



Action in the government of the Russian Federation for establishment of treatment system for solid waste.

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Presented by:

Vladimir Maryev

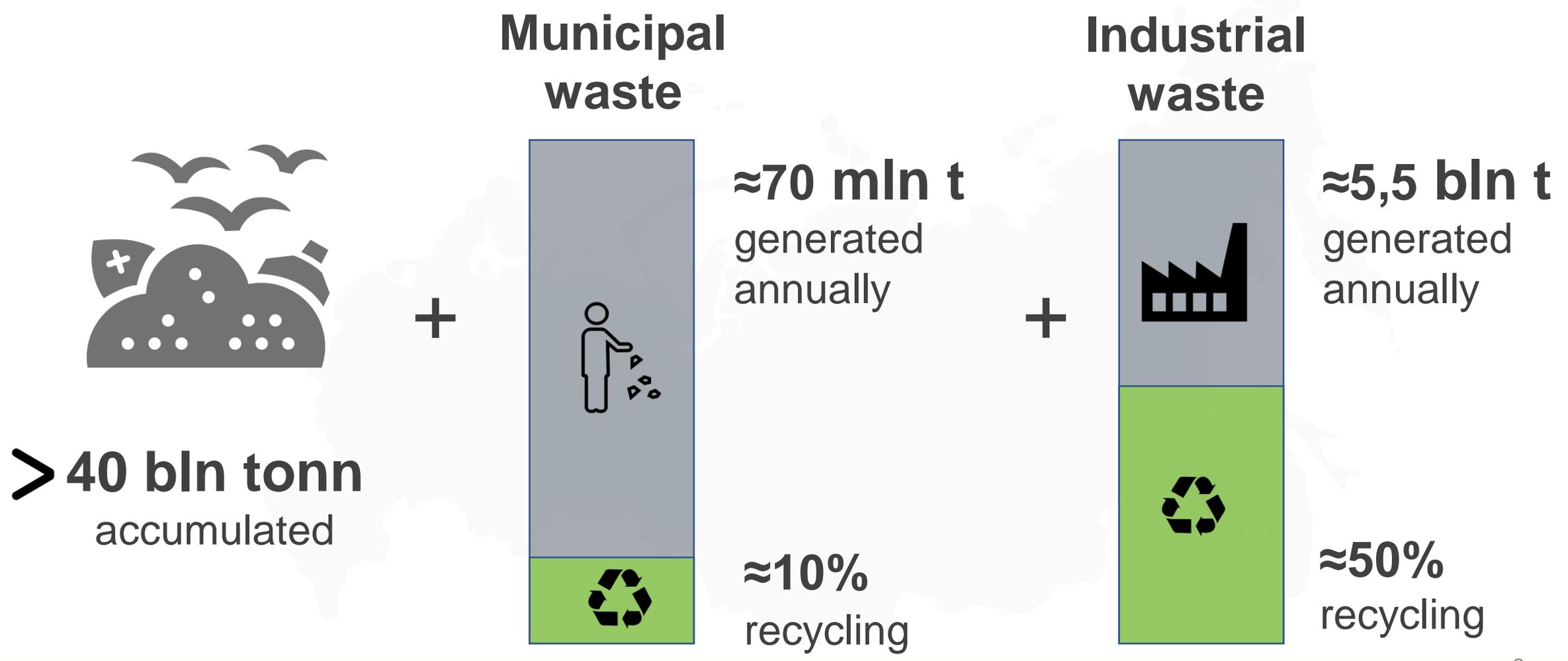
The Head of Waste and Resource Management Department of EIPC



Federal Institute "Environmental Industrial Policy Centre", Moscow, Russia



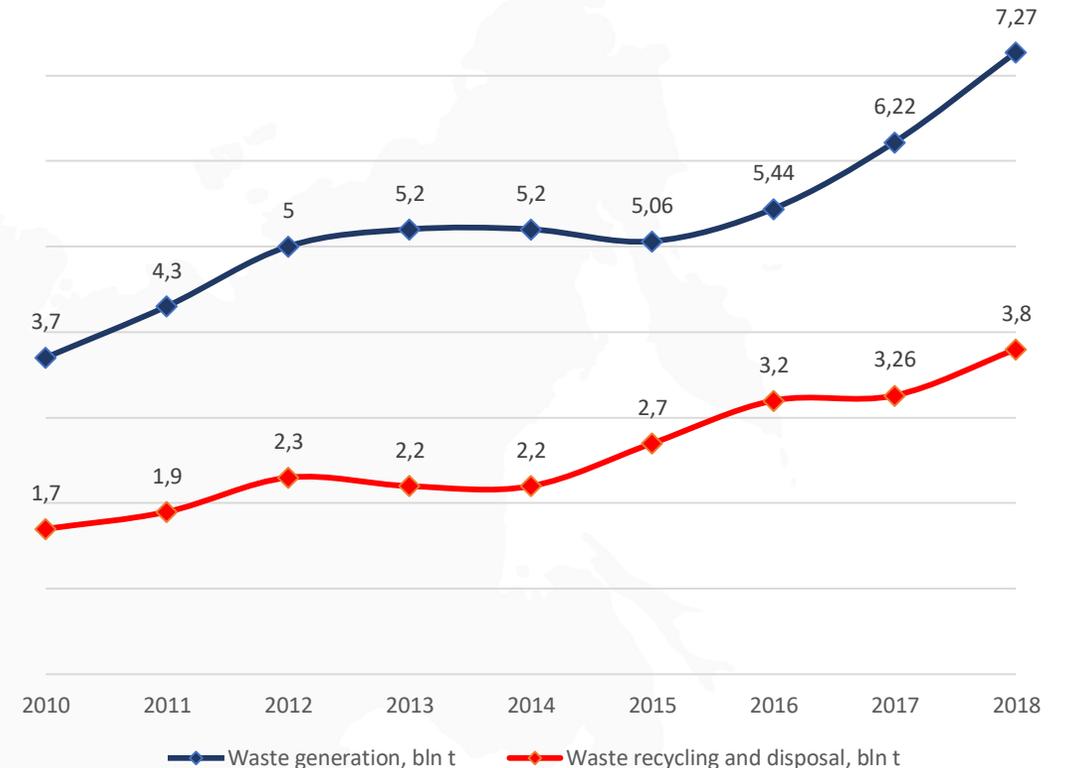
Waste generation in the Russian Federation





Challenges

- Waste generation keeps growing
- Most waste goes to landfill
- Lack of incentives for WM companies to sort and recycle waste
- Lack of technologies and modern equipment for waste recycling
- Imperfections of waste accounting information systems
- Ineffective management of WM industry





Measures and approaches

- Implementation of **territorial schemes of waste management** on the level of regions of Russia
- Implementation of legislation for **regional operator for MSW**
- Implementation of **EPR** in Russia
- **Prohibition of landfilling** of wastes that contain useful recyclable components
- Adoption of the **Strategy for the development of Waste Recycling Industry** up to 2030
- Assignments of the President of Russia for **sustainable waste management**
- Law for **Eco-Industrial parks** developed and introduced for adoption
- Law of **Secondary Material Resources** developed and introduced for adoption
- Developing a Plan for implementation of the **Strategy**
- **Separate collection of MSW** implementation

2015

2016

2017

2018-2019



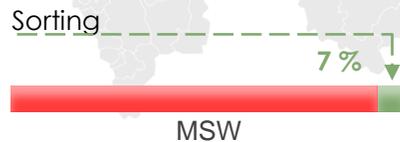
National Project "Ecology" (Adopted in 2018 by the Act signed by President)

Actual situation (2018 y.)

Unlegal landfills identified by
01.01.2018
191

Sorting plants (MSW)
~ 140

Eco-Industrial parks
0

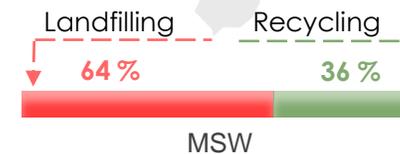
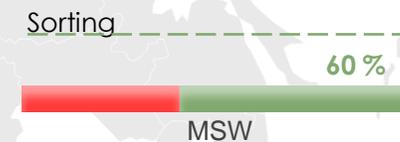


Perspectives (2024 y.)

Unlegal landfills identified by
01.01.2018
0

Sorting plants (MSW)
~ 300-350
(Annual input ~ 57 mln t MSW)

Eco-industrial parks
20

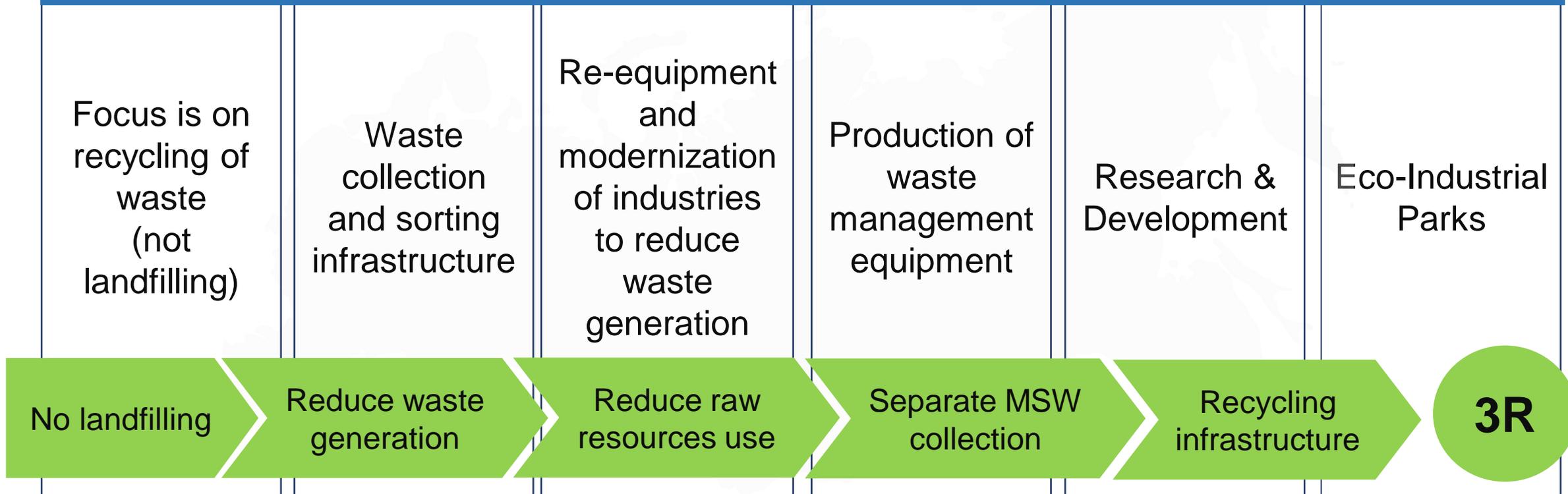




Strategy 2018–2030

Strategy for Development of Industry for Sorting, Recycling and Treatment of Waste for the period until 2030 (Order of the Government of the Russian Federation №84-r from 25.01.2018)

Fundamentally new priorities in waste management





Strategy 2018–2030

Strategy for Development of Industry for Sorting, Recycling and Treatment of Waste for the period until 2030 (Order of the Government of the Russian Federation №84-r from 25.01.2018)

	2018	2020	2025	2030
The amount of recycled materials in a total amount of waste	60%	65%	75%	86%
The amount of MSW sorted in a total amount of MSW	10%	15%	50%	80%
The reduction of waste generation	1.9%	1.8%	1.8%	3.7%
WM industry share in GDP of Russia	0.08%	0.09%	0.10%	0.11%
Number of Eco-Industrial Parks	4	12	30	70



Waste as potentially secondary resources in Russia

Name of waste	Annually generating, mln.t / cub.m	Useful fractions,%	Sphere for usage	Actual amount of usage mln.t/cub.m
Ash and slag (Generating power station)	25 ,0	100	Road construction, reclamation	2,0
Slag (ferrous metallurgy)	18,0	100	Construction, incl. road construction	7,0
Phosphogypsum	13,5	70	Construction materials	0, 135
Slag (non-ferrous metallurgy)	50,0	100	Cement production	2,0
Timber processing industry	200,0 (cub.m)	100	Alternative fuel, construction materials	40,0 (cub.m)
Worn tires	0,9	90	Road construction, sport fields, fuel	0,1
Municipal solid waste	60,0	90	RDF, secondary resources	3

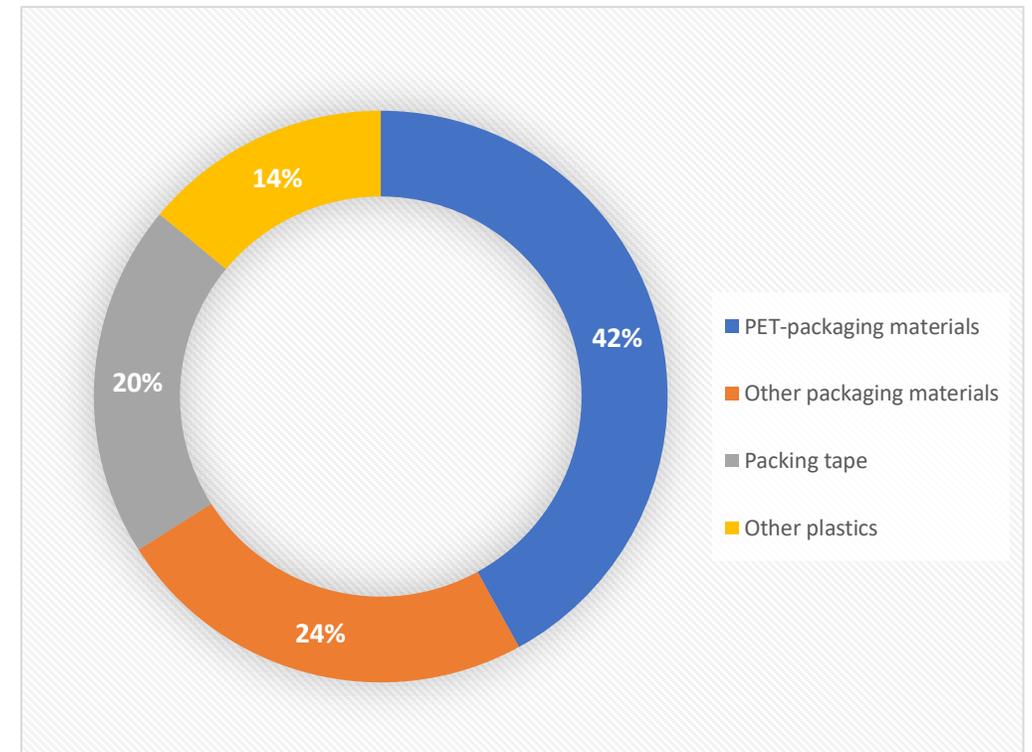


Situation with Plastic wastes in Russia

Key indicators of the plastic waste market

	2017
Resource potential, thousand tons	3600
Waste collection, thousand tons	450
Recovery factor, %	12
Output of recoverable resources, thousand tons	450
Export, thousand tons	12
Import, thousand tons	23

Current situation with plastic recycling





Life cycle of plastic wastes

Waste Collecting and sorting



Secondary resources



Production



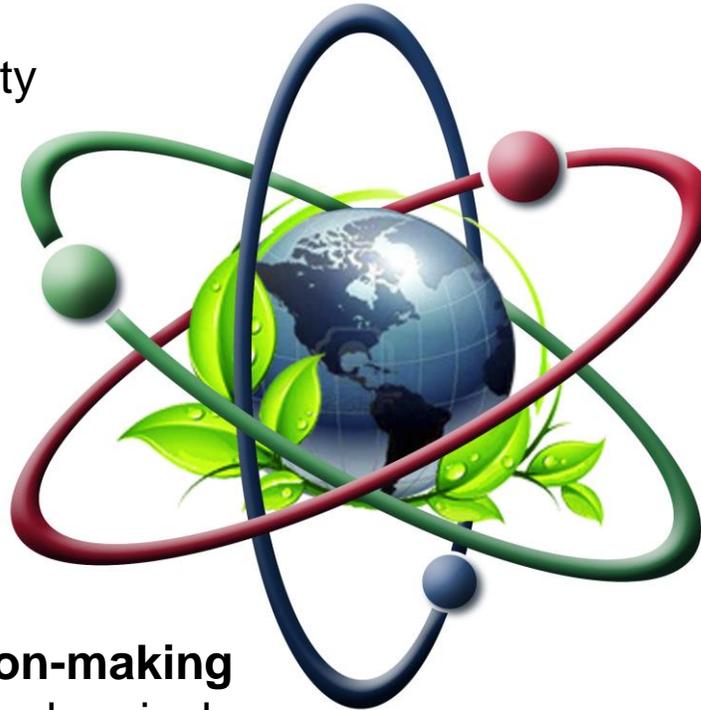
Low level of collecting plastic wastes
Lack of technologies to recycle
comprehensive plastic wastes



Federal Institute “Environmental Industrial Policy Centre”

EIPC - Scientific and Methodological Center

Consulting and analytical activity



Scientific and methodological activity

Expert and regulatory decision-making support in the field of handling chemicals, their mixtures, BAT, resource efficiency and waste management



Federal Institute “Environmental Industrial Policy Centre”

EIPC - International Cooperation Center

Development of **international cooperation** in the fields of

- regulation of **handling chemicals**, their mixtures, (chemical products),
- **BAT** implementation,
- implementation of **energy and resource efficient technical solutions**,
- solving problems of **efficient waste management**,
- introducing **closed-loop economics technologies** in various industries





Federal Institute “Environmental Industrial Policy Centre”

Ensuring the functions of an engineering center in the fields of

- implementation of **energy** and **resource efficient technical solutions**,
- application of **world best practices** to solve the problems of **efficient waste management**,
- implementation of **closed cycle economics projects**,
- reequipment and optimization of the object structure of **enterprises** in order to **improve environmental performance**

EIPC – Engineering Center





UNIFIED INFORMATION ANALYSIS SYSTEM

- Quick response to existing problems.
- Global information space.
- Data for regular analysis and monitoring.





UNIFIED INFORMATION ANALYSIS SYSTEM

Effective local waste markets development through enhancing connections and strong international cooperation

FOR

Governments

Helps in decision-making and market monitoring

Businesses

Increases market transparency

Waste processing facilities

Provides information about best available technologies and best environmental practices developing and implemented

R&D institutions

Assists in sharing experience and collaborative work

Market Associations

Provides information for market control and development



CONCLUSIONS

1. Countries worldwide have similar problems with waste due to trans - boundary pollutions and globalization.
2. Environmental Industrial Policy Center (EIPC) works on collecting and providing the implementation of the BAT/BEP for Waste management, including eco-industrial symbiosis for Russia.
3. Actually the environmental Law in the Russian Federation is changing and demands new methods and technologies due to high penalties and ecological levy.
4. Russia has a very rich resource – fundamental science of the Russian Academy of Science. The great potential of the Russian scientific and engineering centers and laboratories could be used to resolve the ecological problems in the world.
5. Only joint efforts of Governments, Business and Public organizations could save the Earth from the ecological catastrophe.
6. EIPC proposes to create the Unified Analyses System (worldwide ecological network) on the base of UNCRD web-portal. The possibilities of the UN services could be involved.
7. EIPC invites to cooperate to establish an eco-industrial symbiosis in the pilot region in Russia.

THANK YOU

WELCOME TO COOPERATION

Vladimir Maryev

The Head of Waste and Resource Management Department of EIPC

v.maryev@eipc.center



Research Institute Environmental Industrial Policy Centre,
Moscow, Russia