Developing Effective National PCB Strategies

Case Study: REPUBLIC OF MOLDOVA

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CONTENT

Actions required to meet the 2025 and 2028 goals on PCBs elimination

A. Phase-Out of PCB Equipment (Goal: 2025)

1. Identification & Removal
2. Regulatory Framework
3. Enforcement & Compliance
4. Capacity Building for Identification & Testing
5. Inventory Development
6. Phasing Out & Interim Storage

B. Environmentally Sound Management of PCB Waste (Goal: 2028)

1. Regulatory Policies
2. Local Capacities & Treatment
3. Enforcement & Oversight
4. Funding & Sustainability
5. National PCB Management Plan

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CASE STUDY: REPUBLIC OF MOLDOVA

REGULATORY FRAMEWORK

International framework

Stockholm Convention

Basel Convention

National legal background

Law on waste no. 209/2016

Law on chemicals no. 277/2018

National regulatory framework

PCB Regulation (Gov. Decision nr. 81/2009)

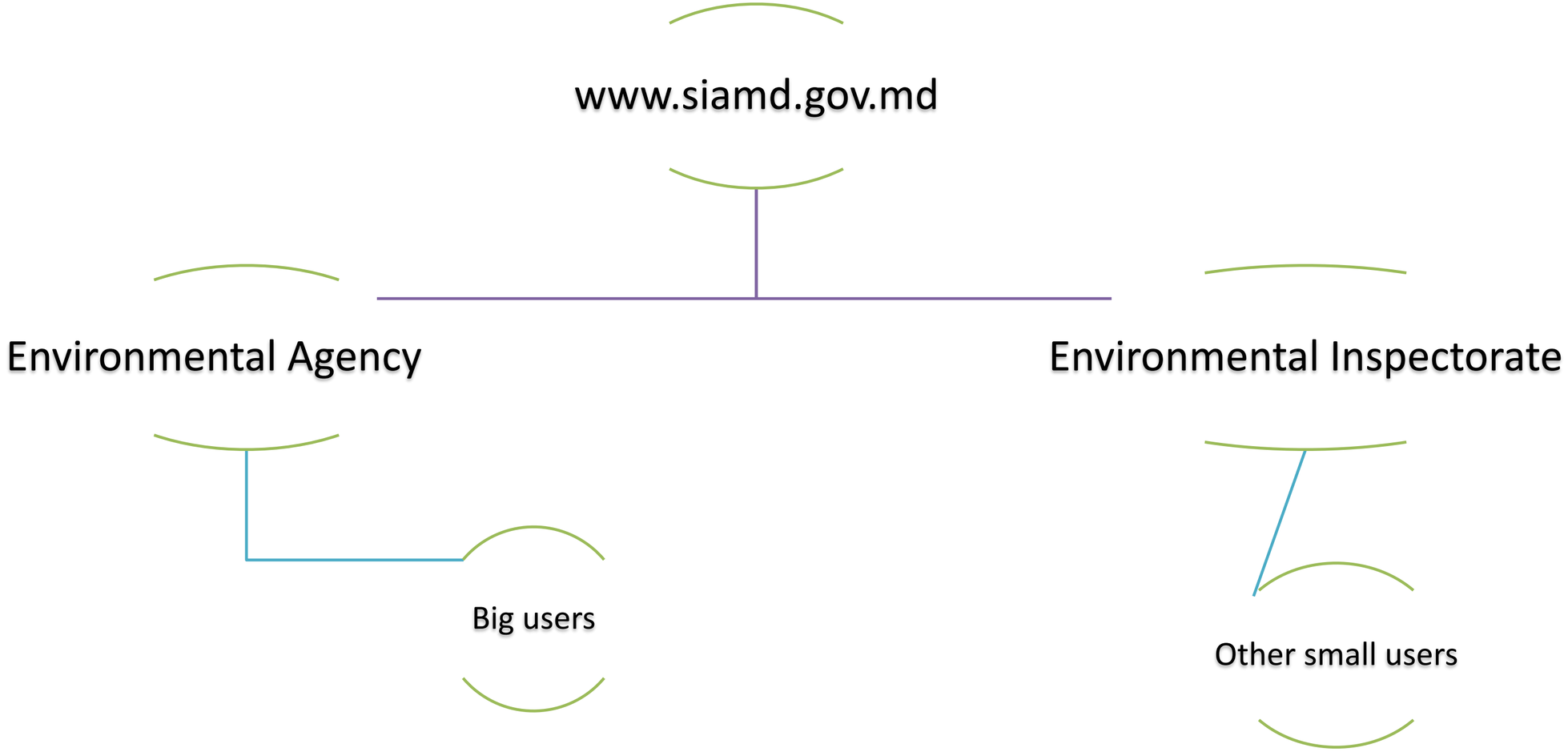
POP Regulation (Gov. Decision nr. 744/2024)

Waste shipment Regulation (Gov. Decision 411/2020)

Enforcement and control actions

- Establishing competent authority
- Establish reporting obligations and create reporting database
- Ensure regular trainings
- Develop laboratory capacities
- Ensure high level environment inspection and demotivating penalties

PCB equipment and waste reporting
Waste Management Information System



Training workshops for consumers and control and enforcement authorities

October 12, 2021, Chisinau

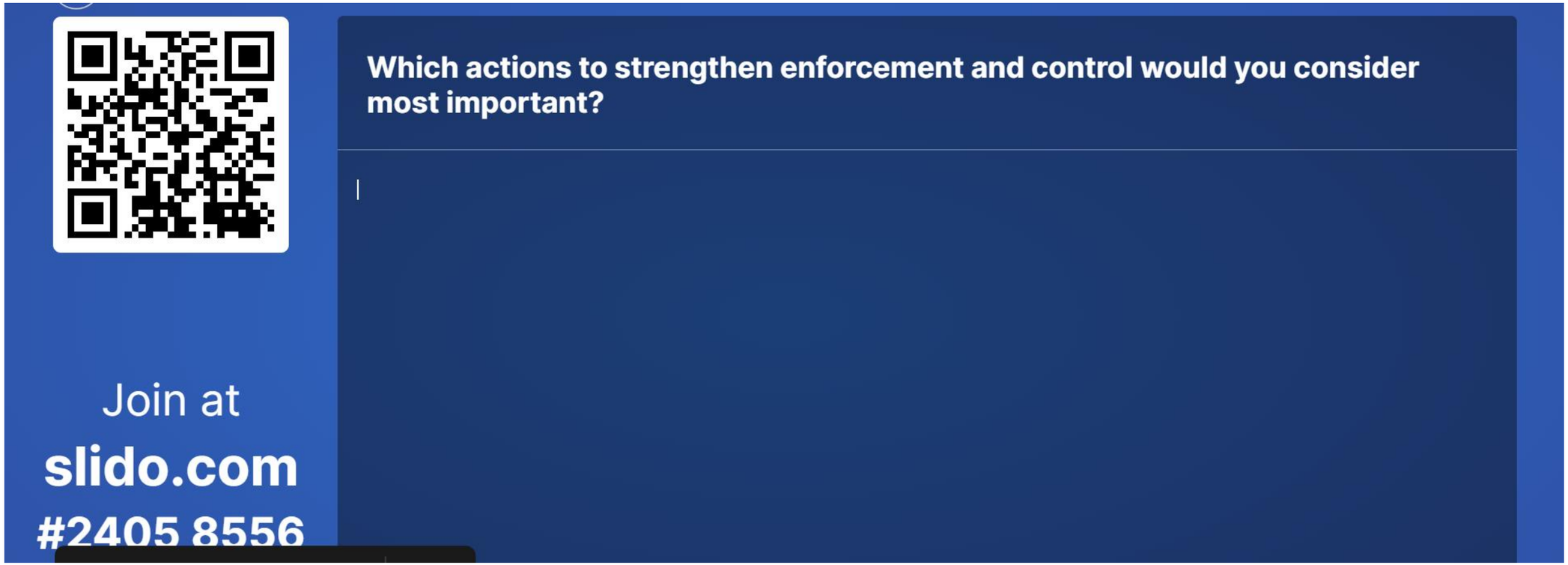
October 28 2021 town Glodeni

9 December 2021, Chisinau

7 December 2021, Chisinau

9-11 April, 2024, Slovakia

Joint technical visits



(ex: create national enforcement authority, strengthen capacities of environmental, health, energy, and customs authorities, develop enforcement tools: incentives, sanctions, electronic reporting, increase laboratory capacities, raise awareness and build capacity among equipment owners and workers…)

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Which actions from those mentioned in the previous reply would be most appropriate for your context?

PCB inventories

First national inventory in 2010-2014 (GEF project)
Second inventory and field visitis – 2020-2022 (NIP update project)

934 tons of equipment with PCB content managed (exported to Tredi (France).

Project Global clean-up in view of meeting the 2025 and 2028 goals regarding PCB under the SC (2024-2025)

Overall, in the inventory were included about 25 big and small users, among which energy supply and distribution companies, water and gas distribution, railway and other small users.

Assessing the resuslts of the previous inventories

Organize the inception workshop and launch the process

Developing field visits and sampling plan

Contacting the operators (phone, email, official letters)

Conducting field trips and sampling, filling in the form

Carry out the laboratory analysis – rapid screening

For selected samples- carry out GC analysis

Develop the phase out plan and validate during the final workshop


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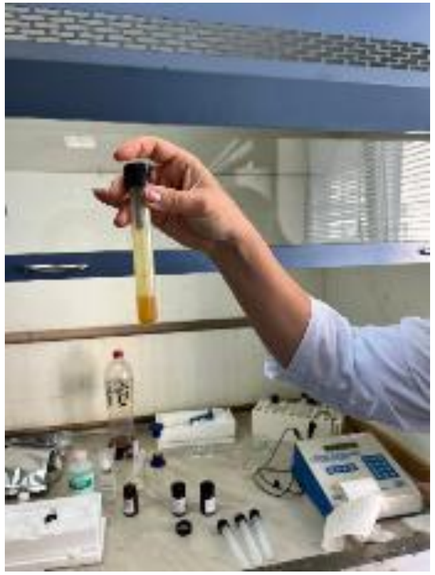
Laboratory capacities

Moldova – rapid testing



Romania – GC

CENTRUL DE TRANSFER TEHNOLOGIC

CTT - ECOIND

INSTITUTUL NAȚIONAL DE CERCETARE - DEZVOLTARE PENTRU ECOLOGIE INDUSTRIALĂ - ECOIND

Phase out plan

Export and disposal in environment sound manner

Moldelectrica – 140 capacitors
151,450 tons of equipment and
40,436 tons of oil, 1 barrel wiht oil - 1,3 tons

RedNord- 16 transformers
9,260 tons of equipment 1,787 tons of oil

Calea Ferată din Moldova (Railway) - 5 barrels with oil - 3.4 tons

Calea Ferată din Moldova (Railway) - 5 trnsformers 1,56 tons of equipment or 0.439 tons of oil

Moldovatransgaz SRL - 2 transformers, 0.435 tons of equipment and 0.109 tons of oil

Oil removal and disposal+ transformer flushing

Calea Ferată din Moldova –21 transformers 5.8 tons of equipment and 1.3 tons of oil

Apă Canal Chișinău – 17 transformers
30 tons of equipment and 7 tons of oil

Consumers –14 transformers , 19.3 tons of equipment and 4.7 tons of oil

Additonal inventory in 2025-2026

Consumers

Transnistria - potential of 100-150 tons of equipment

Lessons learnt

Accurate documentation of all PCB-containing equipment. Maintaining an updated database with details like equipment location, type, PCB concentration, and status (in-service or decommissioned) ensures traceability and helps in planning future maintenance or disposal.

Label equipment containing PCBs to prevent accidental use or mishandling. Under this inventory there was labelled the equipment from which samples were taken.

Establishing a standardized method for sampling, including following guidelines for equipment shut-down and personal protection, can prevent contamination of samples and ensure reliable test results.

For accurate and legally compliant results, using adequate laboratories for PCB testing is essential. This helps in obtaining reliable data and demonstrating compliance with regulatory standards

Lessons learnt

A centralized database allows for easier updates, real-time tracking, and analysis. Integrating sampling and maintenance records into this database helps identify aging equipment and set priority based on PCB levels or equipment condition.

Analyzing PCB levels across equipment can help anticipate future needs for replacement and inform budget planning.

Based on test results, action thresholds were established for interventions. For example, if PCB levels exceed certain regulatory limits, equipment require decommissioning or special handling protocols to minimize risks.

Based on inventory and testing data, a phased replacement plan was developed, along with budgeting and resource allocation.

Follow up

Develop the child project proposal under the Global Elimination Programme for PCBs

Updating NIP to include PCBs and new POPs

Preparing 6th national report (due 2026)

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Which challenges do you consider most critical for achieving the 2025 and 2028 PCB elimination goals?

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THANKS!

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