



UNSD/UNEP Questionnaire on Environment Statistics – waste

Environment Statistics Section
United Nations Statistics Division (UNSD)

Prepared for ninth meeting of the Expert Group on
Environment Statistics (EGES)

25-28 October 2022



Outline

1. **History and current context of this Questionnaire**
2. **“*burden once, use many.*” principle: Waste Section and ties to Sustainable Development Goal indicators; Climate Change Statistics, Environment Statistics**
3. **Consultations with countries and international stakeholders**
4. **Mix of supply and demand to inform progress**
5. **2020 collection cycle ex post remarks and analysis**



1. UNSD/UNEP Questionnaire on Environment Statistics



- Since 1999, UNSD has completed 10 data collections on water and waste data (usually biennially) from about 160-170 UN member states. Mandated by UNSC 28th session (1995); reinforced at 34th session (2003).
- [Questionnaires](#) are sent to National Statistical Offices and Ministries of Environment.
- Questionnaires are not sent to Eurostat and OECD members and candidate members. 170+ member states in previous years; about 163 member states in the 2022 collection cycle
- Response rate typically hovers around 50% (2018: 52%; 2020: approx.: 46%).
- No imputation, no estimation. No change in variables collected in 2022 compared to 2020. Instead, focus is more on boosting response rates, especially to those variables related to SDG indicators
- The current (2022) data collection is the 11th one. Thank you for your collaboration!



1. UNSD/UNEP Questionnaire on Environment Statistics: disseminated outputs

- **UNSD environmental indicators:** <https://unstats.un.org/unsd/envstats/qindicators> Time series, or most recently available data for selected variables provided by countries. Disseminated after completion of collection cycle.
- **Country files:** https://unstats.un.org/unsd/envstats/country_files Individual country data on water and waste. Disseminated periodically during collection cycle. Demand from key users to view Country files as soon as possible.
- **Country snapshots:** <https://unstats.un.org/unsd/envstats/snapshots/> Individual country data spanning many environmental themes.
- **Tailored queries:** Per solicitation from key users (often World Health Organization, UN Environment Programme, UN-HABITAT, academia).



2. Waste section and its many uses



United Nations Statistics Division (UNSD) and United Nations Environment Programme QUESTIONNAIRE 2022 ON ENVIRONMENT STATISTICS

Section: WASTE

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Guidance	Introduction, Steps to Follow, Description of Tables
Definitions	List of Definitions
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Table R2	Management of Hazardous Waste
Table R3	Management of Municipal Waste
Table R4	Composition of Municipal Waste
Table R5	Management of Municipal Waste — City Data
Table R6	Electronic Waste Generation and Collection
Table R7	Supplementary Information Sheet



Country:

City name:

Table R5: Management of Municipal Waste — City Data

Line	Category	Unit	2021
1	Total population of the city	1000 inh.	
2	Total amount of municipal waste generated	1000 t	
3	Percentage of city population served by municipal waste collection	%	
4	Municipal waste collected from households	1000 t	
5	Municipal waste collected from other origins		
6	Total amount of municipal waste collected (=4+5)		
7	Amounts going to: Recycling		
8	Composting		
9	Incineration		
10	of which: with energy recovery		
11	Landfilling		
12	of which: controlled landfilling		
13	Other, please specify in the footnote		

- Variables highlighted in yellow directly feed into Sustainable Development Goal indicator **11.6.1: Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal solid waste generated by cities**
- Custodian agencies: UN-HABITAT, UNSD
- Metadata [\[link\]](#)





Country:

Table R2: Management of Hazardous Waste

Line	Category	Unit	2021
1	Stock of hazardous waste at the beginning of the year		
2	Hazardous waste generated during the year		
3	Hazardous waste imported during the year		
4	Hazardous waste exported during the year		
5	Hazardous waste treated or disposed of during the year (=6+7+9+10)	tonnes	
6	<i>Amounts going to:</i> Recycling		
7	Incineration		
8	<i>of which: with energy recovery</i>		
9	Landfilling		
10	Other, please specify in the footnote		
11	Stock of hazardous waste at the end of the year (=1+2+3-4-5)		

- Variables highlighted in yellow directly feed into Sustainable Development Goal indicator **12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment**
- Custodian agencies: UNEP, UNSD
- Metadata [\[link\]](#)





Country:

Table R6: E-Waste Generation and Collection

Line	Category	Unit	2021
1	Total E-waste Generated		
<i>Amounts going to:</i>			
2	Large equipment		
3	Screens, monitors, and equipment containing screens		
4	Temperature exchange equipment (cooling and freezing equipment)		
5	Small E-waste (=6+7+8)		
6	<i>of which: lamps</i>		
7	<i>of which: small equipment</i>		
8	<i>of which: small IT and telecommunication equipment</i>		
9	Total E-waste collected	1000 t	
<i>Amounts going to:</i>			
10	Large equipment		
11	Screens, monitors, and equipment containing screens		
12	Temperature exchange equipment (cooling and freezing equipment)		
13	Small E-waste (=14+15+16)		
14	<i>of which: lamps</i>		
15	<i>of which: small equipment</i>		
16	<i>of which: small IT and telecommunication equipment</i>		

- Variables highlighted in yellow directly feed into Sustainable Development Goal indicator **12.4.2: Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment;** and
- **12.5.1: National recycling rate, tons of material recycled**
- Custodian agencies for both: UNEP, UNSD
- Metadata for 12.4.2: [\[link\]](#)
- Metadata for 12.5.1: [\[link\]](#)





Table R3: Management of Municipal Waste			
Line	Category	Unit	2021
1	Total amount of municipal waste generated		
2	Municipal waste collected from households		
3	Municipal waste collected from other origins		
4	Total amount of municipal waste collected (=2+3)		
5	Municipal waste imported for treatment/disposal		
6	Municipal waste exported for treatment/disposal		
7	Municipal waste managed in the country (=4+5-6)	1000 t	
8	Amounts going to: Recycling		
9	Composting		
10	Incineration		
11	<i>of which: with energy recovery</i>		
12	Landfilling		
13	<i>of which: controlled landfilling</i>		
14	Other, please specify in the footnote		

- Variables highlighted in yellow directly feed into Sustainable Development Goal indicator **12.5.1: National recycling rate, tons of material recycled.**
- Custodian agencies: UNEP, UNSD
- Metadata [\[link\]](#)



Use of Questionnaire data to apply to the Global Set of Climate Change Statistics and Indicators, and in turn, to a national Compendium on Climate Change Statistics

- Indicators such as those below would have underlying data reported in the Questionnaire:
 - **Municipal waste collected per capita**
 - **Proportion of population served by municipal waste collection**
 - **Proportion of municipal treated**
- Any effort undertaken in a country to compile a Compendium on Climate Change Statistics can have some data used to report to the Questionnaire. See collection of Compendia here:
https://unstats.un.org/unsd/envstats/climatechange_reports.cshtml

Government of Nepal
National Planning Commission
Central Bureau of Statistics
Thapathali, Kathmandu

CLIMATE CHANGE RELATED INDICATORS OF NEPAL

Climate change related indicators of Nepal

- GHG sources and drivers
- Climate extreme events and climate-induced disasters
- Impacts/L&D from climate extreme events and climate-induced disasters
- Exposure
- Sensitivity
- Adaptive capacity
- Mitigation capacity

August, 2022

Our atmosphere and climate 2020

New Zealand's Environmental Reporting Series

Ministry of the Environment Stats

The United Republic of Tanzania

NATIONAL CLIMATE CHANGE STATISTICS REPORT, 2019

TANZANIA MAINLAND

28 MARZO 2022

statistiche **report**

Istat Istituto Nazionale di Statistica

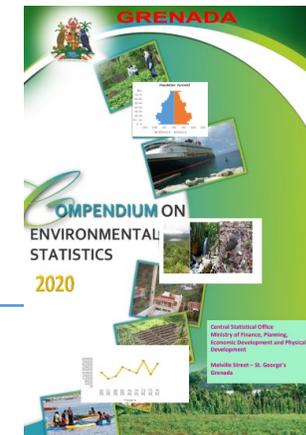
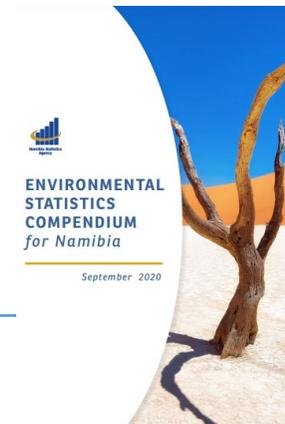
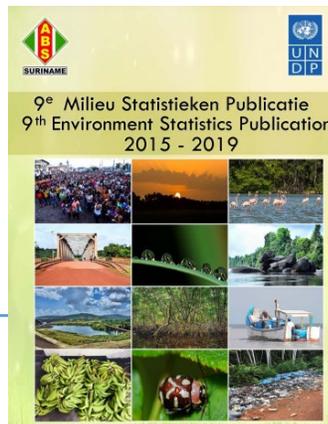
I CAMBIAMENTI CLIMATICI: MISURE STATISTICHE | ANNO 2020

Temperatura media in aumento nelle grandi città, sempre più diffusa la forestazione urbana

Use of Questionnaire data to apply to the Framework for the Development of Environment Statistics, and in turn, to a national Compendium on Environment Statistics

- Within the Framework for the Development of Environment Statistics, the Basic Set of Environment Statistics contained some 450+ statistics which countries can use as applicable when compiling a Compendium of Environment Statistics. Refer: <https://unstats.un.org/unsd/environment/FDES/FDES-2015-supporting-tools/FDES.pdf>
- **Sub-component 3.3: Generation and Management of Waste includes statistics such as: Waste generated by source; hazardous waste generated; municipal waste collected; municipal waste treated by treatment type**
- **Topic 5.1.2: Access to selected basic services includes statistics such as: population served by municipal waste collection.**
- Any effort undertaken in a country to compile a Compendium on Environment Statistics can have some data used to report to the Questionnaire. See collection of some 56 Environment Statistics Compendia here: <https://unstats.un.org/unsd/envstats/fdescompendia.cshtml>

FRAMEWORK FOR THE DEVELOPMENT
OF ENVIRONMENT STATISTICS (FDES 2013)



3. Consultations

with countries...

- Nature of questions asked by countries via [information sessions such as the one in Sep 2022](#)
 - Issue of the prohibitive expense of weigh bridges for measuring volumes of waste
 - How to classify e-waste; how to apply the International Standard Industrial Classification (ISIC); how ISIC can help compile System of Environmental-Economic Accounts – Waste Accounts

with international stakeholders...

- Teleconferences with UNEP and UN-HABITAT concerning SDG indicators within goals 11 and 12
- Comment on complementarity of methods for measuring data on municipal waste generation, collection and treatment at city level
- Consideration of including detailed breakdowns of food waste for measuring SDG indicator 12.3.1(b): food waste index.

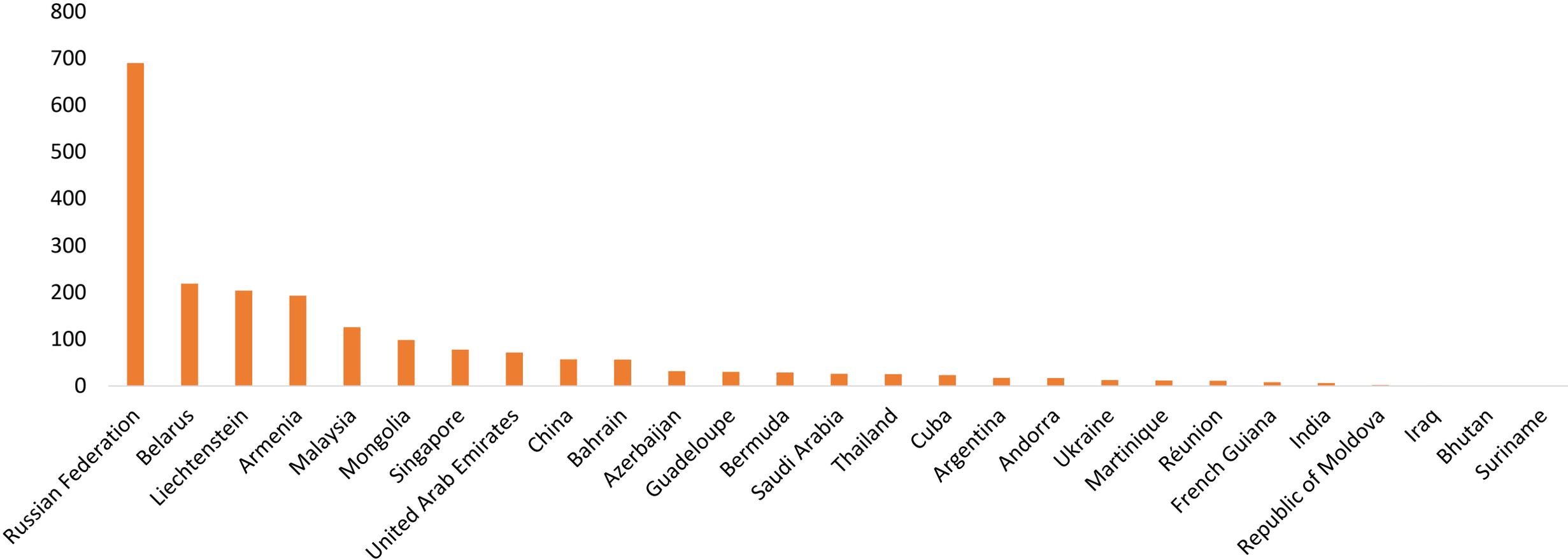
4. Mix of supply and demand of data to inform progress

- Often there is strong demand, and then very low or humbling supply of data for several years (electronic waste disaggregated variables (small e-waste; lamps; IT and telecommunications equipment.) Some e-waste variables have only been collected once (in 2020) and are again included in the 2022 data collection.

5. 2020 collection cycle ex post remarks and analysis (SDG indicator 12.4.2)

Hazardous waste generated per capita (kg), 2019 (30 countries have available data)

Source: Data provided by countries to UNSD. Details and footnotes, refer: <https://unstats.un.org/unsd/envstats/qindicators> (footnotes may explain anomalies)

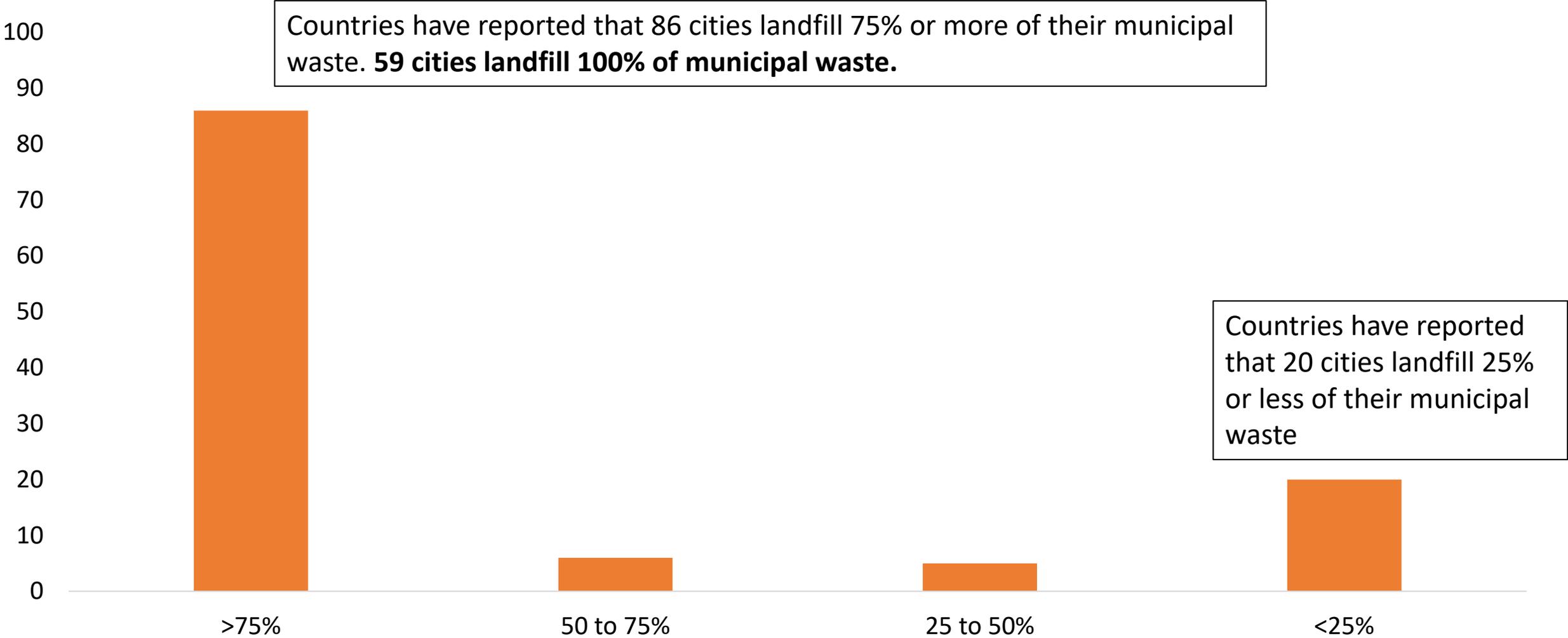


Also Kazakhstan: 9,730 kg per capita

5. 2020 collection cycle ex post remarks and analysis (SDG indicator 11.6.1)

Count of cities by % of municipal waste landfilled (year varies)

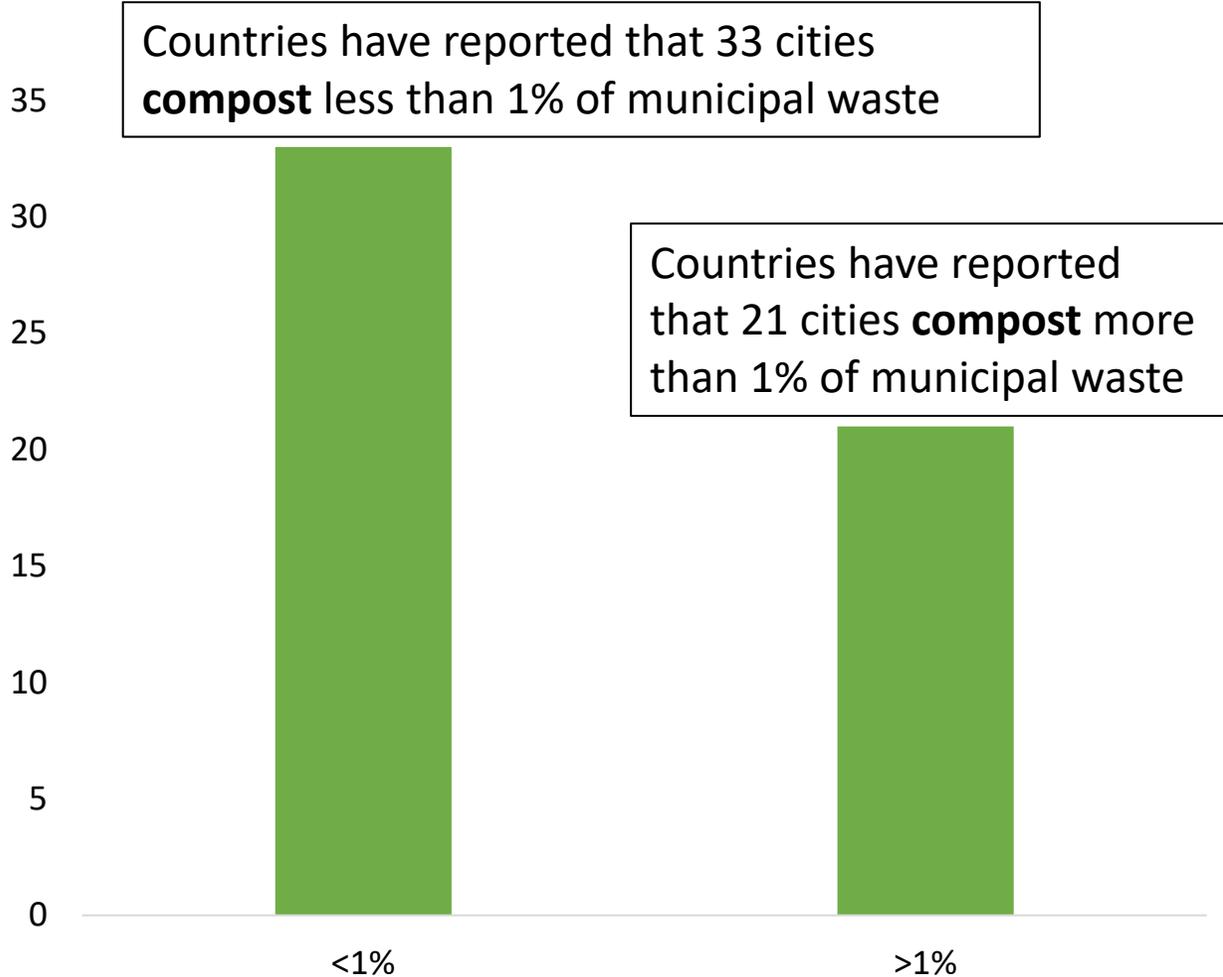
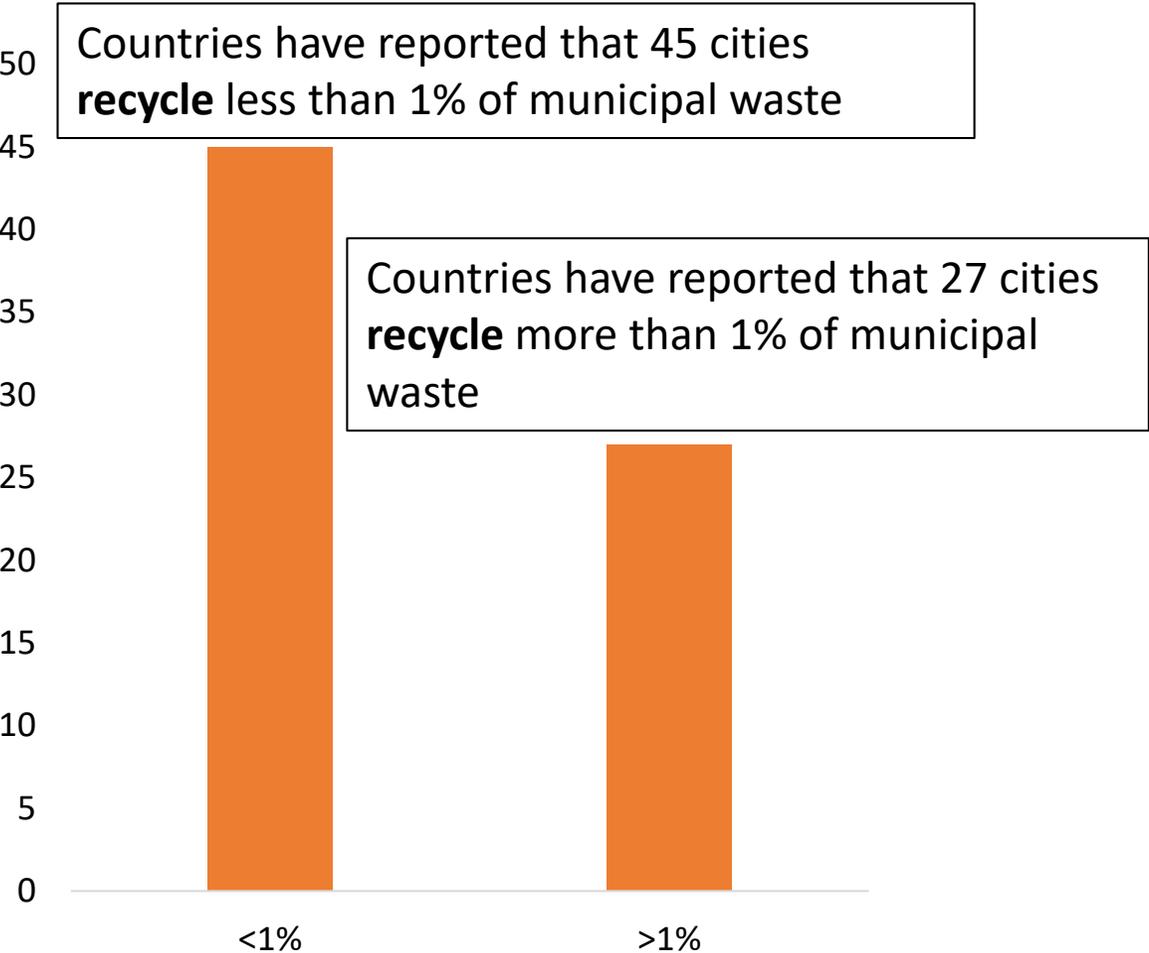
Source: Data provided by countries to UNSD. Details and footnotes, refer: <https://unstats.un.org/unsd/envstats/qindicators> (footnotes may explain anomalies)



5. 2020 collection cycle ex post remarks and analysis (SDG indicator 11.6.1)

Count of cities by % of municipal waste recycled and composted (year varies)

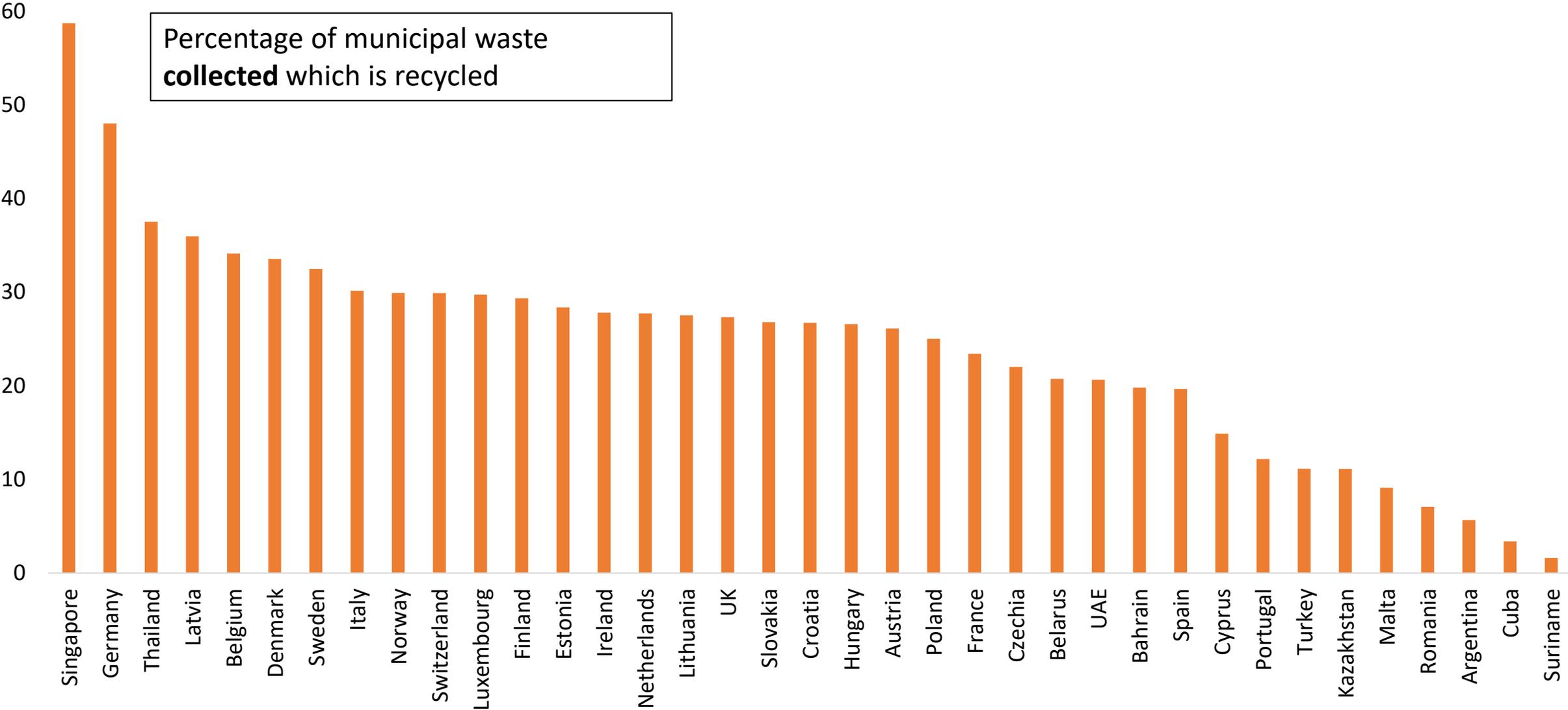
Source: Data provided by countries to UNSD. Details and footnotes, refer: <https://unstats.un.org/unsd/envstats/qindicators> (footnotes may explain anomalies)



5. 2020 collection cycle ex post remarks and analysis (SDG indicator 12.5.1)

National recycling rate (2019).

Source: Data provided by countries to UNSD, OECD and Eurostat. Details and footnotes, refer: <https://unstats.un.org/unsd/envstats/qindicators> (footnotes may explain anomalies)





Grateful to countries for their contributions and for continued supply of data (and detailed footnote explanations) for this Questionnaire.

Grateful to international partners who help improve the quality of the data, and its application to policy.

Thank You!

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