19th session of the Joint Task Force on Environmental Statistics and Indicators

Presentation of North Macedonia

Geneva, 3-4 November 2022
In terms of the management of chemicals, the Department deals with drafting opinions on requests for import/export of certain chemicals, as well as equipment containing dangerous chemicals. Also, the Department works on the management of certain groups of chemicals (substances that deplete the ozone layer, persistent organic pollutants, mercury) starting from the preparation of strategic documents to specific actions for monitoring, control, reduction and elimination of these groups of chemicals.
Strategic Approach to International Chemicals Management (SAICM)

- The SAICM initiative was adopted at the First International Conference on Chemicals Management on February 6, 2006.
- The goal of the initiative is to introduce sound management of chemicals in all phases of their life cycle so that chemicals are produced and applied in a way that minimizes their negative effect on people and the environment.
- Structure of the initiative:
  - Dubai Declaration on International Chemicals Management
  - A comprehensive political strategy
  - Global Action Plan
Strategic Approach to International Chemicals Management (SAICM)

Activities:

- National action plan as a roadmap for the introduction of actions for the safe management of chemicals in the development program of Macedonia
- Preliminary list of priorities
- National action plan - objectives, strategies and principles
- National Action Plans for the Implementation of SAICM, 2010

1. Strengthening the market control approach
2. Improving information about chemicals on the market
3. Improving chemical safety and health care of professionals and the general population exposed to chemicals
4. Strengthening in the application of good agricultural practices
5. Addressing high-risk locations that have occurred in the past/contaminated sites and storage facilities
Minamata Convention on Mercury

- **Purpose:**
  Protection of human health and the environment from anthropogenic emissions and discharges of mercury and mercury compounds.
- **National legislation**
  - Environmental Law
  - Chemicals Act
  - Occupational Safety and Health Act
- **Institutional Framework**
  - Ministry of Health
  - Ministry of Agriculture, Forestry and Water Management
  - Ministry of Environment and Spatial Planning
  - Customs Administration
  - Ministry of Economy
  - State Environmental Inspectorate
Minamata Convention on Mercury
Report of the initial assessment of the mercury situation in North Macedonia

Inventory of mercury in the Republic of Macedonia

✓ The most significant category in this inventory is "Waste disposal and wastewater treatment". This source contributed 45% of the total mercury releases or 1,476.8 kg Hg/year.

✓ The second most significant source of releases of mercury in the country is "Incineration and incineration of waste" with a total release of mercury of 382.90 kg Hg/g (12%), followed by "Extraction and use of fuels / energy" and "Production of recycled metals' with a release of 343.83 kg Hg/g (10%) and 299.91 kg Hg/g (9%) respectively.
Minamata Convention on Mercury
Report of the initial assessment of the mercury situation in North Macedonia

Inventory of mercury in the Republic of Macedonia

- 5.1: Extraction and use of fuels/energy sources
- 5.2: Primary (virgin) metal production
- 5.3: Production of other minerals and materials with mercury impurities
- 5.4: Primary (virgin) metal production (SWM process)
- 5.5: Consumer products with intentional use of mercury (whole life cycle)
- 5.6: Other intentional product/process use
- 5.7: Production of recycled metals
- 5.8: Waste incineration and burning
- 5.9: Waste deposition/landfilling and waste water treatment
- 5.10: Crematoria and cemeteries

Legend:
- Blue: 45.00% 1,476.8
- Yellow: 11.66% 382.90
- Green: 10.47% 343.83
- Purple: 9.14% 299.91
- Orange: 8.31% 282.93
- Red: 7.17% 235.47
- Beige: 3.12% 102.46
- Brown: 3.67% 120.46
- Gray: 1.46% 48.02
- Black: 0.00% 0

Statistics:
- 7.62% 255.39
- 3.12% 102.46
- 1.46% 48.02
- 0.00% 0
- 0.00% 0
- 0.00% 0
- 0.00% 0
- 0.00% 0
- 0.00% 0
- 0.00% 0
FOUR-FOLD SYNERGY SCHEME AND NATIONAL ACTION PLAN FOR IMPLEMENTATION OF FOUR-FOLD SYNERGY SCHEME AND SAICM

Responsible Institution: Ministry of Environment and Spatial Planning of the Republic of North Macedonia, Office of Nondegradable Organic Pollutants

- Document adopted in June 2022
- The main purpose of this document is to identify the priority activities for strengthening the institutions involved in the management of chemicals and waste, to help build the capacities to support increased coordination, synergy and cooperation at the national level for the implementation of the Basel, Stockholm, Rotterdam Convention, the Minamata Convention and the Strategic Approach to International Chemicals Management.
FOUR-FOLD SYNERGY SCHEME AND NATIONAL ACTION PLAN FOR IMPLEMENTATION OF FOUR-FOLD SYNERGY SCHEME AND SAICM

- At the same time, the conclusions of the GAP analysis of the existing Action Plan for synergistic and coordinated implementation of the Basel, Rotterdam and Stockholm Conventions will be taken into account in the framework of the report on the Assessment of the current status of the implementation of the Basel, Rotterdam and Stockholm Conventions in the RM(2014), the National Implementation Plan for the Reduction and Elimination of POPs in the Republic of Macedonia (2017), Report on the State of Chemicals Management (2010), Report on the Initial State of Mercury in the Republic of Macedonia (2018), the strategic documents prepared by the Ministry of Education, Culture and Science such as The strategy for sustainable development and other relevant documents.
IDENTIFICATION OF PRIORITY AREAS FOR THE IMPLEMENTATION OF THE NATIONAL PLAN FOR THE 4-FOLD SYNERGY SCHEME

Within the framework of the SAICM Project, a National Action Plan for the safe management of chemicals has been developed, which is based on five pillars, namely:

- Strengthening the control for access of chemicals to the market;
- Improving information on chemicals present on the market through the Global Harmonized System;
- Improving the safety of chemicals and protecting the health of the professional and wider population exposed to chemicals;
- Strengthening the application of good agricultural practices; and
- Addressing the problem of high-risk historical contamination: Contaminated sites and stored chemicals.
WASTE STATISTICS
LEGAL BASIS

National:
- Programme of Statistical Surveys (2018-2022)
- List of Waste Types (“Official Gazette of the Republic of Macedonia” No 100/2005)

EU:
WASTE STATISTICS
SURVEYS

- Annual survey on municipal waste
- Biennial survey on waste by sectors of economic activity (NACE Rev.2)

Observation units:
- The Municipal waste survey includes all business entities to which the municipality has granted the right to implement the mandatory public services of municipal waste collection and all business entities that are entered into the records of waste collectors at the Sate Statistical Office business register (NACE 38.12, sector E).
- About 80 units are covered in the Municipal waste survey
- The observed units within the biennial survey of waste by sectors of economic activity are all business entities/local units (with 10 and more employees) that generate, receive, deliver, treat and dispose waste and belong in the sectors A/A to U/P, according to NACE Rev. 2.
- About 1500 units are covered in the Municipal waste survey
# WASTE STATISTICS

## MUNICIPAL WASTE

<table>
<thead>
<tr>
<th>Reference period</th>
<th>Generated municipal waste (in tonnes)</th>
<th>Annual amount of municipal waste per person (in kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>713 564</td>
<td>349</td>
</tr>
<tr>
<td>2009</td>
<td>725 976</td>
<td>354</td>
</tr>
<tr>
<td>2010</td>
<td>721 507</td>
<td>351</td>
</tr>
<tr>
<td>2011</td>
<td>735 250</td>
<td>357</td>
</tr>
<tr>
<td>2012</td>
<td>786 909</td>
<td>382</td>
</tr>
<tr>
<td>2013</td>
<td>792 785</td>
<td>384</td>
</tr>
<tr>
<td>2014</td>
<td>765 156</td>
<td>370</td>
</tr>
<tr>
<td>2015</td>
<td>786 182</td>
<td>380</td>
</tr>
<tr>
<td>2016</td>
<td>796 585</td>
<td>376</td>
</tr>
<tr>
<td>2017</td>
<td>786 881</td>
<td>379</td>
</tr>
<tr>
<td>2018</td>
<td>854 865</td>
<td>412</td>
</tr>
<tr>
<td>2019</td>
<td>915 943</td>
<td>456</td>
</tr>
<tr>
<td>2020</td>
<td>913 033</td>
<td>452</td>
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<tr>
<td>2021(^2)</td>
<td>896 066</td>
<td>452</td>
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</tbody>
</table>
WASTE STATISTICS
WASTE BY SECTORS OF ECONOMIC ACTIVITY

• **Time series 2008-2020**
  2008 – Sector of manufacturing industry
  2010 – Sector of Mining and Quarrying
  2012 - Sector of electricity, gas, steam and air conditioning supply
  2014 – 2020 – All sectors according to NACE Rev. 2

• **Data sets reported**
  Amount of generated waste by NACE Rev. 2
  Amount of waste by waste categories (EWC-Stat)
  Amount of treated waste
## Waste Statistics
### Waste by Sector of Economic Activity

<table>
<thead>
<tr>
<th>Sector of economic activity</th>
<th>Generated waste</th>
<th>Non-hazardous waste</th>
<th>Hazardous waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1 488 218</td>
<td>1 070 042</td>
<td>418 177</td>
</tr>
<tr>
<td>Agriculture, forestry and fishing</td>
<td>126</td>
<td>126</td>
<td>-</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>521 259</td>
<td>109 085</td>
<td>412 174</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>519 617</td>
<td>517 391</td>
<td>2 227</td>
</tr>
<tr>
<td>Electricity, gas, steam and air conditioning supply</td>
<td>7 997</td>
<td>7 404</td>
<td>593</td>
</tr>
<tr>
<td>Water supply; sewerage, waste management and remediation activities</td>
<td>266 240</td>
<td>264 831</td>
<td>1 409</td>
</tr>
<tr>
<td>Construction</td>
<td>56 217</td>
<td>56 103</td>
<td>114</td>
</tr>
<tr>
<td>Wholesale and retail trade; repair of motor vehicles and motorcycles</td>
<td>99 167</td>
<td>98 789</td>
<td>377</td>
</tr>
<tr>
<td>Transportation and storage</td>
<td>1 701</td>
<td>1 688</td>
<td>13</td>
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<tr>
<td>Accommodation and food service activities</td>
<td>2 030</td>
<td>1 799</td>
<td>231</td>
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<tr>
<td>Information and communication</td>
<td>2 192</td>
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<td>Financial and insurance activities</td>
<td>144</td>
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<tr>
<td>Real estate activities</td>
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<td>-</td>
</tr>
<tr>
<td>Professional, scientific and technical activities</td>
<td>106</td>
<td>100</td>
<td>6</td>
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<tr>
<td>Administrative and support service activities</td>
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<td>721</td>
<td>-</td>
</tr>
<tr>
<td>Public administration and defence; compulsory social security</td>
<td>177</td>
<td>177</td>
<td>-</td>
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<tr>
<td>Education</td>
<td>2 562</td>
<td>2 562</td>
<td>-</td>
</tr>
<tr>
<td>Human health and social work activities</td>
<td>7 612</td>
<td>6 580</td>
<td>1 032</td>
</tr>
<tr>
<td>Arts, entertainment and recreation</td>
<td>281</td>
<td>281</td>
<td>-</td>
</tr>
<tr>
<td>Other service activities</td>
<td>70</td>
<td>70</td>
<td>-</td>
</tr>
</tbody>
</table>
WASTE STATISTICS
E-WASTE

Pilot project on E-waste (UN)

• Used tools for calculation of generated e-waste
• Used data from Department of Foreign trade for import and export of electrical and electronical products
• Used data from Industry department – PRODCOM for Domestic production
• Produced data series 2011-2021
• Results send to coordinator of the project
• Received feedback
In terms of the environmental dimension of development, the SDGs cover natural resource management, climate change, water-related issues, biodiversity and ecosystems, circular economy, environmentally sound management of chemicals and waste, and many other topics. Through regular statistical surveys, the SSO obtains data for calculating sustainable development indicators, which are related to the following goals:
Sustainable Development Indicators

6 CLEAN WATER AND SANITATION

11 SUSTAINABLE CITIES AND COMMUNITIES

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION
Sustainable Development Indicators

Goal 6. Ensure availability and sustainable management of water and sanitation for all:

• 6.1.1 Proportion of population using safely managed drinking water services
• 6.2.1 Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water

Goal 11: Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable:

• 11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities

Goal 12. Ensure sustainable consumption and production pattern:

• 12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP – Resource management
Sustainable Development Indicators

**Goal 13.** Take urgent action to combat climate change and its impacts:
- Net greenhouse gas emissions
- Net greenhouse gas emissions of the LULUCF sector

**Goal 15:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- 15.1.1 Forest area as a proportion of total land area

SSO provides data for calculation of other indicators for different goals.