



Heating policy, including renewables use, within the framework of the state program 'Energy Saving' for 2021-2025

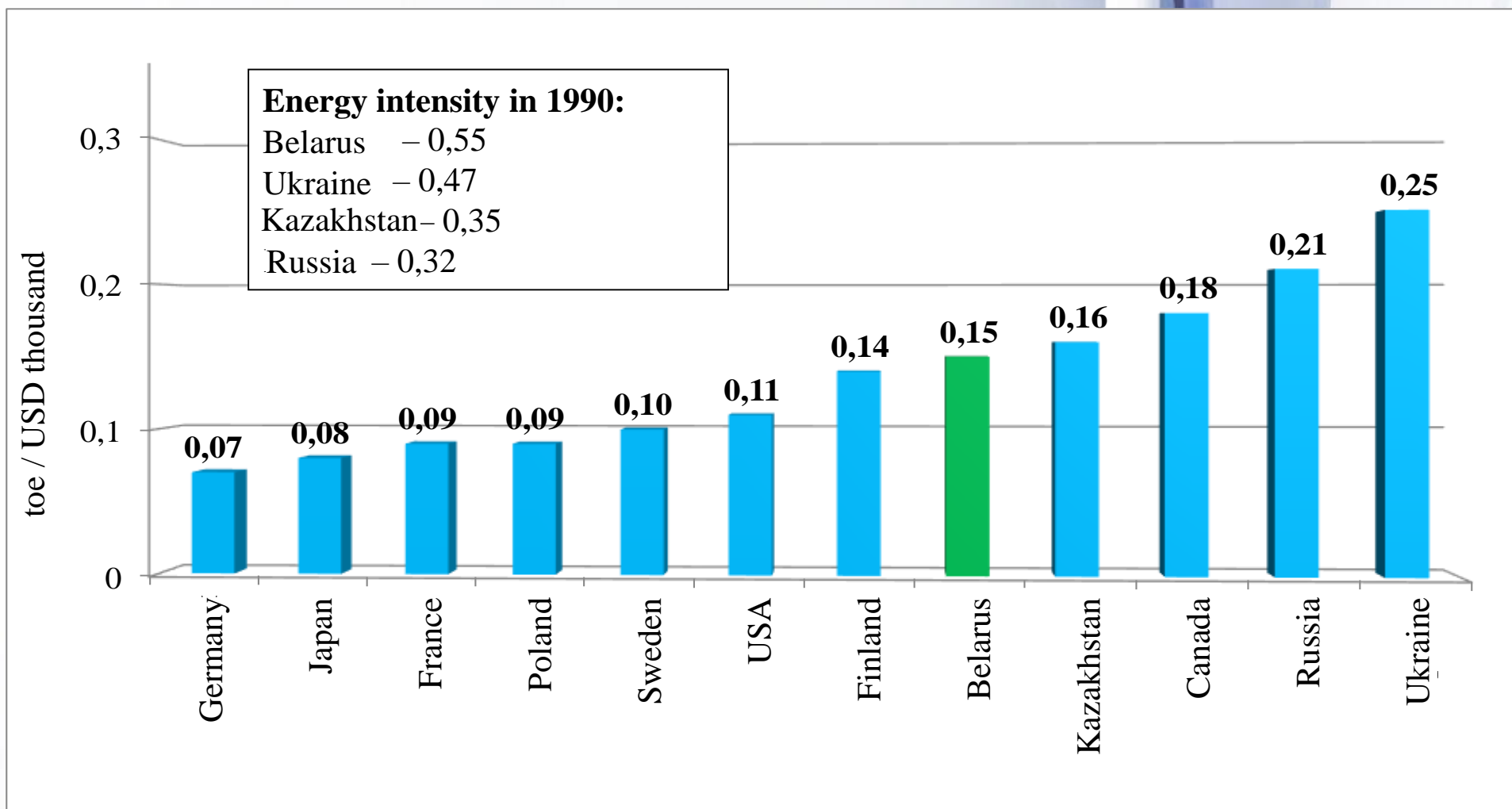
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Legislation framework for achieving SDG7 “Ensure access to affordable, reliable, sustainable and modern energy for all”

1. Law of the Republic of Belarus on Energy Saving of 8 January 2015, No 239-3
2. Law of the Republic of Belarus on Renewable Energy Sources of 27 December 2010, No 204-3
3. Directive of the President of the Republic of Belarus ‘Economizing and Sparingness – Main Factors of a State’s Economic Security’ of 14 June 2007 No 3 (as amended by the Decree of the President of the Republic of Belarus of 26 January 2016, No 26)
4. Concept of Energy Security of the Republic of Belarus of 23 December 2015
5. State Program ‘Energy Saving’ for 2021-2025
6. Decree of the President of the Republic of Belarus of 24 September 2019, No 357, on Renewable Energy Sources

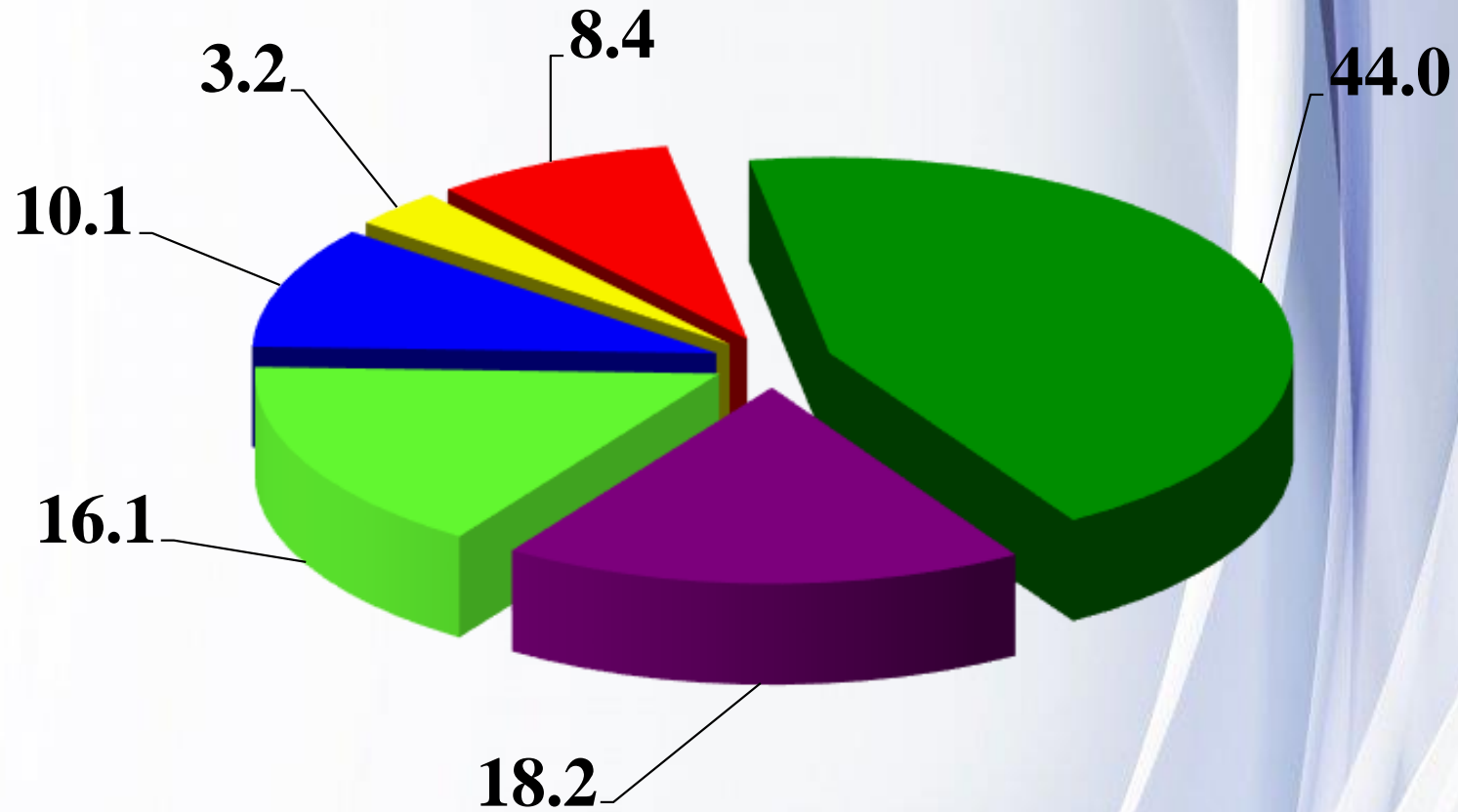
GDP energy intensity globally in 2018 (2015 prices, PPP), based on IEA data (World energy balances 2020)



Energy policy goals of the Republic of Belarus

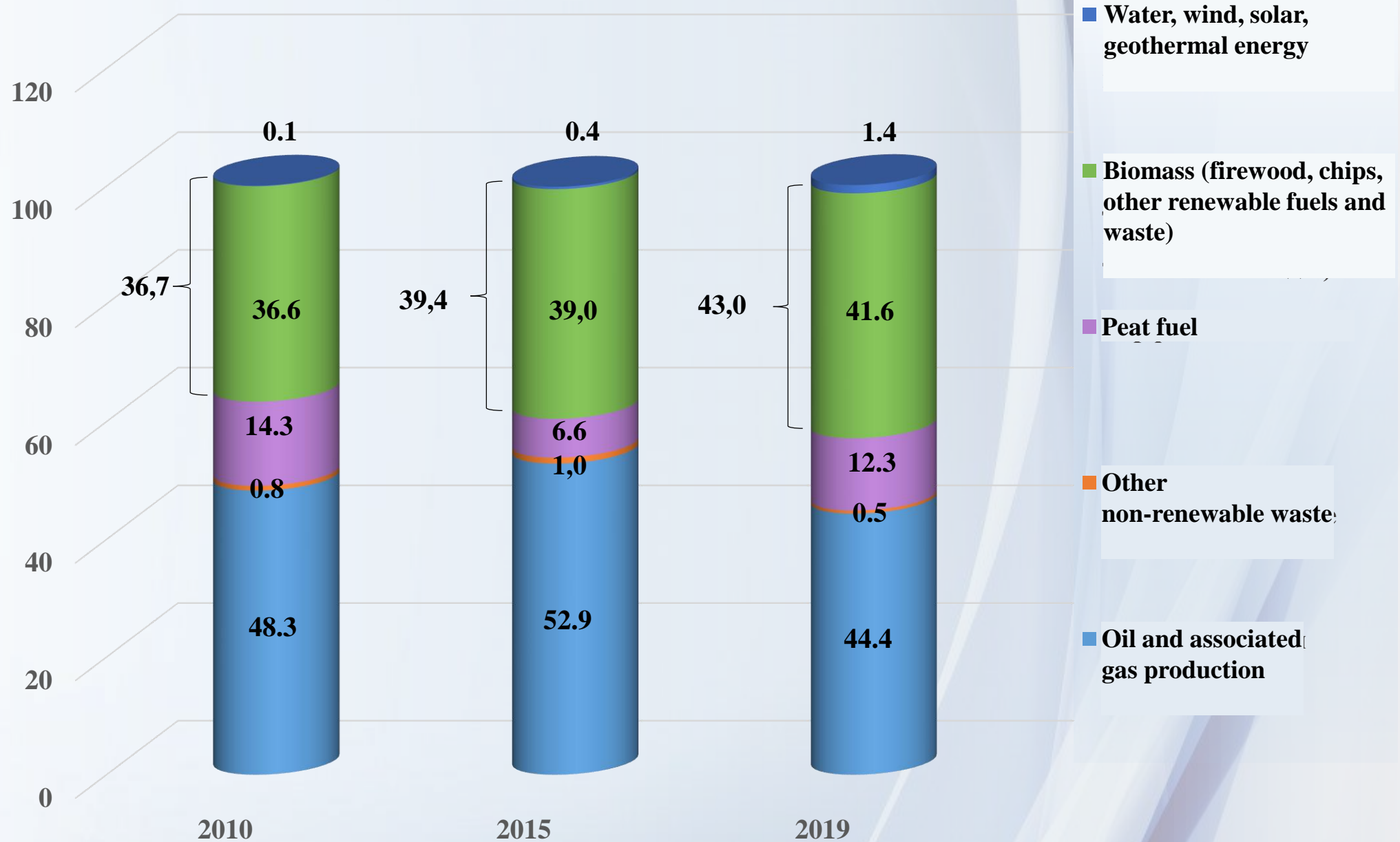
Indicator	2019 (achieved)	2016- 2020	2025	2035
Reducing GDP energy intensity, %	-2,5	-1,6	-7	Closing on the global average
Share of own energy resources in fuel and energy resources gross consumption, % (energy independence)	16,2	16	17	20
Renewables share in fuel and energy resources gross consumption, %	7,1	6	8	9
Fuel and energy resources savings via energy saving activities, thousand tce	920	5 000	3000	

Renewables energy mix in the Republic of Belarus in 2019, %

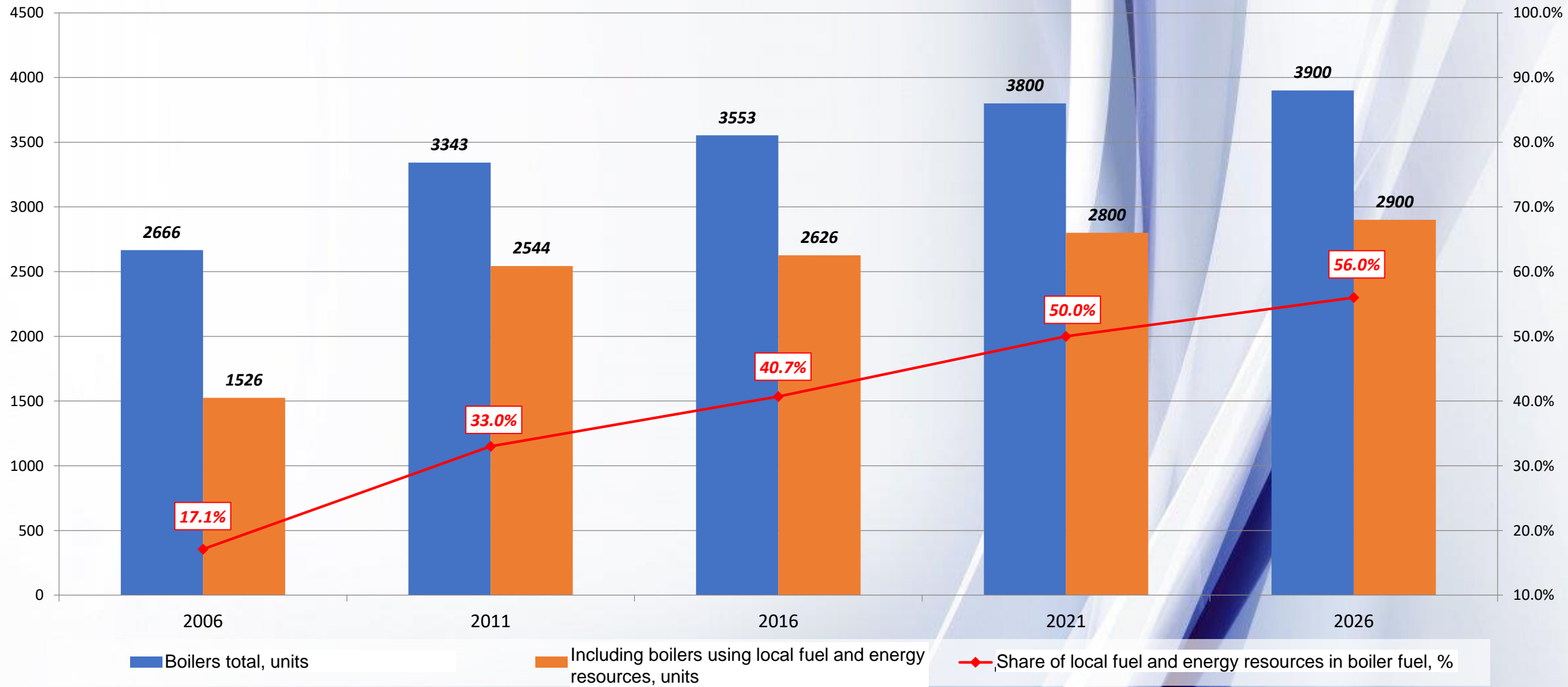


■ Firewood ■ Fire wood chips ■ Refuse wood ■ Other ■ Wind, water, solar energy ■ Pellets

Pattern of consumption of local fuel and energy resources, %



Construction of energy sources using local fuel and energy resources in utilities following state programs 'Energy Saving' 2006-2026



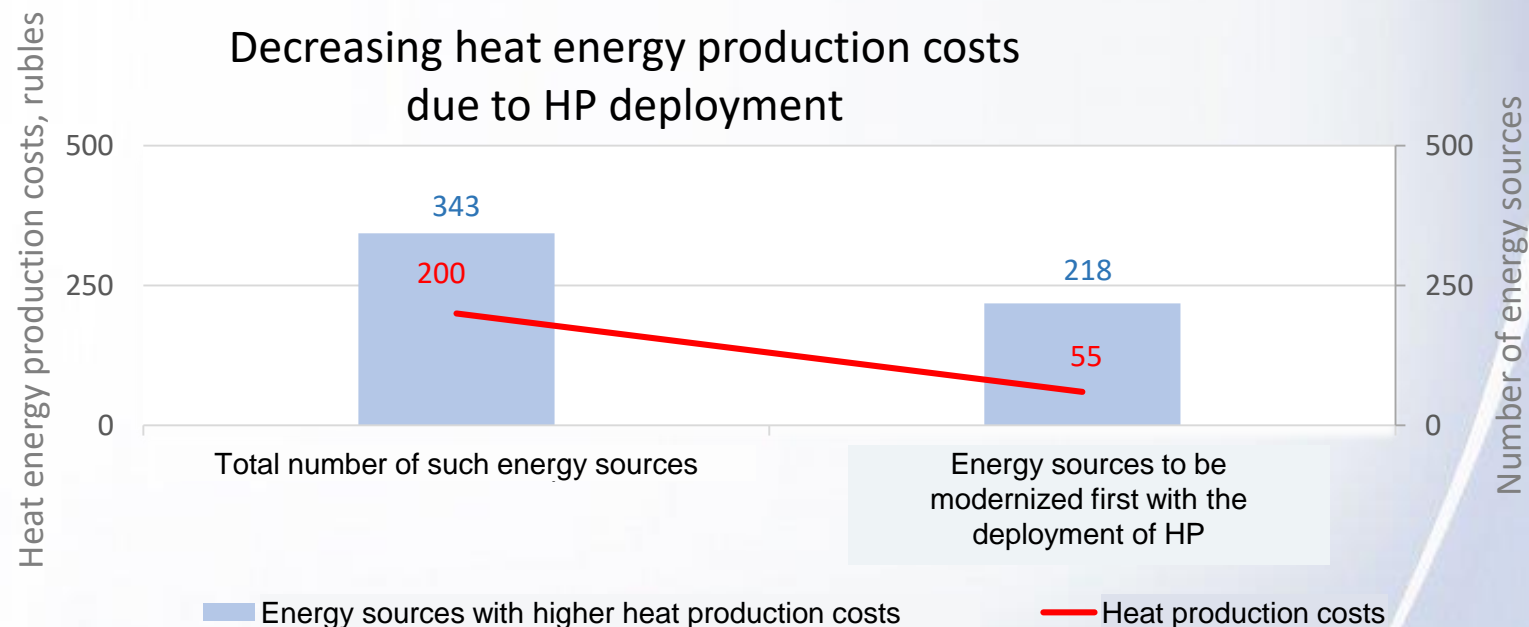
Introduction of heat pumps (HP) in public infrastructure

Ministry of Antimonopoly Regulation and Trade, Order of 31 January 2020, No 21

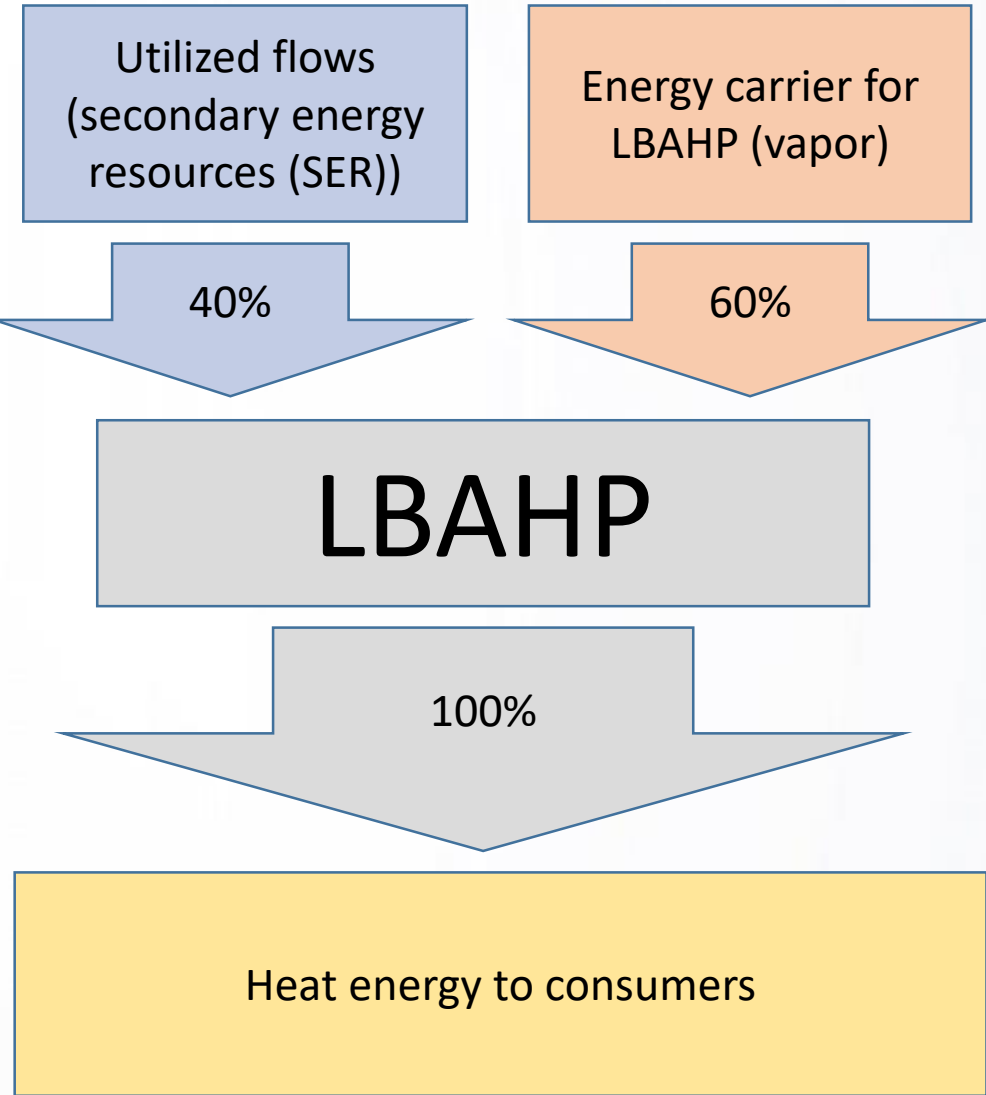
As of 1 October 2020

It is proposed to initially modernize the energy sources of the social sphere (schools, day-care centers, community centers) with the connecting thermal capacity of up to 300 KWh

6.	Electric energy:	rubles/KWh
6.3	Used by stationary electric boilers, electric heating devices (including heat pumps)	
	- Minimal load period (from 23.00 till 6.00)	0,06536
	- The rest of the day	0,16657



Introduction of heat pumps in factories and CHP plants



Implementing projects for the deployment of lithium bromide absorption heat pumps (LBAHP) will allow the utilization, at industrial hubs, of low-potential heat SER from systems of industrial water recycling, linked to CHP. The potential of the cumulative natural gas replacement volume is estimated at 1 bcm with the deployment of LBAHP.



It is intended to install a 12 MW LBAHP at the OJSC "Svetlogorsk Pulp and Cardboard Mill".

- The facility's main efficiency parameters:
- Annual natural gas savings – 7.3 mcm;
- Thermal capacity of the energy source – 11 GCal/h;
- Financing needs – USD 3.73 mln;
- Simple payback period (PB) – 3.83 years.

EU flagship initiative 'Covenant of Mayors for Climate & Energy' in Belarus

NATIONAL COORDINATORS

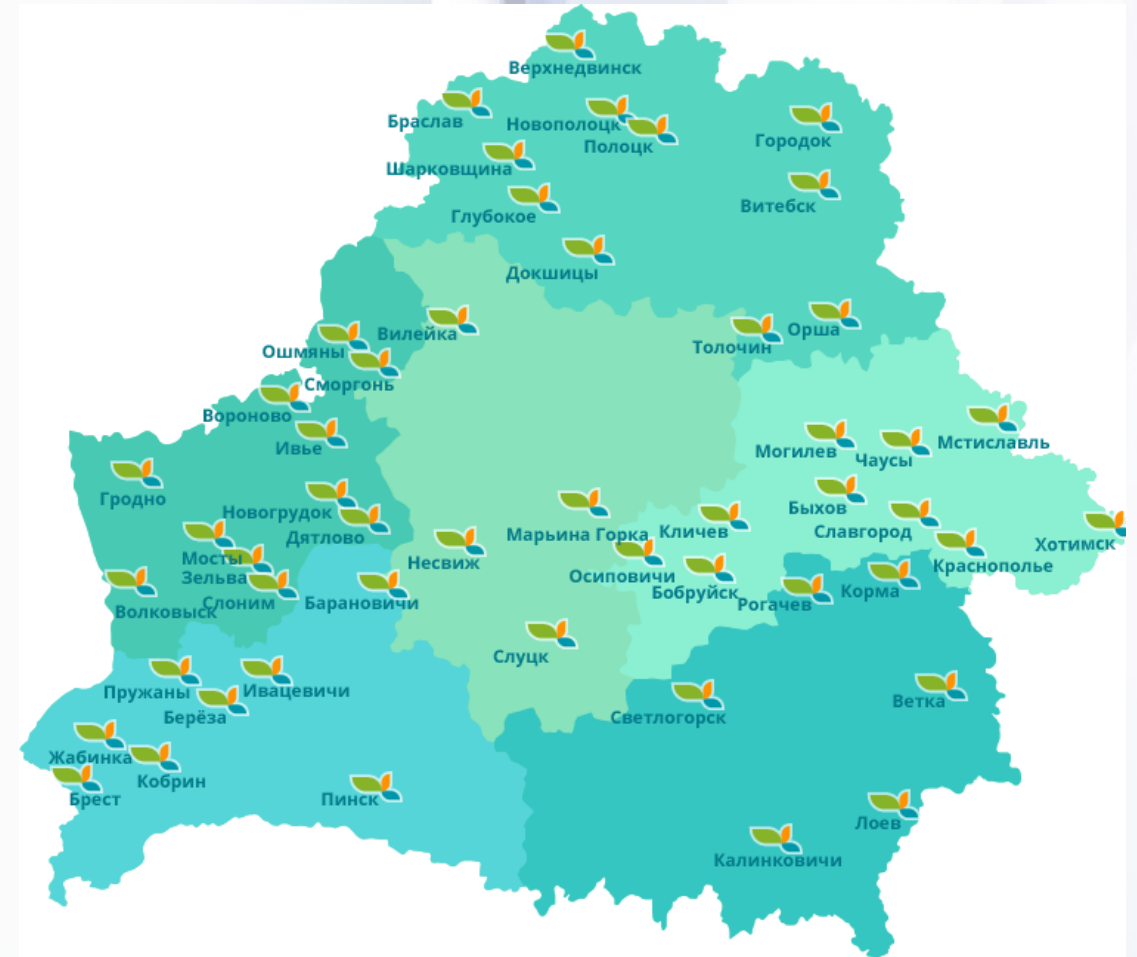
The State Standardization Committee's Energy Efficiency Department (energy efficiency and renewables)

The Ministry of Natural Resources and Environment Protection (reducing CO2 emissions, adapting to climate change)

Support structures:

International non-governmental association 'Eco Partnership': EU international technical assistance project 'Support to the Covenant of Mayors in Belarus'

'Interaction' Fund: CoM-DeP project 'Sustainable city demonstration projects – Eastern Partnership support mechanism'



57 cities took on voluntary obligations to reduce CO2 emissions to 20% 30% within their territories by 2030 (44% of the country's population)

33 cities developed Sustainable energy and climate development plans, 20 cities are in the process of developing such plans, 7 monitoring reports submitted

Sustainable energy and climate development plans for Mayors' Covenant cities as a tool for attracting investments for implementing the state program 'Energy Saving' for 2016-2020

Projects within the framework of the Covenant of Mayors on Climate and Energy in Belarus

- City of Braslav – modernizing street lighting systems, **installing heat pumps and solar collectors in municipal buildings, modernizing the heat supply system utilizing biomass energy** (the project budget is at EUR 735 140, implementation period 2016-2019)
- City of Polotsk – modernizing the street lighting system (the project budget is at EUR 1 630 521, implementation period 2015-2020)
- City of Chausy – **modernizing the heat supply system**, hot water supply and treatment facilities, introduction of an automated energy audit system (the project budget is at EUR 595 268, implementation period 2015-2019)
- City of Oshmyany – introduction of energy efficiency activities in the 'Oshmyany daycare center No 3': roof and walls thermal insulation, window replacement, **installing a solar collector with a heat pump**, ventilation with recovery, automation of heat consumption, energy efficient lighting, energy efficient kitchen equipment (the project budget is at EUR 696.6 thousand, implementation period 2018-2021)
- City of Beryoza – introduction of a LED-based street lighting system in the Beryozovskiy district utilizing an automatic regulation system (the project budget is at EUR 775 thousand, implementation period 2018-2021)

Photos of installed applications in the city of Braslav



Photos of installed applications in the city of Oshmyany



Thank you for your attention

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