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Examples of “Socialistic Circular Economy”: waste management in the former Soviet Union

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Legislation

There was not a special law on WM.

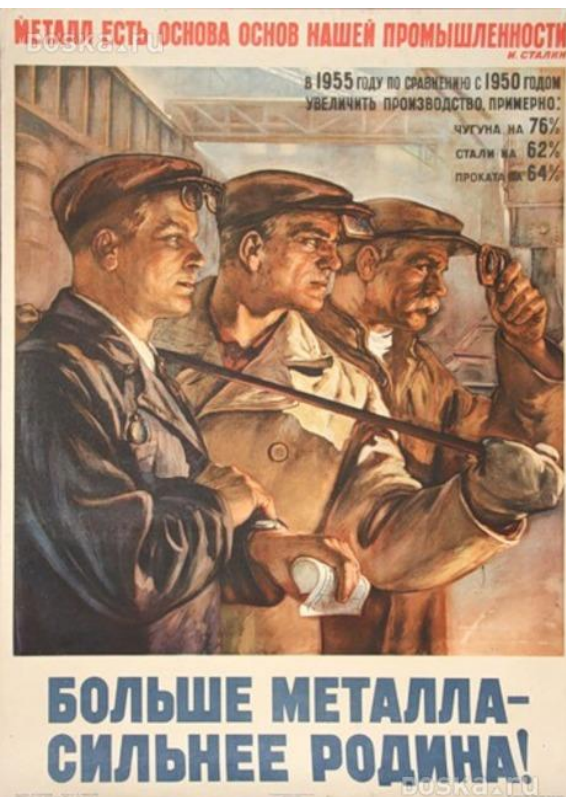
The legislation in the sphere of WM had focus on secondary raw materials, their collection and utilization, especially metals.

The first technical standard on development and design of landfills – 1977.

The first Cadaster of toxic waste -1987.

In the 1980s the first documents on municipal waste and sanitary maintenance of urban areas were developed and enforced.

Soviet statistics did not collect in-depth information on MSW management, and this field was given insignificant consideration



General scheme of municipal waste management

I Preparing the waste to loading into waste collector vehicles

II Organizing temporary storage of the waste in households

III Treatment and utilization of the municipal waste

Mixed waste was collected.

Organic waste and recyclables (glass, paper and cardboard, ferrous and non-ferrous metals) were collected separately.

Recyclables were not “waste”, they were calculated separately from MSW.

Most of waste was transported to landfills, and only insignificant part of it was treated (composting or burning).

Recycling

- Recyclables were collected by 4 departments (Glavk):
 - Glavvtorsyr'e (Ministry of light industry) – collection of recyclables in cities and working settlements;
 - Tsentrosoyuz – collection of recyclables in rural areas;
 - Glavvtorchermet (Ministry of Ferrous Metallurgy) – collection of recyclables at industrial enterprises and farms;
 - Glavtsvetmet (Ministry of non-ferrous Metallurgy) – collection of recyclables at industrial enterprises and farms.
- Only the system "Soyuzvtorglavresursy" of Gossnab in the 1980s included 527 enterprises of SRM and 5677 collecting points for recyclables from the population.
- The level of waste paper collection in the system was around 59 %, textile – 51 %, bones – 43 % of used tires – 31 %, glass – 90 %.
- Collection of recyclables from residents was organized through the usual collecting points, combination of collecting points and shops (points-shops) and HPU sites.

Instruments to support waste management hierarchy

- Effectively working system of collateral prices for glass
- Sale of stimulus (eg, “scarce”) goods in exchange for recyclables
 - For increasing public interest it was provided special exchange rate, depending on the amount of recyclables. So, if for the purchase of goods with price up to 50 kop. you should collected recyclables for the same amount; for goods up to 3 rubles you needed to collect recyclables on 1,5 rubles and so on
- Collection of waste paper in exchange for imaginative literature
- Bonuses and payments for participants of actions on waste paper and scrap metals collection, which was regulated by specific governmental resolutions.
 - It was spent more than 4 mln. rub. annually (1980) for payments on collected waste paper by students and schoolchildren and for awarding the winners of the all-union competition
- All-Union competition for Young Pioneer and Komsomol organizations on collection of paper was held. The motto of action was "Million to Motherland!"
 - Huge attention was given to the reporting about all-Union competition and promotion of the waste paper collection. Mass-media was involved into distribution of information: newspaper "Komsomolsky projector"; the broadcast "Pionersky signal" and etc. In addition, excursions to the paper plants and print shops for schoolchildren were organized; residents were informed through performances before the parents in the school.



Barriers and success factors for waste management performance

<i>Strengths</i>	<i>Weakness</i>
Propaganda, powerful information support of governmental decisions	Lack of an attention to the problem of waste, the lack of sound policy in this area
Trust and support of government by the public	Lack of environmental legislation
Huge resource, research and development, production and technical, administrative capacity	Institutional fragmentation and overlapping of powers
Huge area with different conditions	The rigid centralized and planned economy, the absence / lack of foreign investment, the lack of private business