implement during the time interval 2011 - 2050It and it assumes less ambitious mitigation policy by limiting the possible technological options only to a selected number of sectors with the highest energy efficiency potential and the most promising for the country types of RES, development of JI projects and few regulation documents to support Post-Kyoto. The scenario considers the implementation of all policy instruments approved, but no additional ones apart from the national priorities.

Despite the huge needs of adaptation, there are no planned adaptation policy instruments and it provides a 3,5% share of RES in the total energy mix of year 2020, and 2,07 times increase in the total primary energy consumption compared towards 2009 (74.34 million toe). GHG emissions in 2020 are 372.4 MtCO₂eq (less 13.7 Mt CO₂ towards Current mixture).

Enhanced

It concerns the time evolution of an enhanced Mitigation/Adaptation policy portfolio that Kazakhstan will implement during the time interval 2011 - 2050It and is structured by: i) the introduction of efficient technologies in almost all sectors targeting to the maximum reduction of GHG emissions through the maximum exploitation of the potential of the country in energy efficiency and renewable energy sources and ii) the necessary infrastructure for the adaptation of the country towards the minimum – in size and extent - expected climate change impacts; iii) development of regulation to support Post-Kyoto. It includes legislation on EE improvements and RES support which will reinforce the implementation of the aforementioned policy components. The adaptation policy instruments will meet adaptation needs in the agricultural sector and in water and forest management.

The GHG emissions in 2020 are 335,8MtCO₂eq, which is less 50.3 MtCO₂eq compared to those of the Current mixture.



Graph 2: Historical and projected GHG emissions, according to the 3 policy mixtures

Research needs and gaps related Climate Change policy issues

Lack of complete data for certain sets of variables in developing M/A policy portfolios; no available information about climate change impacts, inadequate national implementation network, lack of capacity building building on development and assessment of climate change M/A policy portfolios.