



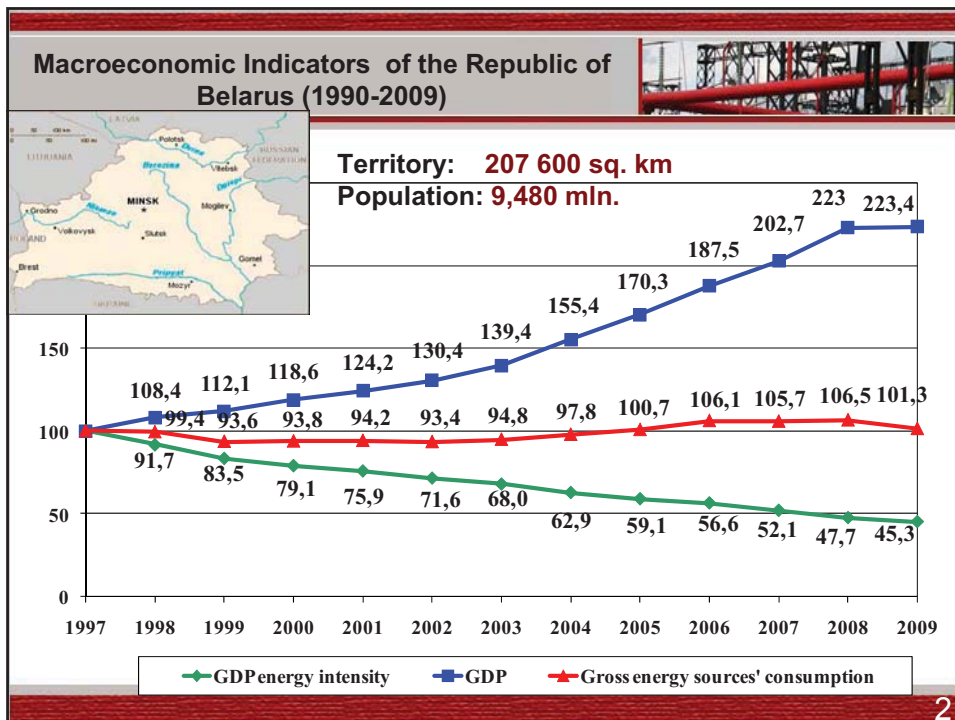
Republic of Belarus



EFFECTIVE POLICIES FOR SUSTAINABLE ENERGY OF THE REPUBLIC OF BELARUS

*Vladimir KOUZMITCH,
Director General CJSC “Belvneshenergo”*

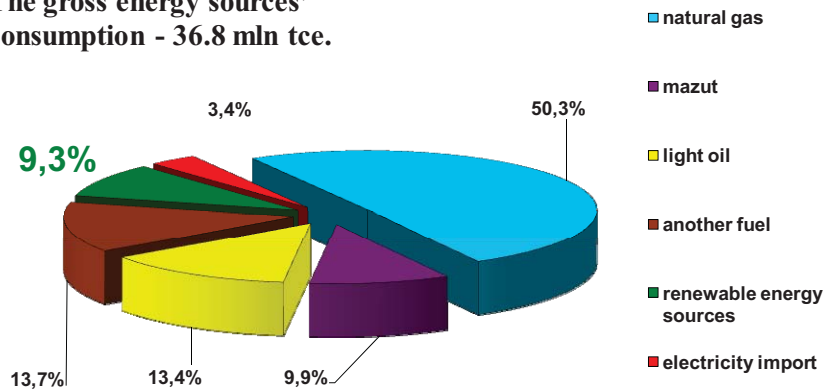
OSCE First Preparatory Meeting (Development of Sustainable Energy)
Vienna, 7-8 February 2011



The structure of energy sources consumption in the Republic of Belarus, 2009



The gross energy sources' consumption - 36.8 mln tce.



Republic of Belarus Energy Policy for the Period up to the Year 2020:



■ **“The Basic Principles of the Republic of Belarus Energy Security”**

■ **President of the Republic of Belarus Directive N 3 “Economy and Thrift are the Main Factors of the Country’s Economic Security”**

□ **“The Strategy for the development of the energy potential of Belarus” (August 2010)**



Energy System of Belarus - 2009

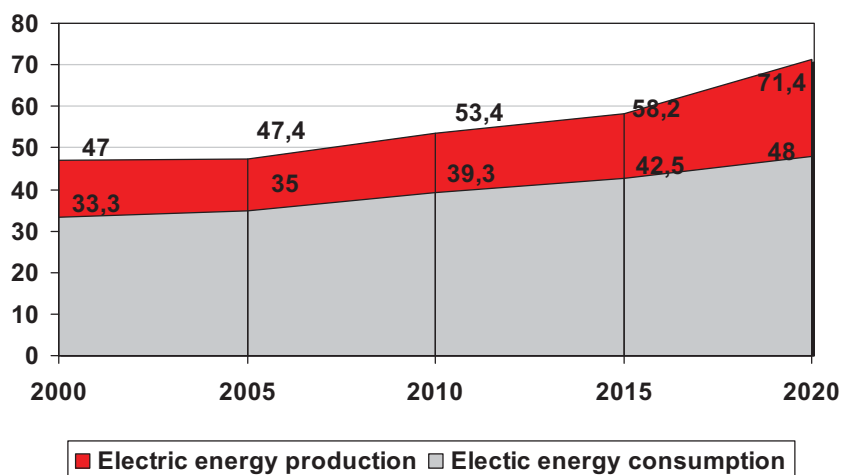


Installed capacity:

■ Power plants	8 233.3 MW
➤ Condensation	3 489.5
➤ Co-generation	4 319.5
➤ Hydropower stations	16.1
➤ Industrial (bloc-stations)	408.2
■ Transformer substations 35-750 kV	33,123 MVA
■ Transmission lines	268,200 km
■ Heat networks	5,210 km

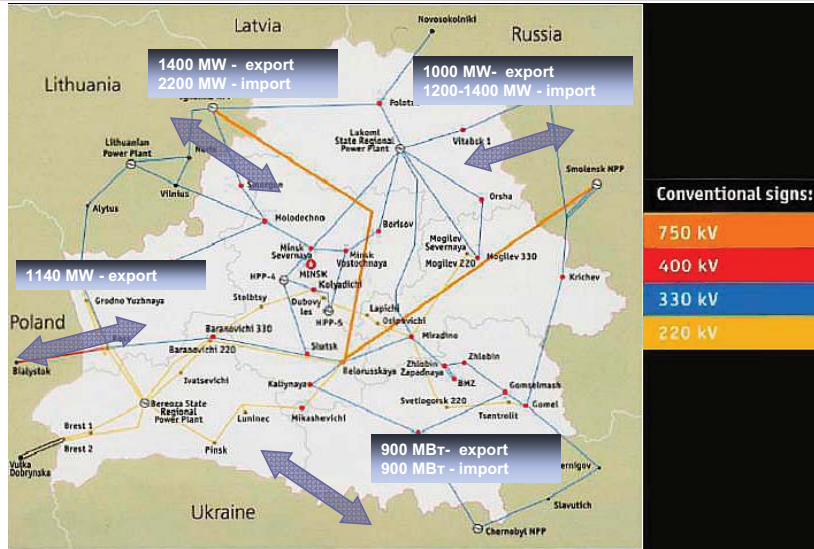
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Electricity Consumption and Possible Production in the Republic of Belarus (bln. kWh)



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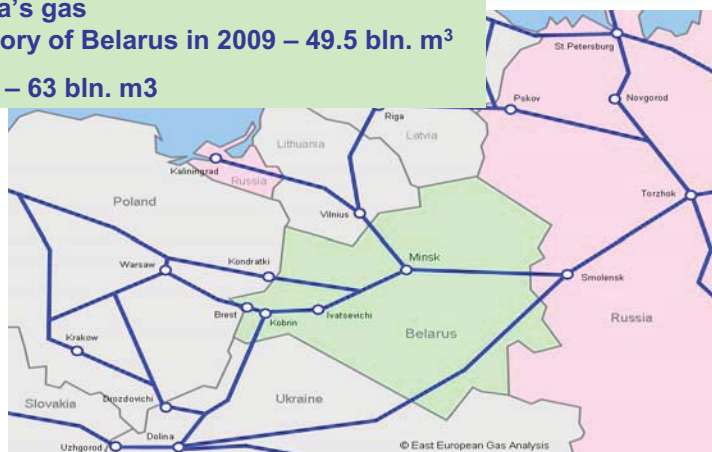
Electric Grid of the Republic of Belarus



Main Belarus' and Neighbour Countries' Gas Pipelines



- Transit of Russia's gas across the territory of Belarus in 2009 – 49.5 bln. m³
- Transit capacity – 63 bln. m³



Torzhok-Kondratki-Frankfurt/Oder (Yamal gas pipeline), 1420 mm (56-in); Torzhok-Minsk-Ivatshevichi, 3 x 1220 mm (48-in); Ivatshevichi-Kobrin-Dolina, 2 x 1220 mm (48-in); Kobrin-Brest-Warsaw, 1020 mm (40-in); Minsk-Vilnius, 1220 mm (48-in); Torzhok-Dolina, 1420 mm (56-in)



“Task Program for ensuring in Belarus not less than 25% of the total production of Heat and electricity by means of local fuel and non traditional and renewable sources of energy for the period till 2012”

“Program for building biogas facilities for the years 2010-2012”

“The State Program for the construction of energy sources from local fuel resources for 2010-2015”

Energy Dependence of Belarus



Fuel consumption thousand tce

	2007	2008	2009
Total	27254	27857	26100
Local fuels	3648,4	3818,4	5290
Share of local fuels, %	18,1	18,3	20.3

Forecast of local fuels use in 2012 – 25%

Forecast of local fuels use in 2020 – 32%

Renewable Energy in Belarus



<u>RE balance</u>	<u>now</u>	<u>future</u>
Wood biomass	(95%)	(48%)
Agricultural waste	(3,7%)	(20%)
Biogas	(0,2%)	(5%)
Wind power	(0,02%)	(14%)
Hydro power	(0,55%)	(4%)
Bio diesel	(0,28%)	(7%)
Solar energy	(0,25%)	(2%)

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Strategy for the development of the energy potential



Wood fuel: as 38% of Belarus is covered in woods, with 1.56 Billion cubic meters current potential and 25 Million cubic meters growth per year

Logs: currently 6 million cubic meters are created through planned logging, including clearance of natural falls. This should reach 7 million cubic meters in 2020;

Waste wood from felling: it is planned to use 0.5 million cubic meters of the waste from felling for energy

Waste from timber processing: the current volumes of waste from timber processing is 1.5 million cubic meters, which is used for wood chips, but which also provides the basis for making pellets for export.

Fast growing wood: the potential is estimated at 1 million cubic meters per year.

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Strategy for the development of the energy potential



Hydro: between 2011 and 2015 it is planned to build hydro capacity of additional 120 MW

Wind: it is planned to construct up to 300 MW wind capacity between 2011 and 2015

Biogas: The plan is to construct 39 biogas facilities

Sun: Given the climatic conditions, the use of sun energy is restricted. The strategy mentions a few projects for hot water supply.

Municipal household waste: It is planned that by 2020 30–40 MW of generation capacity will be built, including no less than 15 MW by 2015.

Plant waste from agriculture: it is planned to use 1.46 million tce per year

Biodiesel. It is anticipated that by 2012 the demand of biodiesel in Belarus will be satisfied from domestic production.

Fuel ethanol : it is planned to construct pilot projects, to 2015 - 50 thousand per year

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Republic of Belarus
CJSC "Belvneshenergo"



Thanks a lot for your attention

We invite you to participate in a mutually-beneficial cooperation!

Contact information: Republic of Belarus
220004, Minsk,
Korolya str.,2
Tel.: +375 29 611 07 35
Email: kouzmitchv@yandex.ru

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