

A retrospective on the national policy for municipal solid waste management in Israel 2007-2022

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March 2023

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Executive summary

In Israel, approximately 6 million tons of municipal solid waste are produced each year, which includes household waste, bulky waste, and commercial waste (hereinafter: "waste"). The regulator in the field is the Ministry of Environmental Protection (hereinafter: "the Ministry"), while the local authorities are responsible for the collection and disposal of the waste and bear the costs of the chain of its treatment.

The policy and regulation led by the Ministry of Environmental Protection in the years 2007 - 2022, including a levy on landfilling waste and separation of waste at source, were designed to promote the stated vision and goal of the Ministry - reducing landfilling. The policy and regulation led by the Ministry to achieve "zero landfill waste" had a cardinal effect on a variety of sectors, including the local authorities, industry, and the public in general. In particular, the changes in the regulation imposed on the local authorities, who as mentioned bear responsibility and ownership for waste treatment, a cost of hundreds of millions of NIS per year that are passed on to the public.

Despite the regulatory changes led by the Ministry, landfill rates in Israel have remained almost unchanged and from 2003 until today, almost 80% of the municipal solid waste in Israel is landfilled.

This work examined the national policy for the management of municipal solid waste in the years 2007-2022, the regulatory changes derived from it, the strategic plans formulated by the Ministry, the goals it set, and the actual results in the field.

Key conclusions

- The regulation did not lead to the achievement of the vision and goal of the Ministry of Environmental Protection, in the years 2007 - 2022 the landfill rate of municipal solid waste in Israel remained almost unchanged.
- The landfill levy and the arrangements for separating waste at source did not, in any way, promote the reduction of landfilling, and on the other hand, cost the local authorities and the public hundreds of millions of NIS per year.
- There is an urgent need to remove barriers to the establishment of waste management infrastructures and to preserve and protect the existing infrastructures.
- In the absence of end-of-life waste treatment facilities and demand for recycled products, sorting waste in the sorting facilities is not efficient.
- It is not possible to achieve the Ministry's goal of significantly reducing waste landfilling without facilities to recover energy from waste. The success of establishing such facilities depends on financial assistance from the government (which is available in the Maintenance of Cleanliness Fund), approval of planning and construction within

reasonable schedules, ensuring reasonable treatment costs for the local authorities (tipping fee), ensuring the supply of an appropriate amount of waste for the long term, ensuring adequate electricity rates with a sufficient horizon, and yes, selecting the location of the facilities to make them accessible to the waste supply and the consumers of heat and electricity (but far enough from NIMBY issues). Of course, the facilities must be constructed using Best Practice Technologies (BAT) and comply with Clean Air Act regulations.

- Separation at the source of organic waste, as far as it is implemented, should be carried out subject to the existence of suitable end solutions for the treatment of the separated organic stream and should focus on the business and institutional sector. The business and institutional sector has a size advantage compared to households and the waste is relatively homogeneous and of higher quality. Additional advantages are management under a business license and the economic incentive of an excess waste fee. In the future, these facilities will also be able to receive organic waste from households in areas where there is a built-in and efficient separation infrastructure (for example, neighborhoods/buildings established with such an infrastructure).
- Similar to organic waste, separation at the source of dry-recyclable materials should also focus on institutions, businesses, and industries, which have an advantage in terms of the quantity and quality of the materials.
- In-depth changes are required in the way the funds of the Maintenance of Cleanliness Fund are managed (collection, allocation, supervision of implementation, etc.).
- Any technological solution for waste treatment will be subject to BAT (best available technology) requirements and an emission permit, through the business license.
- Education and information should be promoted to reduce waste at the source. The perception of waste as a "resource", which the Ministry has promoted for years, is a negative incentive to reduce waste production, because the message is that waste is a valuable thing, while, in practice, there is no demand for waste and the costs of treating it, especially recycling and recovery, are very high. Therefore, it is essential and critical to reflect to the public that waste treatment involves very high economic and environmental costs.

Also, it is important to clarify the public discourse, the public does not "recycle" waste, the public separates waste. Recycling is an industry for all intents and purposes and recycling operations involve high economic and environmental costs. In households, the only cycle is if there is a composter in use.

- Future regulation in the field must be promoted in a joint dialogue and while forming joint agreements between the regulator and the local government, which is in charge of the collection and removal of the waste and bears the costs of its treatment, along with

the participation of key factors in the field of waste from the private sector/market, those in charge of implementing the policy in practice and the field.

- Objective studies are required in the field of waste treatment, which will enable informed and science-based decision-making.