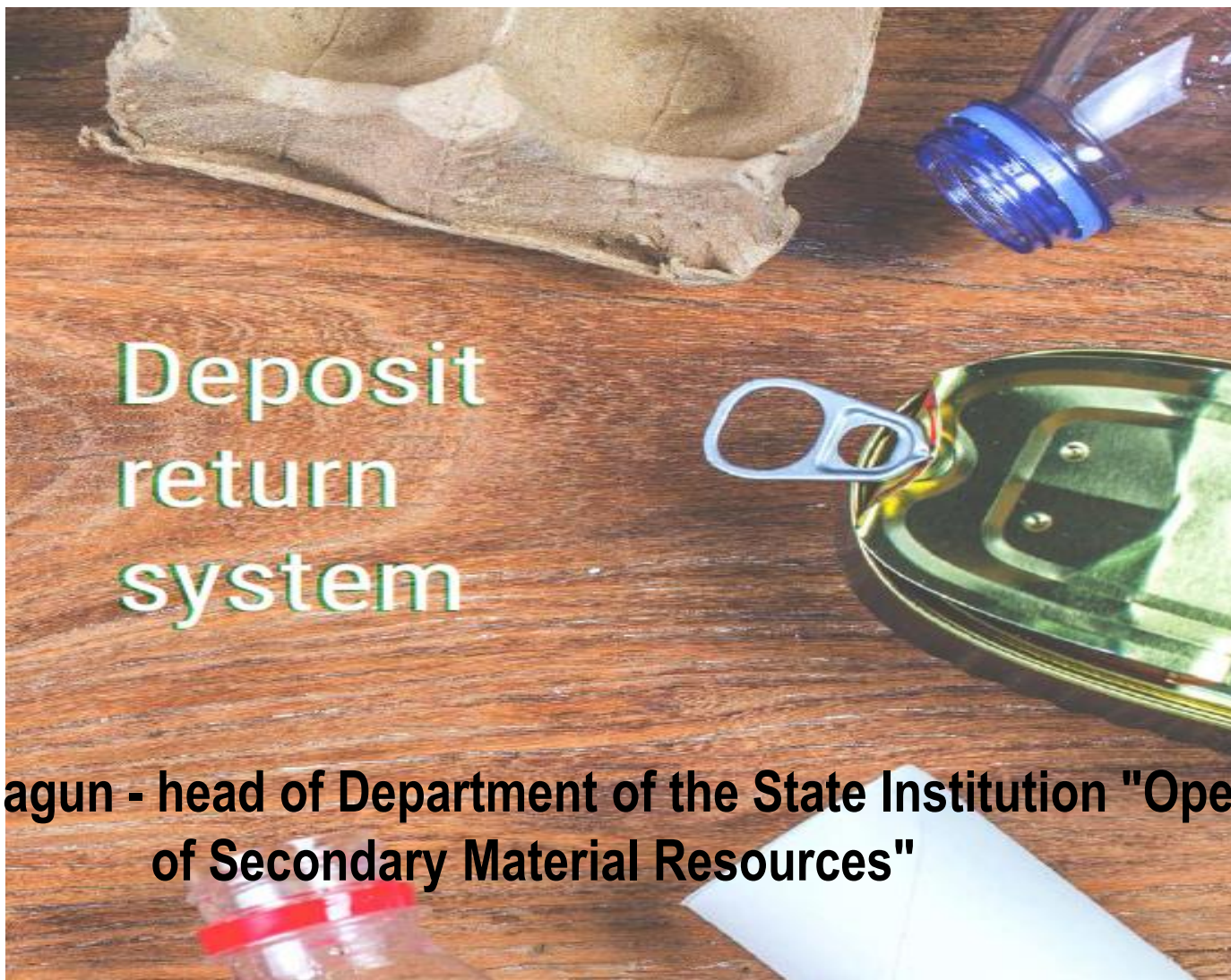




Ministry of Housing and Utilities of the Republic of Belarus



**Anatol Shagun - head of Department of the State Institution "Operator
of Secondary Material Resources"**

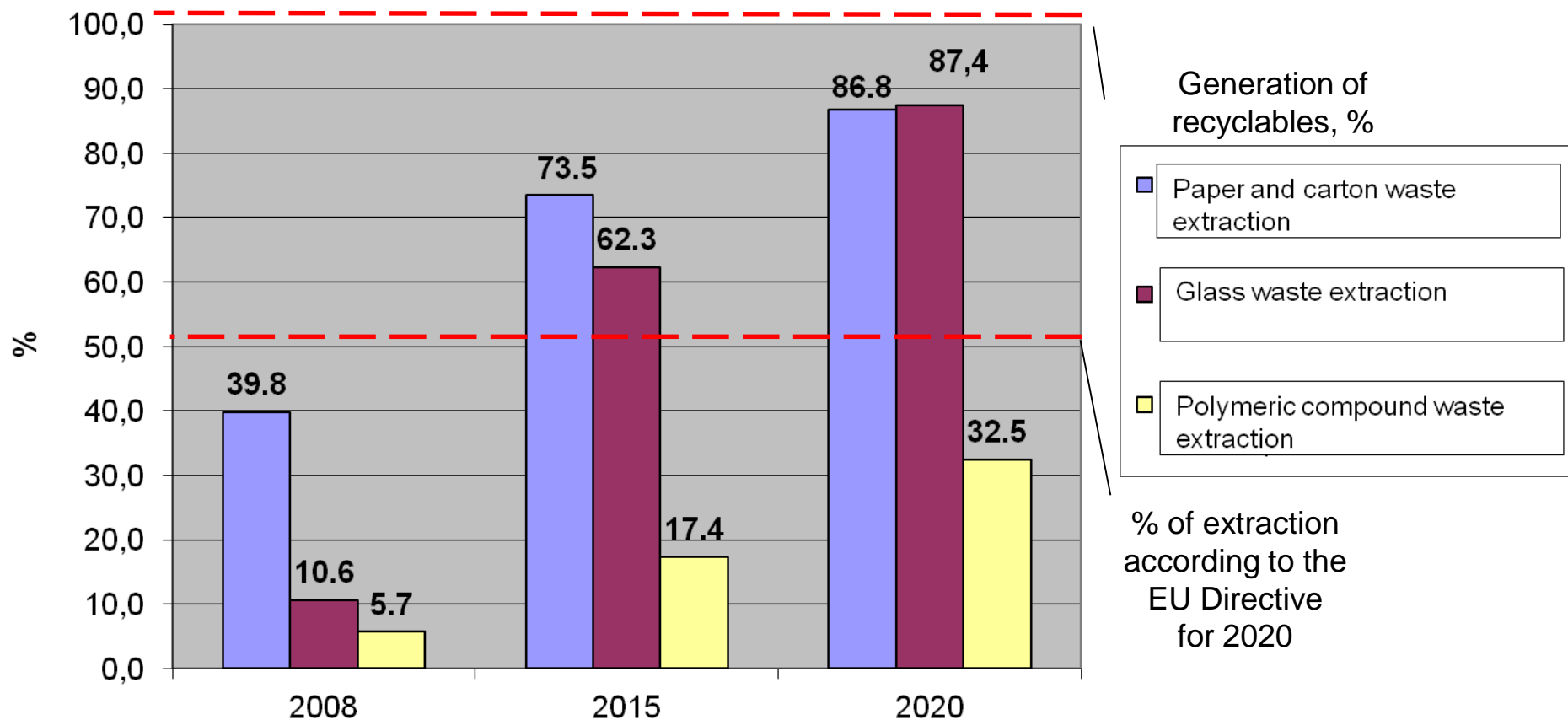


Republic of Belarus

Territory	207.6 thousand sq. km
Extension	From north to south - 560 m, from west to east - 650 km
Population (as of January 1, 2017)	9504.7 thousand people
urban	7400.8
rural	2103.9
Population density	46 people per sq. km
Administrative and territorial division:	
capital	Minsk
regions	6
districts	118
towns	113
urban-type settlements	89
rural settlements	23174



Recovery of recyclables by the types in percentage of their generation volume in Belarus





The history of the deposit return system in the Republic of Belarus

until the mid-90s	- there is a deposit collection system for glass multi-turn packaging
2000s	- massive use of PET packaging and disposable glass bottles, the cessation of the existence of a deposit return system for reusable packaging
2012	- the first attempt to develop legislation on the deposit return system
2015	- development of a feasibility study and a concept for introducing a deposit return system
2016	- the inclusion of the introduction of the deposit return system in the state program "Comfortable housing and a favorable environment"
2017	- approval of the National Strategy for the Management of Municipal Solid Waste and Secondary Material Resources in the Republic of Belarus for the Period up to 2035 that provides for the introduction of a deposit return system by 2020 in the Republic of Belarus



Types and nomenclature of containers

DRS shall include disposable consumer packaging (totally 1.8 billion pcs.), except for packages intended for socially important goods, including baby food and dairy products. Manufacturers and importers of goods in multi-turn packaging shall be exempted from the participation in DRS.

Glass containers (capacity from 0.1 up to 3 l)

Home market capacity –
655 million conventional
bottles



PET containers capacity from 0.1 up to 3 l)

Home market capacity –
1110 million conventional
bottles



Aluminium containers capacity from 0.1 up to 1 l)

Home market capacity –
30 million conventional
bottles



Container deposit rate – 20 kopecks per container (draft) - 0.101 USD or 0.091 EUR at the average exchange rate in 2017



Participants and management model of the Deposit return system

Participants of DRS are manufacturers and importers of goods in deposit package, as well as trade organizations selling such goods.

DRS is managed by the means of a centralized model, in which the management body (Coordinator of the deposit return system - CDRS) is responsible for the implementation of the following tasks:

- registration of all participants and types of deposit beverage packages included in DRS;**
- development and approval of agreements (contracts) between all participants of DRS;**
- control of the labeling standard and introduction of data base on the flow (quantity) of filled and empty deposit packages;**
- logistics management (concluding contracts on transportation, storage and processing of the collected deposit packaging) and management of sales of secondary resources (concluding contracts);**
- accumulation of data from the points of automated and manual collection of deposit packaging and quality control of the manual and automated collection of deposit packaging;**
- remuneration for operating and investment costs of DRS participants; promotion of DRS among consumers;**
- reporting to state authorities and DRS participants.**



Packing collection and financing of the DRS

Collection of deposit packaging from consumers and return of the deposit amount will be performed at retail facilities in two ways:

- automated collection by means of reverse vending machines (hereinafter - RVM);
- manual collection by personnel of retail facilities.

Sources of compensation for operating and investment costs include:

- **fee for deposit package management paid by the manufacturers of goods for each unit of package** (*in the rationale for the introduction of DRS the amount of fee is estimated at 0.07 Belarusian rubles for unit of packaging (0.036 USD or 0.033 EUR at the average exchange rate in 2017)*);
- **the amount on non-returned package deposits (certain amount of deposit packaging isn't returned by the consumers,** *in the rationale for the introduction of DRS the amount of fee is estimated at 0.20 Belarusian rubles for unit of packaging (0.101 USD or 0.091 EUR at the average exchange rate in 2017)*);
- **revenue from the sales of secondary resources (sales to processors of PET, glass and aluminum).**



Preparatory stage of implementation of the DRS

Currently the preparatory phase of DRS introduction has begun, within which the following is to be determined:

- legal framework for DRS introduction;**
- responsibilities and powers of the participants;**
- form and structure of the centralized management body;**
- the amount of deposit and fee for management;**
- mechanisms and terms of payment settlement between the DRS participants;**
- types of retail facilities, where collection of packaging from consumers will be arranged;**
- methods of package labeling.**

The term of the preparatory phase is up to 1.5-2 years.

The introduction of a DRS is expected by attracting an investor with experience in creating and operating such a system.



Terms and conditions of attracting investors in DRS development

Potential investors will be attracted in the DRS development by means of an open tender. It is intended that the major criteria for the evaluation of bids will include the qualification of the bidder and financial conditions of the investment return.

Investor shall have experience in the development and operation of similar systems in other countries.

Investments can be attracted for the following purposes (jointly or separately):

- development of collection points for deposit packaging in trade organizations and providing them with necessary equipment (RVM installation, as well as for manual collection by the personnel of trade facility);**
- development of centers for calculation of collected deposit packaging and its preparation for sales;**
- development of a logistical system for transportation of deposit packaging from the collection point to the calculation center and further sales of procured secondary resources;**
- development of a system of payment settlement between DRS participants;**
- at the initial stage financing of expenses of industry and importers, trade (a credit line for the current financing of deposit payments within 1-2 months, payments for the organization of deposit packaging collection, servicing of reverse vending machines, etc.).**



Terms and conditions of attracting investors in DRS development

To implement the project, the investor and the Republic of Belarus shall enter into an investment agreement. The terms and conditions of an investment agreement regulated by Decree of the President of the Republic of Belarus No 10 of August 6, 2009

It is proposed to structure the relations with the investor under the investment agreement according to the following scheme: Design – Build – Finance – Operate (DBFO).

Based on the provided necessary information and general requirements to DRS operation the investor shall independently perform the following:

- design the system for collecting deposit packaging from consumers (location, quantity and type of collection points), logistical and processing system for deposit packaging, the system of accounting and payment settlement within DRS;**
- finance and develop the designed system;**
- provide technical maintenance of the developed system and finance operating costs.**

It is proposed that the term of the investment agreement shall be no less than the service life of the main technological equipment (RVM).

Investment return and coverage of operating costs will be performed by means of regular payment by the DRS management body (CDRS) to the investor under specified terms. For example, the payment shall be transferred for each unit of the deposit packaging collected by the system in the amount determined and agreed by the parties in advance.



Assessment of the volume of investments in DRS

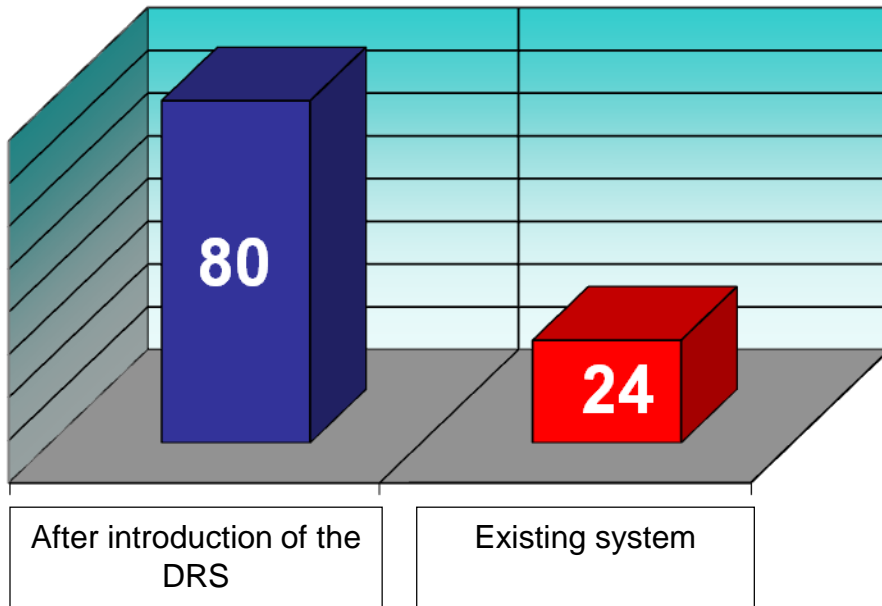
(million roubles /million euros)

	Size of investment
1. Establishment of a management body:	5.5/2.5
1.1. development and maintenance of the information management system	2.86/1.3
1.2. financing of the organizational structure (personnel, vehicles, computer equipment, preparatory activities)	2.64/1.2
2. Purchase of process equipment (reverse vending machines)	77 – 88/35 – 40
3. Development of collection infrastructure (calculation centres, warehouses, transport, logistics, process equipment, production facilities for equipment)	22 – 44/10 – 20
4. Financing of expenses of industry and importers, trade (a credit line for the current financing of deposit payments, payments for the organization of deposit packaging collection, servicing of reverse vending machines, etc.), including:	83.6/38
4.1. financing of deposit fees return to trade organizations at the initial stage (1-2 months)	30.8/14
4.2. working capital of trade organizations in the amount up to the moment of repayment of the CDS (from 1 to 2 months) of deposit payments to trade organizations	22/10
4.3. financing at the initial stage of waste management fees	7.7/3.5
4.4. Other costs (leasing of reverse vending machines, production areas for such machines, maintenance, staff wages, electricity, administrative Expenses)	23.1/10.5
Total	188.1 – 221.2/ 85.5 – 100.5



Basic characteristics of the deposit system for consumer disposal containers

% container return



Deposit system will not require budgetary financing and increase of MSW management tariffs

Deposit system will reduce volumes of landfilled recyclables and will increase volumes of recyclables collection by 10%

More than 80% of consumer disposal containers will be used in the economic turnover

Deposit system will reduce the cost of MSW sorting by more than 30% and will reduce investments into container facility by 15-20%



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