

# National activities

Overview of data sources



**Jordan**  
**June 2, 2023**

# Jordan – Monitoring of the Sustainable development goals until 2030

Environment statistics are statistics that describe the state and trends of the environment, covering the media of the natural environment (air/climate, water, land /soil), the biota within the media, and human settlements. The departmental [website](#) provides data on environmental resources – mineral energy biological and water – and their uses:

## 2.1 [Mineral resources](#)

### 2.1.1 Inventory and change in mineral resources

- Table 1: Quantity of Production of Quarries and Mines products (2014-2021)
- Table 5: Production of Potash by kind (1995-2021)
- Table 6: Production of Dried Phosphate by Mine (1995-2021)

### 2.1.2 Production and trade of metals

- Table 4: Selected Imported Mineral Ores and Processed Materials (2014-2021)

## 2.2 [Energy resources](#)

- 2.2.1 Inventory and change in energy resources
- 2.2.2 Production and consumption of energy

## 2.5 [Biological resources](#)

- 2.5.1 Wooden Resources
- 2.5.2 Fisheries Resources
- 2.5.3 Plant production
- 2.5.4 Animal Production

## 3. [Residuals](#)

### 3.1. Emissions to air

- Table 1: Sectoral Distribution of GHG Emissions 2014

### 3.3.1 Waste generation (solid, liquid, electronic and electrical)

- Table 1: The proportional distribution of solid waste components (2014-2019)
- Table 2: Quantity of olive cake (left) extracted from pressing by governorate (2008-2021)
- Table 3: Quantity and type of electronic and electrical waste produced from sectors activities, by disposing method (2011-2021)
- Table 4: Quantity of solid waste generated from hotel and education activities by disposing method (2010-2021)
- Table 5: Quantity of solid and liquid residues resulting from industrial sector activities by kind and disposal method (2012-2021)
- Table 6: Quantity of solid wastes in the medical sector activity by category and method of disposal (2014-2019)

- Table 7: Quantity of solid wastes in the governmental sector activity by category and method of disposal (2020)

### 3.3.2. Management of waste

- Table 1: Quantity of municipal solid wastes collected by governorate and region and disposal method (2005-2020)
- Table 3: Per capita share of collected waste by governorate (2005-2020)
- Table 4: The amount of total solid waste received annually for landfills (2012-2021)
- Table 5: Quantity of waste exported, imported and re-exported (2005-2021)

### 3.4 Release of chemical substances

- Table 1: Imported agricultural pesticides by kind (1980-2021)

Other relevant information includes the following agricultural data:

- Number of [livestock](#)
- Area, average yield and production of [vegetables](#)
- Area, average yield and production of [field crops](#)
- Area, number, average yield and production of [fruit trees](#)

### Data availability for indicators 12.2.1, 12.2.2, 12.4.2, and 12.5.1

Information on indicator 12.2.1 *Material footprint* (including MF per capita and per GDP) is available from the [UNEP IRP Global Material Flows Database](#).

Information on indicator 12.2.2 *Domestic material consumption* (including DMC per capita and per GDP) is available from the [UNEP IRP Global Material Flows Database](#).

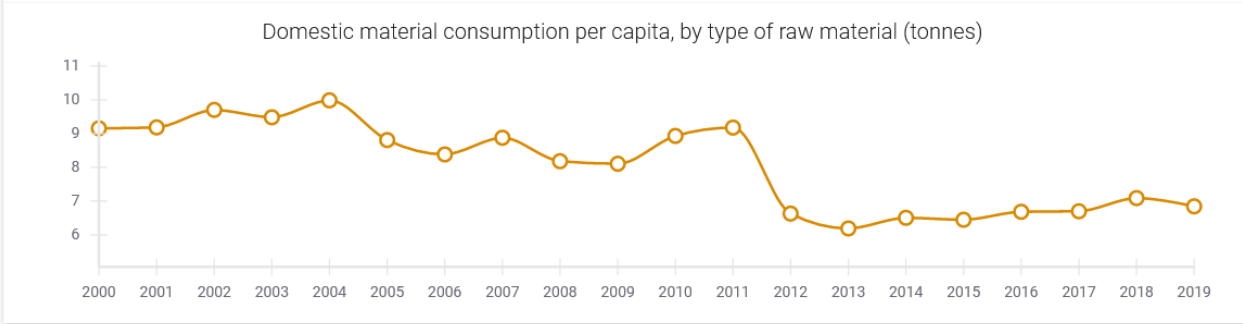
Data for indicator 12.4.2 *Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment*: The Department of Statistics has reported information to UNSD on hazardous waste generation.

Data for indicator 12.5.1 *National recycling rate, tons of material recycled*: The Department of Statistics has on waste generated and collected (see above). No information on recycling rate was identified.

Information on indicators 12.2.1, 12.2.2, 12.4.2, and 12.5.1 is also available in the UNSD country profile and the WERS Scorecard as shown below. The data in these dashboards are taken from national sources through instruments such as the UNSD/UNEP questionnaire or from international sources such as UNEP's International Resource Panel, Global Material Flows Database.

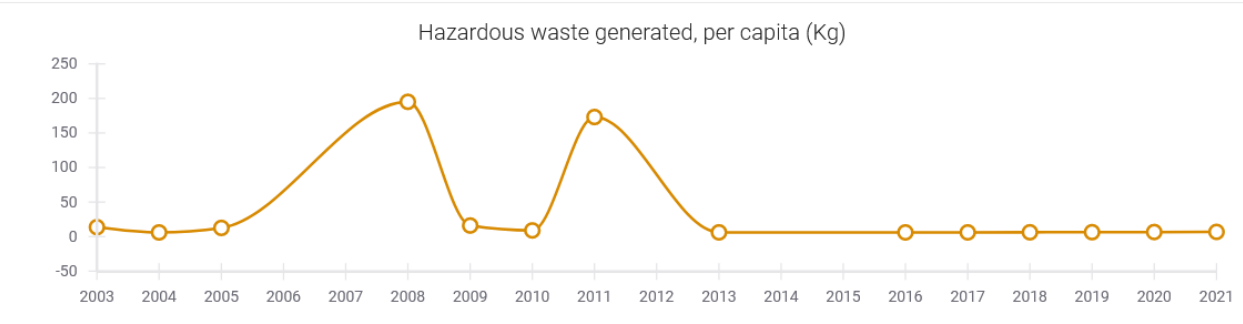
The following visualization is available in the UN Statistics Division's Country Profile for Jordan (<https://unstats.un.org/sdgs/dataportal/countryprofiles/jor#goal-12>):

Domestic material consumption decreased from **9.2** metric tons per capita in **2000** to **6.8** metric tons per capita in **2019**.



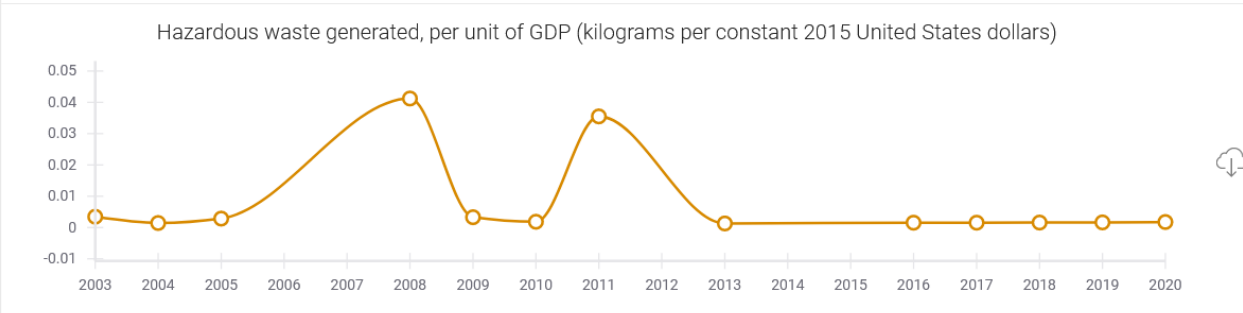
Data source: UNEP World Environment Situation Room ([WESR](#))

The quantity of hazardous waste generated per capita decreased from **13.6** kg in **2003** to **6.8** kg in **2021**.



Data source: Dept. of Statistics

In **2020**, the amount of hazardous waste generated for each dollar of GDP was **0.0** kg.



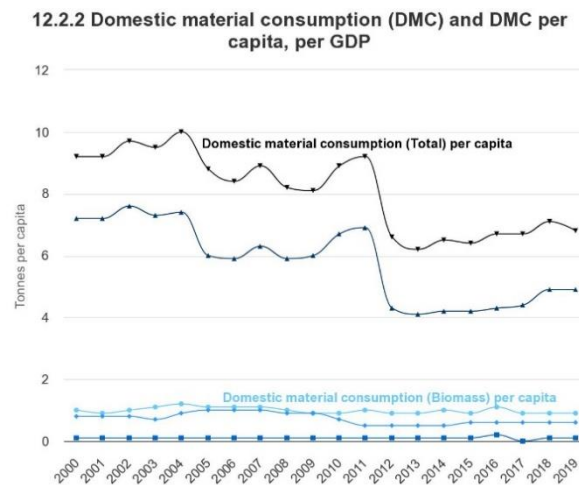
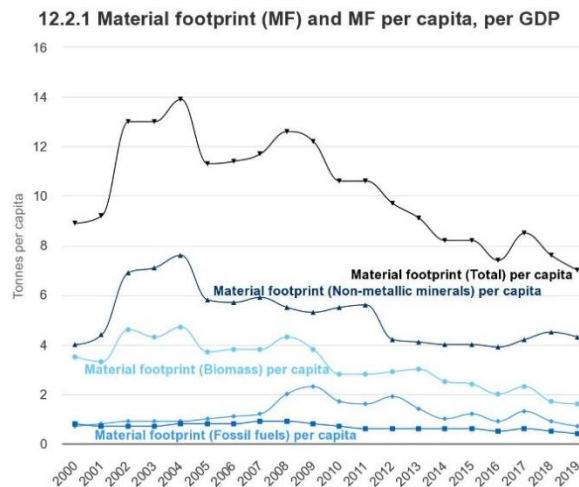
Data Source: Dept. of Statistics

The rate of hazardous waste treated or disposed declined from **100.0%** in **2003** to **68.5%** in **2021**.



Data Source: Dept. of Statistics

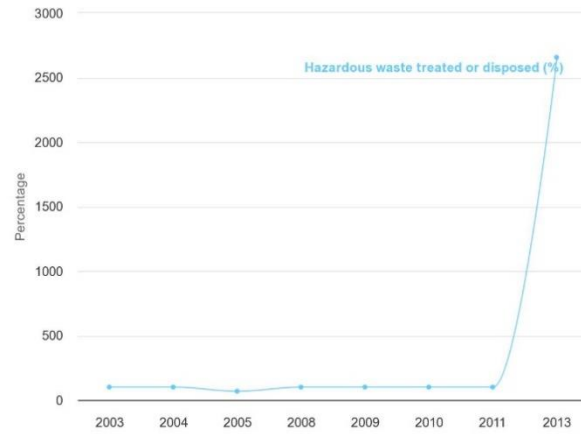
The WESR scorecard (<https://wesr.unep.org/scorecard/>) includes the following visualizations for Jordan:



12.4.2 (a) Hazardous waste generated per capita;



12.4.2 (b) proportion of hazardous waste treated, by type of treatment



12.5.1 National recycling rate, tons of material recycled



[Summary of data availability](#)

**a) Material footprint and domestic material consumption**

<b>Material category</b>	<b>Information needed</b>	<b>Data availability</b>
<p><b>Biomass</b> Material of vegetable origin extracted by humans and their livestock – crops, used crop residues, fodder crops, grazed biomass, wood, capture of wild fish, and the biomass of hunted animals.</p>	<p>Statistics on the production, import, export and use of agricultural crops, crop residues, wood, wild harvests (fishing, hunting, gathering of terrestrial and aquatic plants).</p>	<p>Department of Statistics Production of <a href="#">vegetables, field crops, fruit trees</a> <a href="#">Agricultural Food Balance Sheet</a>: Table 3: Quantity of Products  <a href="#">Fishing (Aquaculture fish / Marine fish)</a> Table 1: Value and Quantity of Marine Fish Production  Nationally reported data are also available in <a href="#">FAOSTAT</a> and <a href="#">FISHSTAT</a></p>
<p><b>Metal ores</b> Deposits of metal compounds in the Earth's crust which can be processed to produce desired metals at an economically viable cost. Only the portion of the excavated rock which is to be processed in some way to obtain the desired metals is included in the accounts. Data is compiled in three ore categories: iron,</p>	<p>Statistics on production, import, export of metallic ores. This includes information on ore type, ore grade, recovery rate, estimated total tonnage of Run of Mine (ROM) ore extracted, quantity of waste rock. This information may be collected from mine operators</p>	<p>Department of Statistics <a href="#">Environmental resources and their uses</a>: Mineral resources</p>
<p><b>Non-metallic minerals</b> "stone quarries and clay and sand pits; chemical and fertilizer mineral deposits; salt deposits; deposits of quartz, gypsum, natural gem stones, asphalt and bitumen, peat and other non-metallic minerals other than coal and petroleum."</p>	<p>Statistics on production, import, export of non-metallic ores  Data from official national statistical reports on consumption of cement, bitumen and bricks can indirectly indicate consumption of non-metallic minerals.</p>	<p>Department of Statistics <a href="#">Environmental resources and their uses</a>: Mineral resources</p>
<p><b>Fossil fuels</b> Includes coal and peat, crude oil, natural gas and natural</p>	<p>Statistics on production, import, export of fossil fuels</p>	<p>Department of Statistics <a href="#">Environmental resources and their uses</a>: Energy Resource</p>

Material category	Information needed	Data availability
gas liquids, and oil shale and tar sands.		
<p>Emissions to air Includes Emissions of greenhouse gases (Carbon dioxide (CO<sub>2</sub>), Methane (CH<sub>4</sub>), Dinitrogen oxide (N<sub>2</sub>O), Nitrogen oxides (NO<sub>x</sub>), Hydroflourcarbons (HFCs), Perflourocarbons (PFCs) Sulphur hexafluoride (SF<sub>6</sub>)</p> <p>Common air pollutants (Carbon monoxide (CO), Non-methane volatile organic compounds (NMVOC), Sulfur dioxide (SO<sub>2</sub>) Ammonia (NH<sub>3</sub>), Particles (e.g. PM<sub>10</sub>, Dust)</p> <p>Toxic pollutants (Heavy metals</p> <p>Persistent organic pollutants (POPs)</p> <p>Other emissions to air</p>	Annual quantities of pollutants emitted to air	Department of Statistics <a href="#">Residuals</a> : Emissions to Air - Table 1: Sectoral Distribution of GHG Emissions 2014
<p>Waste landfilled (uncontrolled) Waste refers to materials that are of no further use to the generator for production, transformation or consumption. Waste may be generated during the extraction of raw materials, during the processing of raw materials to intermediate and final products, during the consumption of final products, and in the context of other activities.</p>	<p>Total quantities of uncontrolled municipal and industrial waste produced per year</p> <p>In addition to the national environmental authority, sources of this information may include municipal governments and industries</p>	Department of Statistics <a href="#">Residual</a> : Generation of Waste- Management of Waste >> Table 1: Quantity of Solid Wastes
Emissions to water Substances and materials released to natural waters by human activities after or without passing wastewater treatment. It includes the following pollutants: Nitrogen	Information on outflows from municipal or industrial sewage treatment plants	Department of Statistics <a href="#">Residuals</a> : Generation and Management of Wastewater



Material category	Information needed	Data availability
(N), Phosphorus (P), Heavy metals, Other substances and (organic) materials, Dumping of materials at sea		
Dissipative use of products Materials that are deliberately dissipated into the environment such as organic fertilizer (manure), mineral fertilizer, sewage sludge, compost, pesticides, seeds, salt and other thawing materials spread on roads, solvents, laughing gas, and other materials.	<p>Agricultural statistics on sale or use of fertilizers, pesticides, seeds.</p> <p>For manure, an estimate could be based on the number of livestock</p> <p>Information on the use of lime (e.g. as a fertilizer in forestry)</p> <p>Information on compost</p> <p>Information on amount of salt or other materials spread on roads</p> <p>For data on non-methane volatile organic compounds solvents, information on use and emissions from paint application, degreasing and dry cleaning, chemical products manufacture and processing, and other sources. Information on use of laughing gas.</p>	<p>Department of Statistics Pesticides: <a href="#">Residuals</a> – Release of Chemical Substances Seeds: <a href="#">Agricultural Food Balance Sheet</a> – Quantity of products</p>
Dissipative losses Dissipative losses are unintentional outputs of materials to the environment resulting from abrasion, corrosion, and erosion at mobile and stationary sources, and from leakages or accidents. This includes abrasion from tyres, friction products, buildings and infrastructure, leakages (e.g. of gas pipelines), or from accidents during the transport of goods.	Abrasion from tyres, particles worn from friction products, such as brakes and clutches, losses of materials due to corrosion, abrasion, and erosion of buildings and infrastructure, dissipative losses from the transport of goods, and leakages during (natural) gas pipeline transport (if not reported as emissions to air).	None identified
Balancing items	For balancing items – input side:	None identified

Material category	Information needed	Data availability
<p>The oxygen demand of various combustion processes (both technical and biological ones), water vapour from biological respiration, and from the combustion of fossil fuels containing water and/or other hydrogen compounds. Also, flows of considerable economic importance such as nitrogen which is withdrawn from the atmosphere to produce fertilizer in the Haber-Bosch process or groundwater used in the production of beverages are accounted for as balancing items.</p>	<p>Oxygen for combustion processes</p> <p>Oxygen for respiration of humans and livestock; bacterial respiration from solid waste and wastewater</p> <p>Nitrogen for Haber-Bosch process</p> <p>Water requirements for the domestic production of exported beverages</p> <p>For balancing items – output side:</p> <p>Water vapour from combustion</p> <p>Water vapour from moisture content of fuels</p> <p>Water vapour from the oxidized hydrogen components of fuels</p> <p>Gases from respiration of humans and livestock (CO<sub>2</sub> and H<sub>2</sub>O), and from bacterial respiration from solid waste and wastewater (H<sub>2</sub>O)</p> <p>Carbon dioxide (CO<sub>2</sub>)</p> <p>Water vapour (H<sub>2</sub>O)</p> <p>Excorporated water from biomass products</p>	
<p>Material footprint and domestic material consumption</p>	<p>Not applicable</p>	<p>Information on Material Footprint and Domestic material consumption is available at <a href="#">UNEP IRP Global Material Flows Database</a></p>

## b) Waste indicators

Indicator: 12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment

Indicator	Information needed	Data availability
Hazardous waste generated	"the quantity of hazardous waste generated within the country during the reported year, prior to any activity such as collection, preparation for reuse, treatment, recovery, including recycling, or export, no matter the destination of this waste".	Department of Statistics <a href="#">Residuals</a> : Generation of Waste – Waste generation (solid, liquid, electronic and electrical)
Hazardous waste generated by type, including e-waste	A breakdown of hazardous waste generated by key type of waste, including e-waste, waste engine oils, Hazardous household waste, Healthcare waste	Department of Statistics <a href="#">Residuals</a> : Generation of Waste – Waste generation (solid, liquid, electronic and electrical)
Proportion of hazardous waste treated	The total quantity of hazardous waste treated = sum of quantities of hazardous waste treated, per each type of treatment (recycling, incineration with/without energy recovery, landfilling or other) + Exports - Imports. Proportion of hazardous waste treated = Quantity of hazardous waste treated ÷ Total quantity of hazardous waste generated	Department of Statistics <a href="#">Residuals</a> : Generation of Waste – Waste generation (solid, liquid, electronic and electrical) and Management of Waste
Hazardous waste intensity of production	= Quantity of hazardous waste generated ÷ Domestic material consumption	Domestic material consumption is available at <a href="#">UNEP IRP Global Material Flows Database</a>

### c) National recycling rate

Indicator	Information needed	Source
National recycling rate	Amount of waste generated, material recycled, material exported for recycling, material imported intended for recycling in the country Total MSW generated (t/day) Quantity of material recycled from MSW stream	Department of Statistics <a href="#">Residuals</a> : Generation of Waste – Waste generation (solid, liquid, electronic and electrical) and Management of Waste
Total Waste Generated (excluding construction, mining and agriculture) by type, including e-waste	Waste from manufacturing (ISIC 10-33) + Waste from electricity, gas, steam and air conditioning supply (ISIC 35) + Waste from other economic activities (excluding ISIC 38) + Municipal waste (excluding construction and demolition)	Department of Statistics <a href="#">Residuals</a> : Generation of Waste – Waste generation (solid, liquid, electronic and electrical) and Management of Waste
National recycling rate by type of waste	Waste streams can include e-waste metals (ferrous, non-ferrous) packaging waste	Department of Statistics <a href="#">Residuals</a> : Generation of Waste – Waste generation (solid, liquid, electronic and electrical) and Management of Waste
Waste intensity	Total waste generated ÷ Domestic material consumption	Domestic material consumption is available at <a href="#">UNEP IRP Global Material Flows Database</a>

## Stakeholders

### a) National Government Stakeholders

The [Department of Statistics](#) is part of the [Ministry of Planning and International Cooperation](#). Established in 1949, its functions include collecting, coordinating, analysing, and publishing statistical data in various demographic, social, and economic fields, as well as conducting public censuses in areas of population, housing, agriculture, industry and others.

- The Environmental Statistics Department in 1995 collects environmental data from various official sources to create a comprehensive compilation of national environmental information. It implements specialized environmental surveys to provide data on energy, water, waste and environmental expenditures and makes

recommendations to serve planners, workers, researchers and those concerned with the environment.

- The Division of Industry and Energy is one of the most important divisions in the Directorate of Economic Surveys. It oversees the implementation of surveys and statistical activities of the industry and energy sectors..

The [Ministry of Agriculture](#) [Note: the website only provided information on the Agricultural Credit Corporation]

The [Ministry of Environment](#) has five objectives: a) To protect & conserve the ecosystems; b) to prevent and reduce the negative impacts on the environment caused by pollution and climate change; c) to develop the capacities and anchoring the excellence culture; d) to raise public awareness and behavior change on environmental protection; and, e) to improve partnership with the private sector in priority sectors.

The [Ministry of Local Administration](#) is the technical, financial and administrative advisor for local councils. It supervises activities related to the local administrative issues of the municipal councils and coordinates the activities and plans of the councils, including the implementation of the national solid waste management strategy.

The [Ministry of Energy and Mineral Resources](#) is entrusted with administering and organizing the energy sector.

The [Ministry of Industry and Trade and Supply](#) includes in its function the regulation internal and external trade, monitoring it, and preparing studies and agreements that protect the interest of the country and its citizens.

## **b) Other stakeholders**

### **Municipal governments**

- Local councils

### **Industry**

- The Jordan Chamber of Industry ([JCI](#)) is a national body that includes all the industrial chambers in Jordan. It represents the interests of the chambers and promotes cooperation and coordination among them. JCI represents the industrial sector in various local and international fora to advance the national industry and improve its comparative and competitive advantages.