November 10, 2006 Nairobi, Kenya

Progress of the Republic of Belarus in the Kyoto Process













Total area of Belarus is 207.6 km².

Extension from the north to the south is 560 km and from the east to the west 650 km.

According to its area, Belarus takes the 13th place among European countries and the 6th place among the CIS countries.

The population is about 10 mln. people.

Minsk is the capital of the Republic of Belarus.











Average winter temperature is -8° C.

Average summer temperature is +18°C.

Annual precipitation amounts to 550-700 mm.



Belarus is a country with economy in transition.



According to the index of human potential development, Belarus takes the 67th place out of 177 countries.



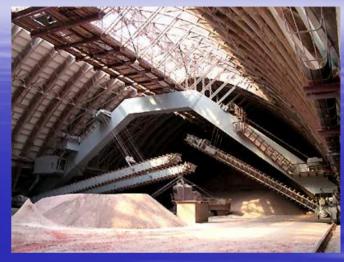






Fossil fuels:

- deposits of potassic salts
- peat deposits
- oil reserves
- deposits of brown coal and oil shale



Domestic fuel and energy resources, including associated gas and wood fuel, account for only 16 per cent of primary energy demand of Belarus.









Belarus is a country that suffered most heavily from the consequences of the Chernobyl disaster of 1986:

- 23% of the territory
- 20% of the population
- the material loss of the country is estimated as more than 235 billion USD.









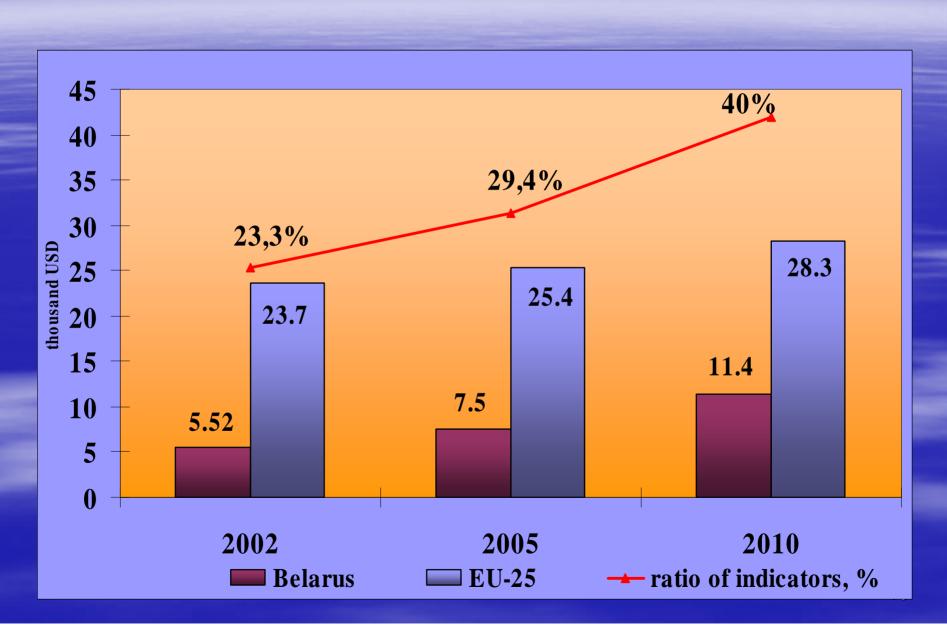
Indicators of the socio-economic development of Belarus (2005)

GDP	29 413 mln. \$
GDP production per capita	3 000 \$
Cash income per capita	1 825 \$
Foreign commerce amount	32 687 mln. USD
Export	15 979 mln. USD
Import	16 708 mln. USD
GDP Energy Intensity (IEA, 2004 edition)	0,43 toe per thousand 2000 US\$ PPP
Average lifetime	63,2 years for men
	75,0 years for women
Aggregate GHG emissions (2004)	74 364 thsd. tons of CO2 equivalent
	(not taking into account LULUCF)
	62 464 thsd. tons of CO2 equivalent
	(taking into account LULUCF) 8

Indicators of the socio-economic development of Belarus (forecast for 2006-2010)

	2010 to 2005,
	0/0
Population	97,9
Gross Domestic Product	150-155
Real cash income of population	149-156
Real salaries	152-158
GDP energy intensity reduction	26,1-30,4

GDP per capita (2002 PPP) in Belarus and EU-25



The Republic of Belarus and international climate agreements

May 9, 1992	Adoption of the UNFCCC.
June 11, 1992	Belarus signed the UNFCC.
December 1997	Adoption of the Kyoto Protocol to the UNFCCC.
March 16, 1998 – March 15, 1999	Kyoto Protocol was open for signature.
April 10, 2000	Belarus approved the UNFCCC.
August 9, 2000	Belarus became a full Party to the UNFCCC.
November 2002 – December 2003	UNDP Project "Feasibility study on opportunities for Belarus to join the Kyoto Protocol of the UNFCCC".
September 5, 2003	The year 1990 was determined as a base year for Belarus (FCCC/SBI/2003/Misc.13).

















The Republic of Belarus and international climate agreements

March 2004 - October 2006	TACIS project "Technical assistance to the Ukraine and Belarus in relation to their commitments on mitigating global climate change".
February 16, 2005	The Kyoto Protocol entered into force.
August 12, 2005	The Republic of Belarus joined the Kyoto Protocol*.
August 26, 2005	The official document was deposited with the Depositary.
November 24, 2005	The Kyoto Protocol entered into force for the Republic of Belarus.

*Belarus is not included in Annex B to the Kyoto protocol.

















The Republic of Belarus and international climate agreements

November 28 – December 9, 2005	Decision 32/CMP.1 that acknowledges the intention of Belarus to be assigned quantified GHG emission limitation and reduction commitments of 95 per cent of the 1990 level in the commitment period 2008 to 2012.
February 2006	Belarus communicated the text of the appropriate amendment to the UNFCCC Secretariat
November 6-17, 2006	Adoption of the amendment proposed shall be considered at the COP/MOP2

















Compliance of the Republic of Belarus with the Kyoto Protocol Requirements

Ü Implementation of national policy and measures to reduce the emissions of greenhouse gases and enhance their removals by sinks (Article 2)

ÜMeeting quantified GHG emission limitation and reduction commitments (Article 3)

ÜCompliance with the eligibility requirements under the Kyoto Protocol



- Programmes of socio-economic development of the Republic of Belarus for the periods of 2001-2005 and 2006-2010
- National environmental action plans of the Republic of Belarus for the periods of 2001-2005 and 2006-2010
- State complex programme on modernization of basic production assets of Belarusian power system, energy conservation and increase the use of domestic fuel and energy resources in 2006-2010
- State programmes on energy conservation up to 2000, for the periods of 2001-2005 and 2006-2010













- Target programme of ensuring not less that 25 per cent of heat and electrical power production in the Republic of Belarus due to the use of domestic fuels and alternative energy resources up to 2012
- Programme of gasification and gas-engine fuel use
- Sectoral programmes on waste management
- Programme of the Ministry of energy of reconstruction of small hydro power plants











- State programme of rational and complex use of wood resources for the period 2002-2010
- Action plan of the Government of the Republic of Belarus to increase the efficiency of the work of Belarusian forestry complex and to improve wood processing
- Programme of forestry development for the period 2007-2011
- National action plan on implementation of the Kyoto Protocol provisions for 2005-2012
- National strategy on GHG emission reduction for the period 2007-2012

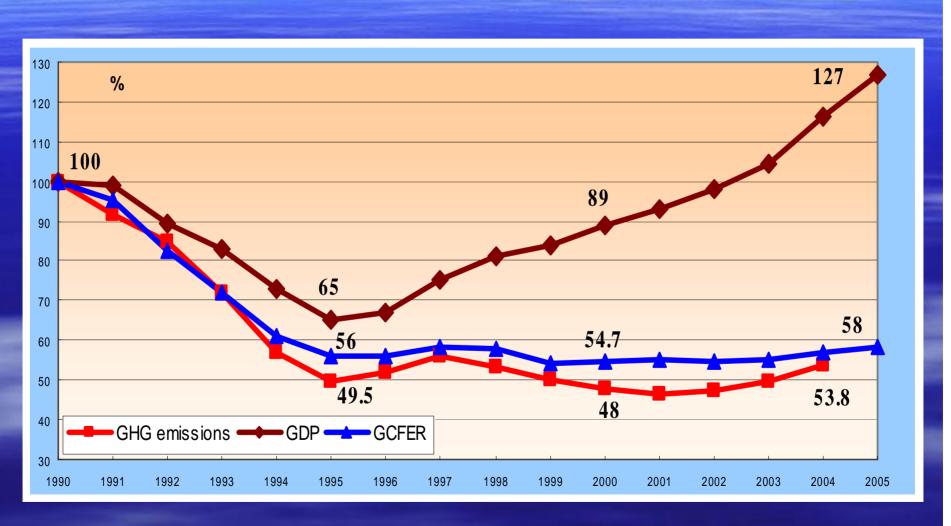






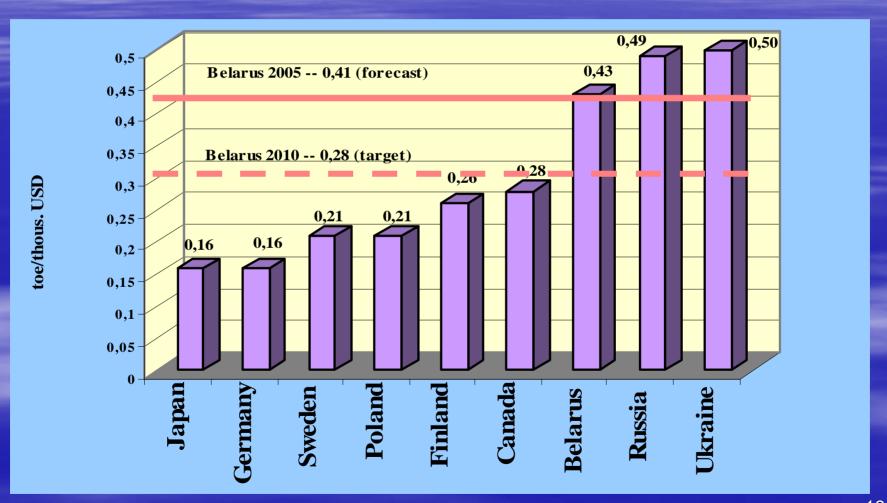
Implementation of national policy and measures

Dynamics of the GDP, Gross Consumption of Fuel and Energy Resources (GCFER) and GHG emissions



Implementation of national policy and measures Component 1. Energy Conservation

GDP energy intensity in 2004 (toe per thousand 2000 US\$ PPP)



Source: International Energy Agency "Key world energy statistics from the IEA", 2004 edition 19

Implementation of national policy and measures Component 1. Energy Conservation

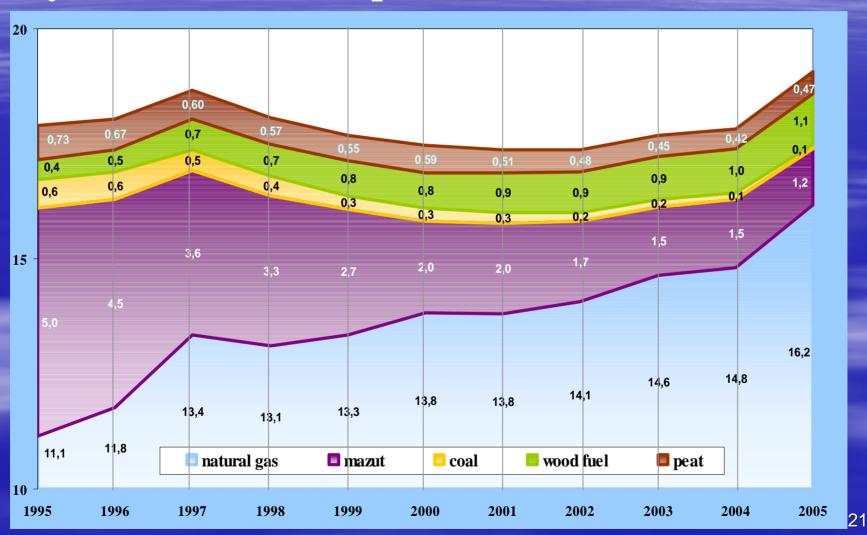
Dynamics of the GDP, gross consumption of fuel and energy resources and GDP energy intensity (compared to the year 1995)

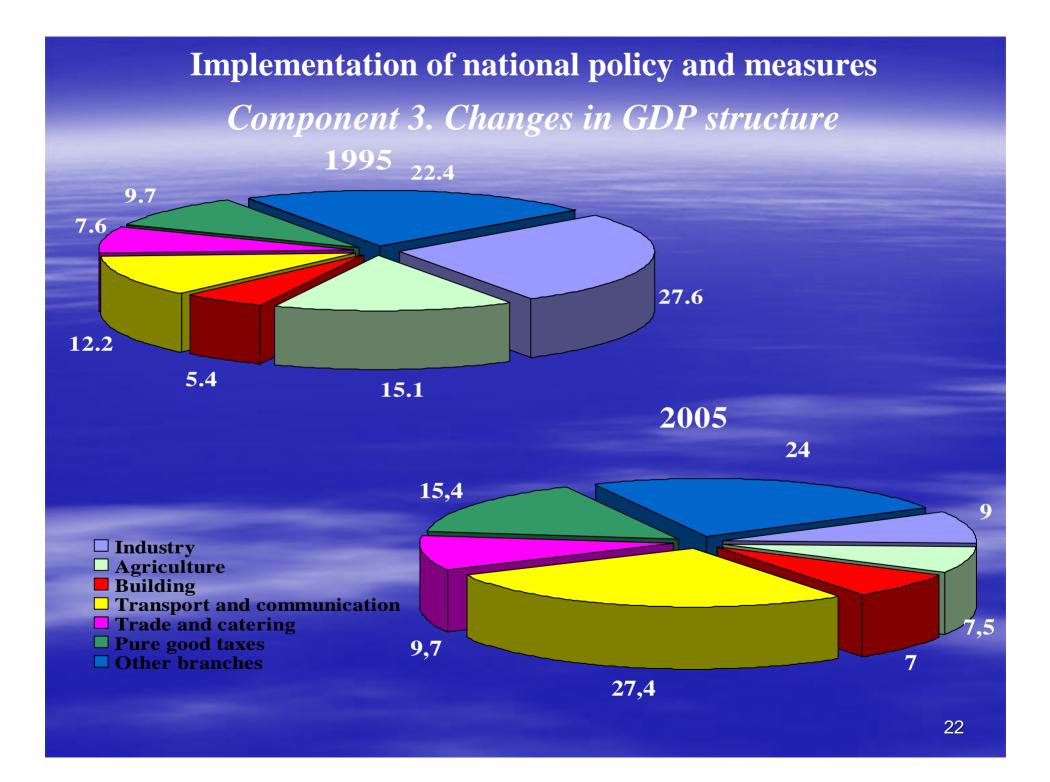


Implementation of national policy and measures

Component 2. Changes in fuel and energy balance structure

Dynamics of consumption of main fuels, mln. toe





Implementation of national policy and measures Financing of GHG emission reduction and limitation GHG emissions reduced from 116.06 Mt CO2 in 1990 to 62.5 Mt CO2 in 2004.

Annually 10 per cent of GDP for GHG emissions reduction and limitation, including

- more than 400 million USD per year for energy efficiency measures
- up to 350 million USD per year for environmental matters.

Belarus does not have "hot air".













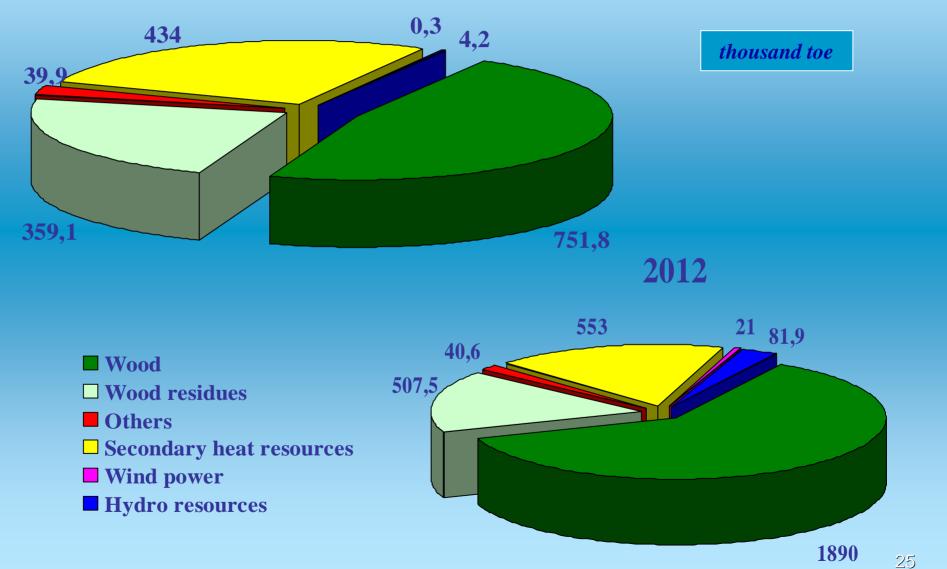


Implementation of national policy and measures Development of Renewable Energy Sources

• Biomass	5 600 thsd. toe
• Hydro power	560-840 thsd. toe
• Wind power	315-490 thsd. toe
• Biogas	112 thsd. toe
• Solar power	3,5 thsd. toe
• Others	105-210 thsd. toe

	2005	2012	2020
		(forecast)	(forecast)
Fuel consumption for energy purposes, mln. toe	19	19,2	21,3
Renewable energy sources,	1,59	3,1	5,3
mln. toe		-	
Share of renewable energy sources in fuel consumption,%	8,4	16,1	25

Implementation of national policy and measures Development of Renewable Energy Sources 2005



Implementation of national policy and measures Development of Renewable Energy Sources BIOMASS

Total area of forest resources is 9.3 mln. hectares.

Average annual growth is about 25 mln. m3. Use of wood biomass is 1.12 mln. toe (4.4 per cent in the fuel and energy balance). Feasible annual opportunities are 2.45 – 2.6 mln. toe.

Reserves of lignine amount to 0.7 mln. toe. Feasible annual use is 35 thsd. toe.







Implementation of national policy and measures

Development of Renewable Energy Sources BIOMASS

UNDP/GEF Project "Biomass energy for heating and hot water supply in Belarus".

1.08 Mt CO2 during 15 years period.

First demonstration site is a 2MW boiler house burning wood.







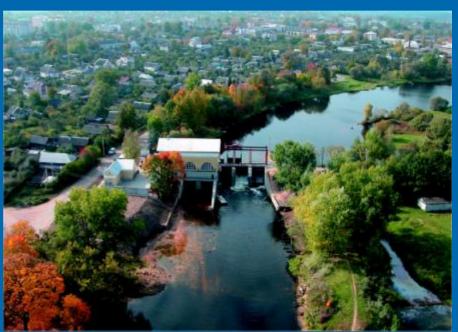
Implementation of national policy and measures Development of Renewable Energy Sources HYDRO POWER

Total installed capacity of HPPs is 12 MW.

Annual power production is 28.2 mln. kW per hour.

Potential capacity is 850 MW, including: technically available 520 MW, economically feasible 250 MW.





By 2012 total installed capacity will be increased to 95.75 MW with annual power production of 417.8 mln. kW per hour.



Implementation of national policy and measures Development of Renewable Energy Sources

BIOGAS

Three biogas plants with total installed capacity of 1.16 MW are being introduced. Feasible potential is 112 thsd. toe per year.

MUNICIPAL WASTE

Feasible potential is 70-84 thsd. toe per year.

SOLAR POWER

Feasible potential is 3.5 thsd. toe per year.

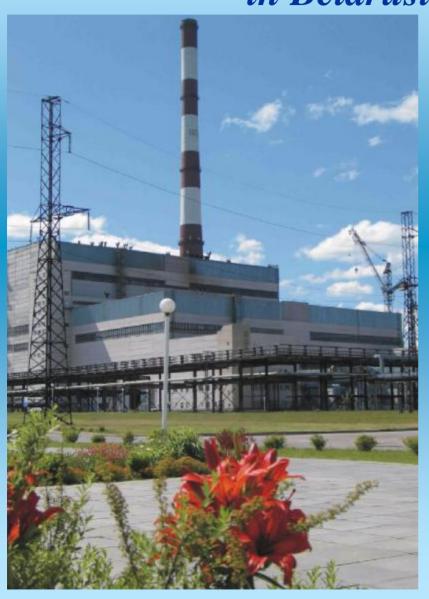






Implementation of national policy and measures

Development of Renewable Energy Sources in Belarusian energy system



Conversion of two large-scale CHP plants to wood fuel and lignine (13 MW_{heat} и 19,5 MW_{heat}).

4 turbo-expanders (12,5 MW).

Total installed capacity of HPPs of the Ministry of energy is 5.2 MW and it will be increased by 1.5 MW in 2007.

In 2006-2010:

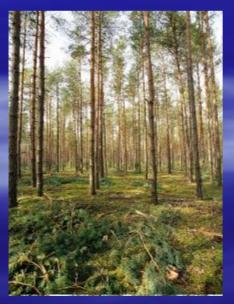
Introduction of 62.9 MW of renewable energy sources, including

hydro power plants (43.4 MW), turbo-expanders (4 MW) and CHP plants on wood fuel (15.5 MW).

Reduction of fuel rate in the energy system (from 192.2 goe per kW per hour in 2006 to 181.7 in 2010).

ENHANCEMENT OF GHG REMOVALS BY SINKS

Total area of forest resources is 9.3 mln. hectares, including 1.9 mln. hectares taken by wetlands, hayfields, tillages.
Belarusian wetlands are "lungs of Europe".









ENHANCEMENT OF GHG REMOVALS BY SINKS

- State programme of rational and complex use of wood resources for the period 2002-2010
- Action plan of the Government of the Republic of Belarus to increase the efficiency of the work of Belarusian forestry complex and to improve wood processing
- Programme of forestry development for the period 2007-2011







ENHANCEMENT OF GHG REMOVALS BY SINKS

Total area of forest resources has increased by 653 thousand hectares.

The percentage of forest land has increased from 35.5 per cent in 1995 to 37.6 per cent in 2005.

Total amount of the standing wood has increased by 320 mln. cubic meters.

Almost all quantitative and qualitative forest indicators have been improved.









ENHANCEMENT OF GHG REMOVALS BY SINKS

Belarus has a great number of peatlands (6.4 per cent of the territory).

In early 1960s peatlands took 2.4 million hectares (14.2 per cent).

54 per cent of peatlands were drained for peat extraction and agriculture development purposes.

A hectare of peatlands drained emits 5.5-22 t CO2 per year.







ENHANCEMENT OF GHG REMOVALS BY SINKS



UNDP/GEF project "Renaturalization and sustainable management of peatlands to prevent land degradation and climate change and to ensure preservation of biological diversity".









- **Ü** State commission on climate change problems with a Vice Prime Minister in charge
- **Ü** National action plan on implementation of the Kyoto Protocol provisions f or 2005-2012
- **ü** National strategy on GHG emission reduction for the period 2007-2012
- **Ü** Main measures and activities aimed at ensuring the compliance with the eligibility requirements under the Kyoto Protocol have been determined









Compliance with the Kyoto Protocol Requirements Compliance with the eligibility requirements

- a) To calculate, justify and account for the Assigned Amount.
- Initial Report (Calculation of the Assigned Amount) (October 31, 2006)
- b) To prepare, submit and justify annual inventories on GHG emissions by sources and removals by sinks (since 1990) and other necessary supplemental information.
- National Report on GHG Inventory for 1990-2004 (April 14, 2006)
- Draft National Report on GHG Inventory for 2005
- 2, 3, 4 National Communications in accordance with its Commitments under the UNFCC (the first National Communication under the Kyoto Protocol) (May 29, 2006)
- Report Demonstrable Progress under the Kyoto Protocol (May 29, 2006)

Compliance with the eligibility requirements

- c) To establish a national system for the estimation of anthropogenic emissions by sources and removals by sinks.
- Greenhouse Gas Inventory Centre (order of the Ministry of natural resources and environmental protection of 29 December 2005 №417)
- Regulation of the Government of April 10, 2006 №485 "On Approving the Provision on the Procedure of Maintaining the State Cadastre of Anthropogenic Emissions by Sources and Removals by Sinks of Greenhouse Gases"
- Regulation of the Government of May 4, 2006 №585 "On Approving the Provision on the National Greenhouse Gas Inventory System"
- d) To establish a national carbon units registry.
- Regulation of the Government of August 26, 2006 № 1077 "On the National Carbon Units Registry of the Republic of Belarus"
- Guidelines on forming and maintaining the national carbon units registry of the Republic of Belarus.
- International bidding to purchase the software and hardware to ensure the functioning of the national carbon units registry of the Republic of Belarus

The preparation for possible participation in the flexibility mechanisms

JOINT IMPLEMENTATION

Establishment of National body for Consideration and Approval of JI projects at a national level (Resolution of the Government of September 5, 2006 № 1145 "On Establishment of the State Commission on Climate Change").

Approval of national procedures concerning JI projects (Resolution of the Government of September 5, 2006 № 1145 "On Approving the Provision on the Procedure of Submission, Review and Monitoring of Joint Implementation Projects").

Development of supplementary documents, including guidelines on preparation and submission of PIN and PDD, as well as provisions on registration, examination and monitoring of JI projects.

Capacity building in the field of JI projects development and preparation.

Cooperation with foreign companies on preparation of memorandums of understanding (BTG (Netherlands), CCM (Great Britain), Russian carbon Fund (Denmark), Shimizu Corporation (Japan), etc.)

The preparation for possible participation in the flexibility mechanisms

EMISSION TRADING

Draft Decree of the President of the Republic of Belarus and Draft Regulation of the Government on target environmental investments due to the funds gained under the emission trading.

Agreement has been achieved that all the potential funds gained under the emission trading shall be earmarked for further GHG emission reduction and sink enhancement purposes only.

Legislative documents concerning the use of "green investment" scheme.

Compliance with the Kyoto Protocol Requirements Meeting quantified GHG emission limitation and reduction commitments

Decision 32/CMP.1 that acknowledges the intention of Belarus to be assigned quantified GHG emission limitation and reduction commitments of 95 per cent of the 1990 level in the commitment period 2008 to 2012.

Draft amendment that provides for inclusion of the Republic of Belarus in Annex B to the Kyoto Protocol.

The inclusion of the Republic of Belarus in Annex B to the Kyoto Protocol will serve as recognition and acknowledgement of those serious efforts. Belarus has been making for many years to mitigate anthropogenic impact on climate and those results it has already achieved in this field.

The inclusion of Belarus in Annex B will open new opportunities for the country to intensify its activities in combating climate change.

Thank you for your attention!

Ministry of natural resources and environmental protection of the Republic of Belarus

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