



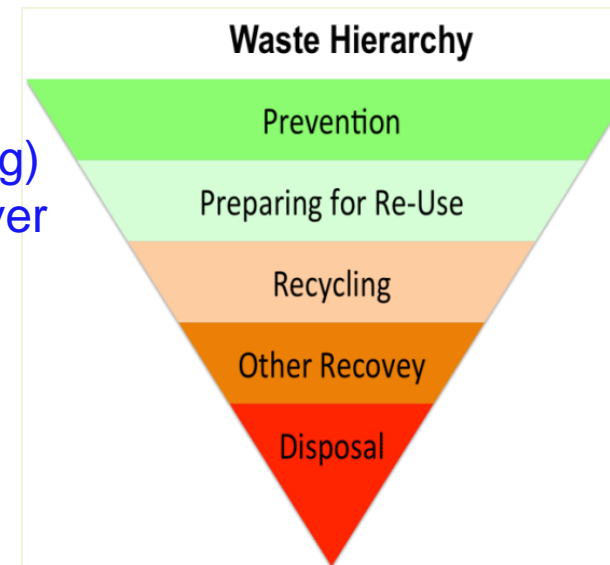
Ministry of Environmental Protection

ISRAEL WASTE MANAGEMENT

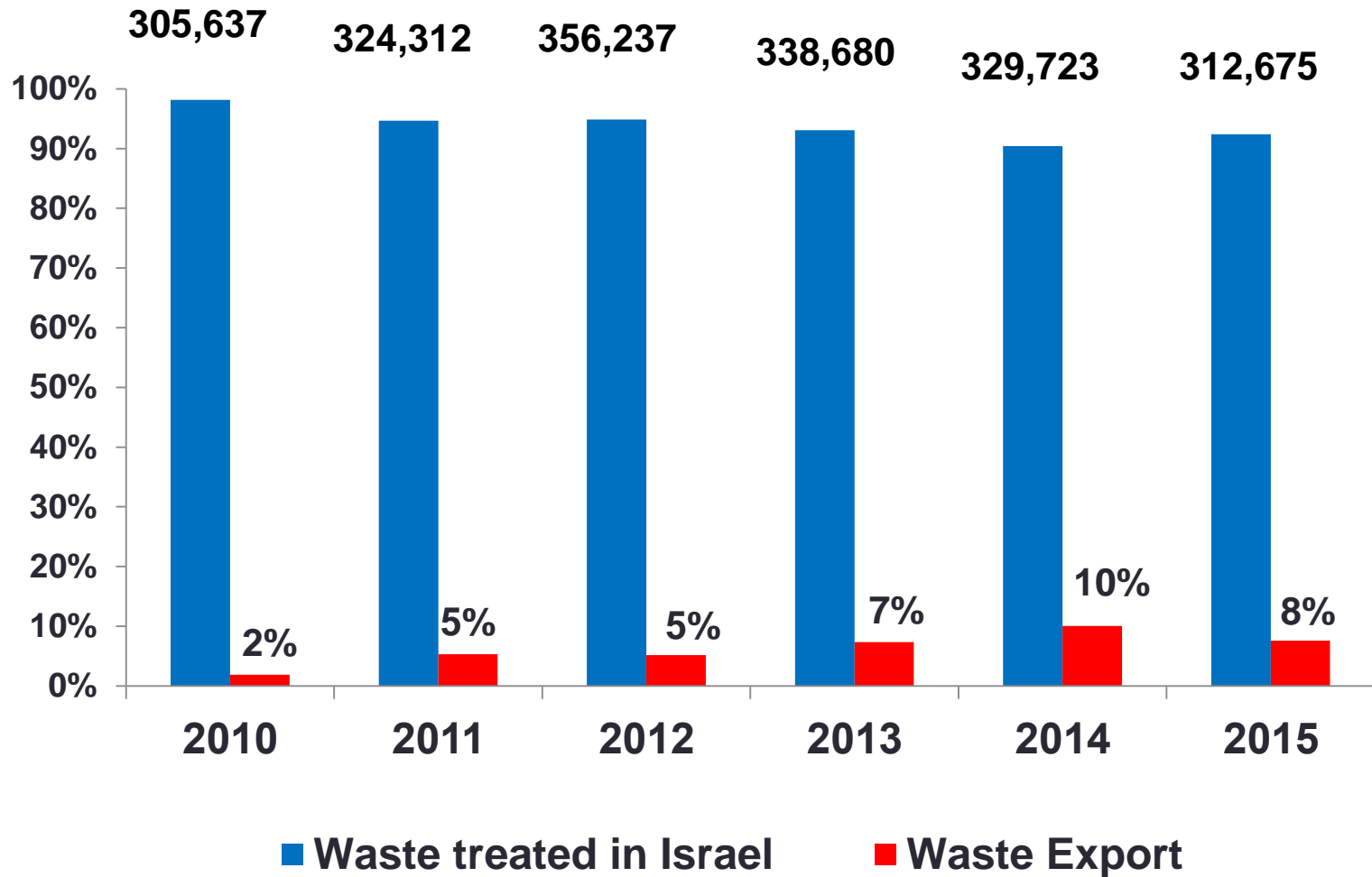
Yael Oren
Hazardous Waste unit

Disposal of Hazardous Waste, Regulations, 1990

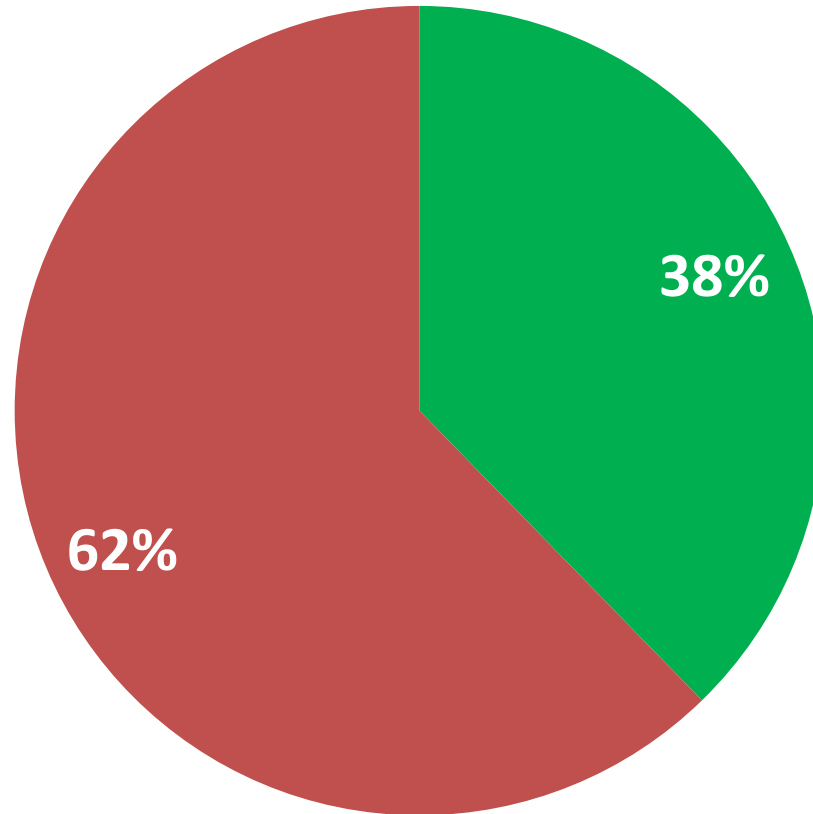
- Require the disposal of hazardous wastes at the treatment site in Neot Hovav (ESC - Environmental Services Company).
- Require owners of industrial plants to dispose of hazardous wastes as soon as possible, and within **six months** from the date of waste formation.
- Disposal elsewhere for the purpose of recycling, reuse or other reasons requires the prior approval of the Ministry of Environmental Protection.
- Promotion of new Hazardous Waste regulations:
 - updated definition of waste (European waste catalog)
 - preference for recycling and recovery treatments over disposal
 - requirements for waste treatment



Around 350,000 tons/year Hazwaste in Israel



Recovery & Disposal Waste 2015



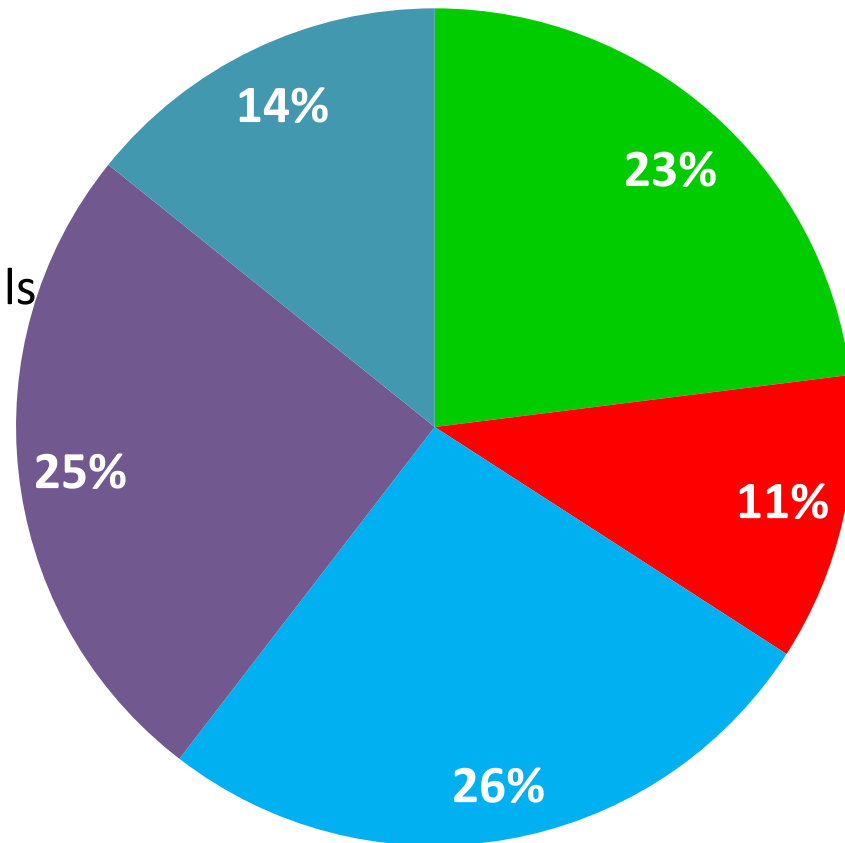
■ Waste to Recovery

■ Waste to Disposal



Recovery Treatments 2015

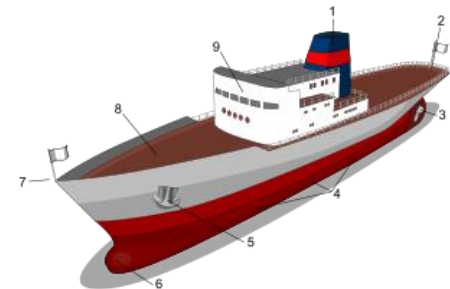
- Solvent Reclamation
- Used oil re-refining
- Energy Recovery
- Recycling/reclamation of metals
- Reuse & Other



Import and Export of Hazwaste –

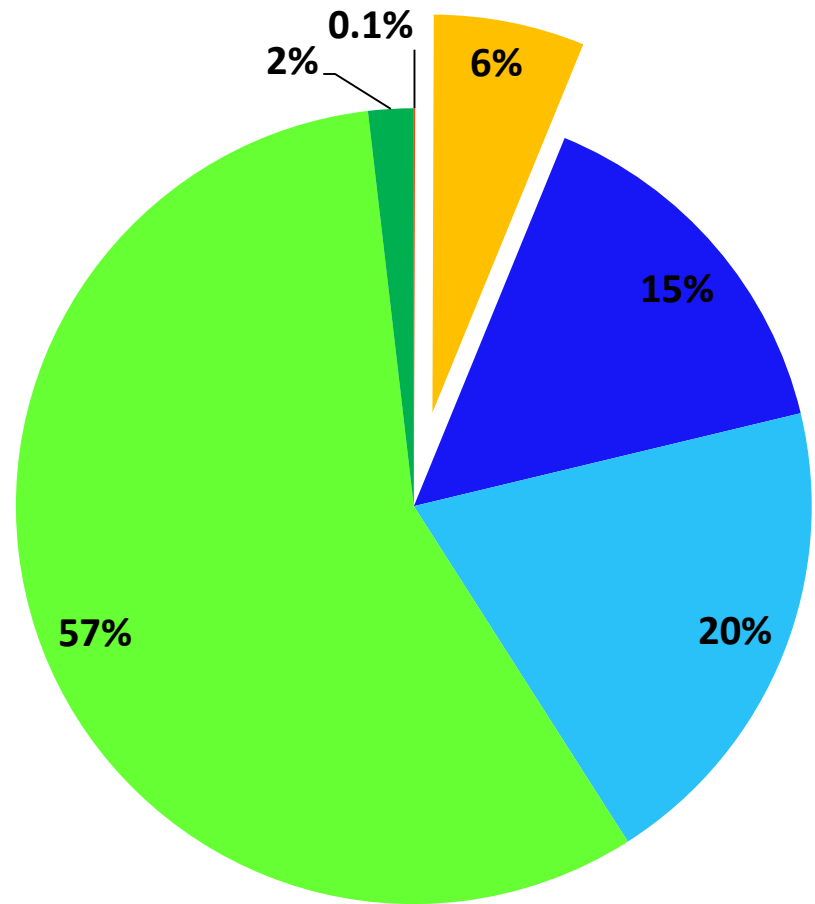
Hazardous Substances Regulations (Import and Export of Hazardous Wastes), 1994

- The legal basis for implementing the Basel Convention and OECD decisions and recommendations.
 - Basel Convention - Control of Transboundary Movements of Hazardous Wastes and Their Disposal. It was designed to reduce the movements of hazardous waste between nations.
- “Policy Document on Hazardous Waste Export”:
 - Export of waste is approved only in cases where there is no environmentally sound treatment available in Israel and only for recovery treatments.
 - Implementation of the Basel Convention “Ban Amendment,” according to which exports are made only to states which are members of the OECD, EC.



Export of Waste 2015

- Physicochemical Treatment D9
- Incineration D10
- Energy Recovery R1
- Recovery of Organic Materials R3
- Recycling/reclamation of metals R4
- Recovery of Inorganic Materials R5



Treatment Facilities

- ✓ One third (100,000 ton/year) - treated at the ESC (Environmental Services Company) central site for hazardous waste at Neot Hovav- landfilling (D5), incineration (D10/R1), Physicochemical treatment (D9)
- ✓ One third is treated by physicochemical technologies in several facilities (7)
- ✓ Another third go through recovery treatments at several facilities:
 - **Solvent reclamation (R2) (4 Facilities);**
 - **Metals recycling (R4) (3 Facilities);**
 - **Used oil refining (R9) (3 Facilities);**
 - **Energy recovery (R1) (cement kiln)**
 - **Reclamation of other inorganic materials (R5) (cement kiln)**
 - **Recycling of packaging, metal and plastic (R12/ R3, R4)- (6 Facilities);**
 - **Recycling of activated carbon (R7)**
 - **Regeneration of acids or bases (R6) (3 Facilities);**



Regulation and Permitting

Environmental permits for industry include:

- Hazardous material permit
- Air Emission permit
- Business license

All licenses include environmental conditions



Integrating licensing law (in the future)

Data Collection – Hazwaste Generation and Treatment

	PRTR Reports	Waste treatment facilities	Waste exporters
Number reporting	About 300	40	10
The legal source reporting requirement	PRTR Law	Conditions in a Hazardous material permit	Conditions in export/import permit
Frequency of reporting	Once a year – 31 March	Once a quarter	Once a quarter
Reporting process	Direct data entry information system	Excel files	Excel files

Data received from the treatment plants - every quarter

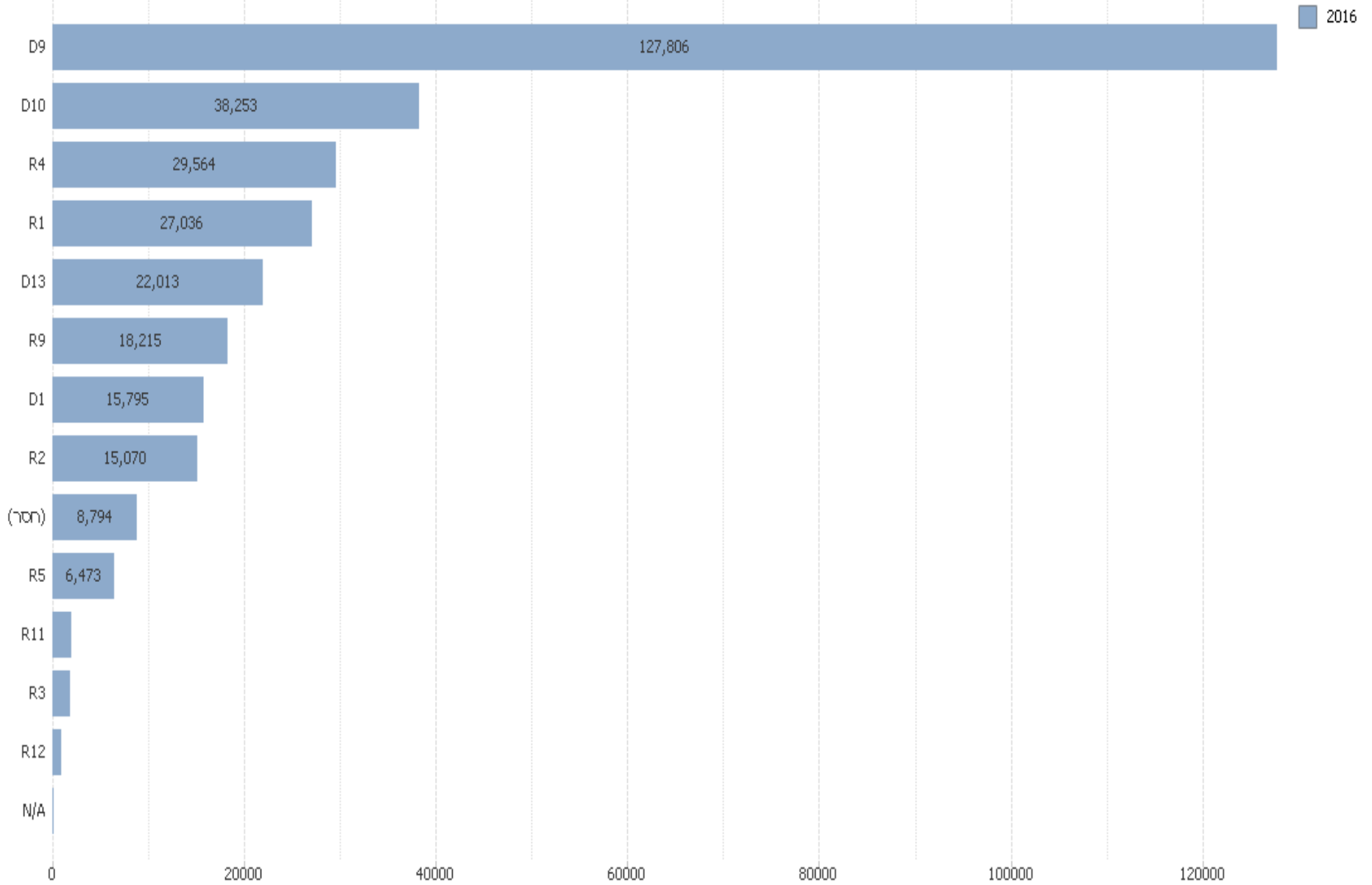
Waste Manufacturer	Code Y Basel Convention	Code A Basel Convention	European Waste list code	UN Class	H code Basel Convention	Facility/ treatment type	treatment code R/D Basel Convention	Amount (tons)
XYZ...	Y4.1	A3150	140602	3	H3		R4	0.7

דיווחי פסולת · דיווח רבעוני קליטת פסולת

⊕ מסמך חדש או גרור קבצים לכאן

🔍 חפש קובץ ... כל המסמכים

השנתה על-ידי	השנתה	שם	📄	✓
יעל אורן ■	13 מרץ 2017 ...	EMS דיווח 2016 רבעון 1	📄	
יעל אורן ■	22 מרץ 2017 ...	EMS דיווח 2016 רבעון 2	📄	
יעל אורן ■	28 פברואר 2017 ...	EMS דיווח 2016 רבעון 3	📄	
יעל אורן ■	05 אפריל 2017 ...	EMS דיווח 2016 רבעון 4	📄	
יעל אורן ■	01 אוגוסט 2017 ...	EMS דיווח 2017 רבעון 2	📄	
יעל אורן ■	28 פברואר 2017 ...	GES דיווח 2016 רבעון 2	📄	
עמרם ארזואן Amram Arzouan ■	16 מרץ 2017 ...	GES דיווח 2016 רבעון 3	📄	
יעל אורן ■	15 מרץ 2017 ...	GES דיווח 2016 רבעון 4	📄	
מעין שמש Maayan Shemesh ■	18 אוקטובר 2017 ...	GES דיווח 2017 רבעון 1 - קליטות	📄	
מעין שמש Maayan Shemesh ■	23 יולי 2017 ...	GES דיווח 2017 רבעון 2	📄	
מעין שמש Maayan Shemesh ■	14 ינואר ...	GES דיווח 2017 רבעון 3 - קליטות	📄	



Problems with the Existing Process

- Treatment Facilities have difficulty in preparing the files.
- Excel files need to be uniform in order for the BI system to read them.
- Certain overlap and double reporting with PRTR reports (Treatment plants report there as well)
- Unsuitable and inflexible BI system – difficulty in data processing.
- Lack of industry knowledge concerning waste classification and treatment facilities classification – Lack of uniformity.
- A need for the formation of uniform and permanent indicators for the yearly reports.

Suggested Process – IT system

- Receiving the waste data – directly from the IT systems of the treatment Facilities, without a need for file transfer or manual operation.
- Deleting parts of the double reporting requirements that treatment Facilities have (PRTR).
- Receiving data at a high frequency (once a week, daily).
- Option to correct the data according to the final waste routing.
- An IT system that includes complete information with an option to produce reports.

Suggested Process – Indicators and Preparation of Annual Waste Report

- Distribution of a manual to classify treatment Facilities.
- Distribution of a manual to classify waste according to the European Waste Catalogue.
- Provide training to treatment Facilities regarding correct data entry, classification of Facilities and waste
- Define indicators and guidelines for their preparation.
- Guidelines for preparing and publishing annual waste report.

Development of a hazardous waste IT system and industry portal

- **Prepare a baseline report** on data production and collection in the Israel.
- **Define a strategy paper** for establishment of an online portal;
- **Initiate a data QA/QC** for the hazardous waste data;
- **Define an online portal** to improve communications between industry and regulatory body (Ministry);
- **Invite/train** main stakeholders from industry and regulatory bodies for operationalizing the online portal;

Outputs to be Achieved

Baseline report prepared	March 2018
Quality of data improved and HW indicators are populated as well as factsheets are updated	November 2018
Report on training on hazardous waste data	September 2018
An online industry portal defined and established	February 2019
Report of beta testing of online portal	April 2019
Policy paper for future implementation of online portal prepared	Max 21 months By First Draft June 2019: By Final Draft September 2019

THANK YOU !

