



Updates on the Work of the United Nations Statistics Division

Environment Statistics Section
United Nations Statistics Division (UNSD)

Prepared for the Seventeenth session of the Joint Task Force on Environmental Statistics and Indicators

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Outline

1. FDES and UNSD/UNEP Questionnaire on Environment Statistics

2. Waste Statistics

- Methodology sheet in the *Manual on the Basic Set of Environment Statistics*
- Waste data collection
 - e-Waste
- Waste and the SDG Indicators

3. Water statistics

- Methodology sheet in the *Manual on the Basic Set of Environment Statistics*
- Water data collection
- Water and the SDG Indicators

4. Climate Change Indicators

All work can be found at: <https://unstats.un.org/unsd/envstats/>



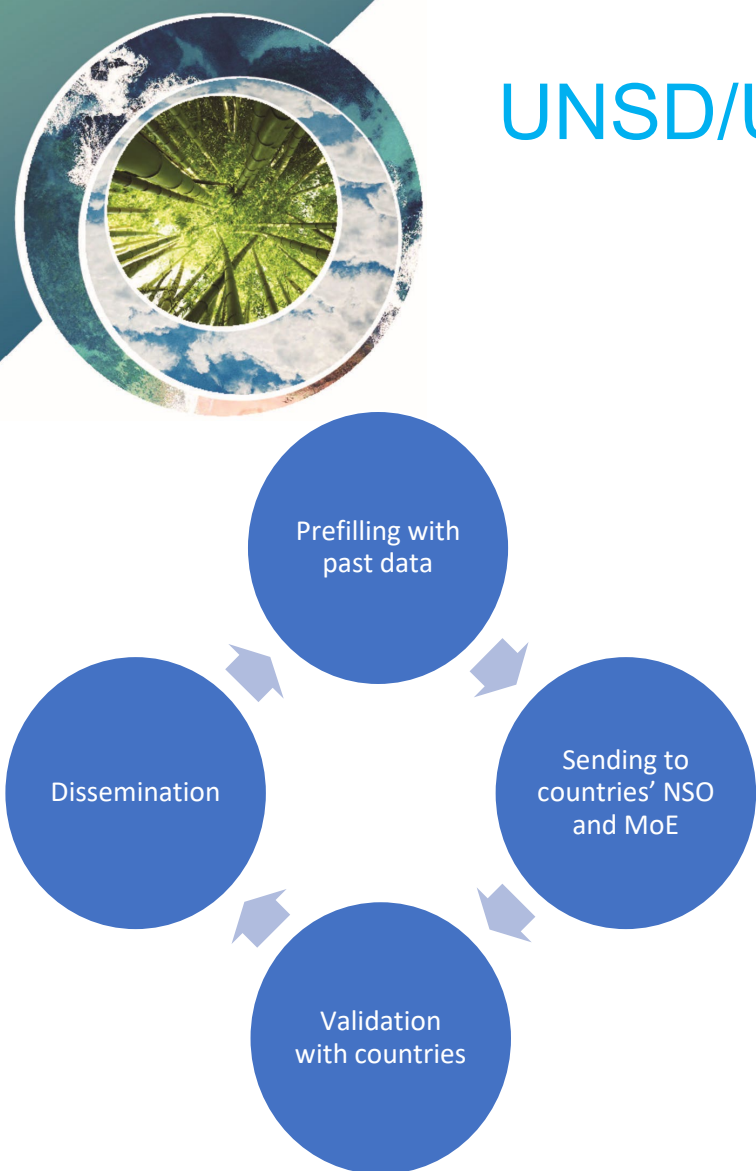
FDES in Russian

- The FDES 2013 is a flexible, multi-purpose conceptual and statistical framework that marks out the scope of environment statistics.
- It provides an organizing structure to guide the collection and compilation of environment statistics at the national level, bringing together data from the various relevant subject areas and sources.
- It is broad, comprehensive and integrative. It covers the issues and aspects of the environment that are relevant for policy analysis and decision making and it can be applied to inform about cross-cutting issues such as climate change.
- FDES 2013 has been translated in Russian by the Russian Federal State Statistics Service (ROSSTAT).

<https://unstats.un.org/unsd/envstats/fdes.cshtml>



UNSD/UNEP Questionnaire on Environment Statistics



- Since 1999, UNSD has collected waste data 9 times biennially, from 170+ UN member states.
- Questionnaire are sent to National Statistical Offices and Ministries of Environment.
- Questionnaires are not sent to Eurostat and OECD members and candidate members.
- Response rate typically hovers around 50% (2018, 52%).
- The 10th round of questionnaire will be sent in November 2020.
- No imputation, no estimation.
- Outputs are: the UNSD Environmental Indicator Tables, Country Snapshots, and Country Files.

Data

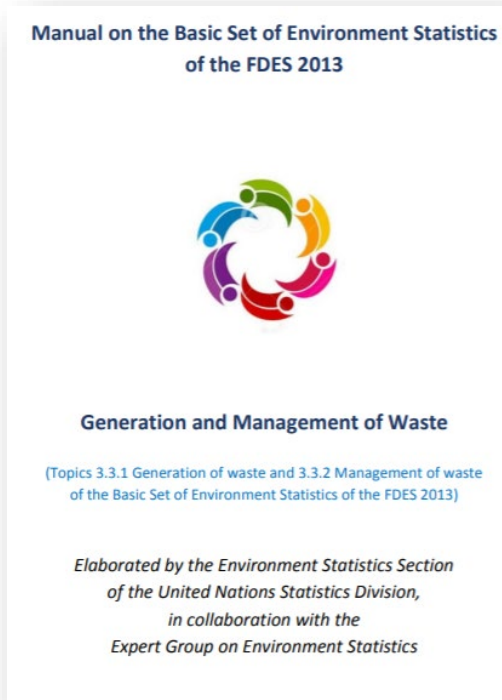
Data collection is implemented through the biennial Questionnaire on Environment Statistics. Data collection started in 1999. UNSD environmental indicators derived from these data, as well as for the eight other themes, are now available.

- 🔗 [UNSD environmental indicators](#)
- 🔗 [Country Snapshots](#)
- 🔗 [Country Files](#)
- 🔗 [Questionnaires](#)



Generation and Management of Waste

- Work on methodology sheets is coordinated by UNSD in collaboration with the Expert Group on Environment Statistics (Seventh meeting in November 2020), thematic experts, and specialized agencies.
- The Generation and Management of Waste methodology sheet, in the *Manual on the Basic Set of Environment Statistics*, attempts to
 - Facilitate collection or compilation of all generation and management of waste statistics of the Basic Set of Environment Statistics embedded in the FDES 2013.
 - Offer detailed and in-depth methodological guidance including definitions, classifications, statistical methods for collection and/or compilation, dissemination and main uses of statistics on generation and management of waste.



https://unstats.un.org/unsd/envstats/fdes/manual_bses.cshtml





UNSD/UNEP Questionnaire on Environment Statistics Waste

- R1: Generation of waste by source / Образование отходов по источникам
- R2: Management of hazardous waste / Обращение с опасными отходами
- R3: Management of municipal waste / Обращение с муниципальными отходами
- R4: Composition of municipal waste / Состав муниципальных отходов
- R5: Management of municipal waste — City data / Обращение с муниципальными отходами — Данные по городам
- R6: Electronic waste / Образование электронных отходов и их сбор



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Вопросник по статистике окружающей среды 2020 года

Раздел: Отходы

Содержание	
Руководство	Введение, порядок заполнения, описание таблиц
Определения	Список определений
Таблица R1	Образование отходов по источникам
Таблица R2	Обращение с опасными отходами
Таблица R3	Обращение с муниципальными отходами
Таблица R4	Состав муниципальных отходов
Таблица R5	Обращение с муниципальными отходами — Данные по городам
Таблица R6	Образование электронных отходов и их сбор
Таблица R7	Дополнительная информационная таблица



United Nations Statistics Division (UNSD) and United Nations Environment Programme
QUESTIONNAIRE 2020 ON ENVIRONMENT STATISTICS

Section: WASTE

TABLE OF CONTENTS	
Guidance	Introduction, Steps to Follow, Description of Tables
Definitions	List of Definitions
Table R1	Generation of Waste by Source
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





Latest Development: Electronic Waste (e-waste)

E-WASTE



- Following liaisons with United Nations University (UNU), and a pilot exercise with 42 countries in 2017, UNSD added e-waste to the Questionnaire in 2018.
 - Total e-waste generated
 - Total e-waste collected
- This is expanded in 2020 to include disaggregation by:
 - Large equipment
 - Screens, monitors, and equipment containing screens
 - Temperature exchange equipment - cooling and freezing equipment
 - Small E-waste
 - Lamps
 - Small equipment
 - Small IT and telecommunication equipment



Waste Statistics and the SDG Indicators

The UNSD/UNEP Questionnaire is the preferred data source for these indicators:

- Indicator 11.6.1 (Tier II): Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities.
 - Custodian agencies: UN-HABITAT, UNSD
 - Metadata [\[link\]](#)
- Indicator 12.4.2 (Tier II): Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment.
 - Custodian agencies: UNEP, UNSD
 - Metadata [\[link\]](#)
- Indicator 12.5.1 (Tier II): National recycling rate, tons of material recycled.
 - Custodian agencies: UNEP, UNSD
 - Metadata [\[link\]](#)





Water Statistics

Manual on the Basic Set of Environment Statistics includes:

- Water resources methodology sheet, published 2017.
- Wastewater statistics methodology sheet, in consultation in November 2020. Objectives of the wastewater statistics methodology sheet are to:
 - Guide wastewater management, improve public financing
 - Respond to the challenge of the global pandemic
 - Help countries achieving long term sustainable goals, promote good wastewater practices
 - Increase capacity of countries to collect wastewater data according to the FDES 2013.

https://unstats.un.org/unsd/envstats/fdes/manual_bses.cshtml

Manual on the Basic Set of Environment Statistics
of the FDES 2013



**Water Resources
Statistics**

(Sub-component 2.6 Water Resources
of the Basic Set of Environment Statistics of the FDES 2013)

*Elaborated by the Environment Statistics Section
of the United Nations Statistics Division,
in collaboration with the
Expert Group in Environment Statistics.*





Collaboration in Water Statistics on Data Collection

- Teleconferences to harmonize water data collection between OECD, Eurostat, FAO, and UNSD to:
 - Streamline data reporting mechanism for the reporting on SDG Indicators 6.4.1 and 6.4.2.
 - Minimize respondent burden from countries.
 - Promote unified concepts and definitions among all water data collection organizations.
- Latest development on water data collection:
 - UNSD is working closely with above-mentioned agencies, WHO and UN-HABITAT to ensure unification of data terminologies and metadata methodology for SDG 6.3.1 regarding wastewater.
 - UNSD reintroduced “Water returned without use” and “Net freshwater abstracted” in Table W2.



UNSD/UNEP Questionnaire on Environment Statistics

Water

- W1: Renewable freshwater resources / Возобновляемые пресноводные ресурсы
- W2: Freshwater abstraction and use / Забор и использование пресной воды
- W3: Water supply industry (ISIC 36) / Предприятия водоснабжения (МСОК 36)
- W4: Wastewater generation and treatment / Образование и очистка сточных вод
- W5: Population connected to wastewater treatment / Население, обеспеченное системами очистки сточных вод



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Раздел: Водные ресурсы

Содержание	
Руководство	Введение, порядок заполнения, описание таблиц и таблица перевода единиц
Определения	Список определений
Таблица W1	Возобновляемые пресноводные ресурсы
Таблица W2	Забор и использование пресной воды
Таблица W3	Предприятия водоснабжения (МСОК 36)
Таблица W4	Образование и очистка сточных вод
Таблица W5	Население, обеспеченное системами очистки сточных вод
Таблица W6	Дополнительный информационный листок



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QUESTIONNAIRE 2020 ON ENVIRONMENT STATISTICS

Section: WATER

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Guidance	Introduction, Steps to Follow, Description of Tables and Conversion Table
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Table W2	Freshwater Abstraction and Use
Table W3	Water Supply Industry (ISIC 36)
Table W4	Wastewater Generation and Treatment
Table W5	Population Connected to Wastewater Treatment
Table W6	Supplementary Information Sheet





Water Statistics and the SDG Indicators

- Indicator 6.3.1 (Tier II): Proportion of domestic and industrial wastewater safely treated
 - Custodian agencies: WHO, UN-HABITAT, UNSD
 - Metadata [\[link\]](#)
- Indicator 6.4.1 (Tier I): Change in water-use efficiency over time
 - Custodian agencies: FAO. Partners: UNEP, IUCN, UNSD, OECD, Eurostat
 - Metadata [\[link\]](#)
- Indicator 6.4.2 (Tier I): Level of water stress: freshwater withdrawal as a proportion of available freshwater resources
 - Custodian agencies: FAO. Partners: UNEP, IUCN, UNSD, OECD, Eurostat
 - Metadata [\[link\]](#)





Climate Change Statistics Mandates

2016: Report of the Secretary-General on Climate Change Statistics to the 47th session of the Statistical Commission.

- UNSD, in collaboration with UN-ECE, prepared the Report of the Secretary-General on Climate Change Statistics to the 47th session of the Statistical Commission (E/CN.3/2016/15)
- Main decision: UNSD to review and consider UN-ECE set of climate change-related statistics and indicators as a basis for developing a global set of climate change statistics and indicators, applicable to countries at various stages of development.

2018: Report of the Secretary-General on Climate Change Statistics to the 49th session of the Statistical Commission in 2018

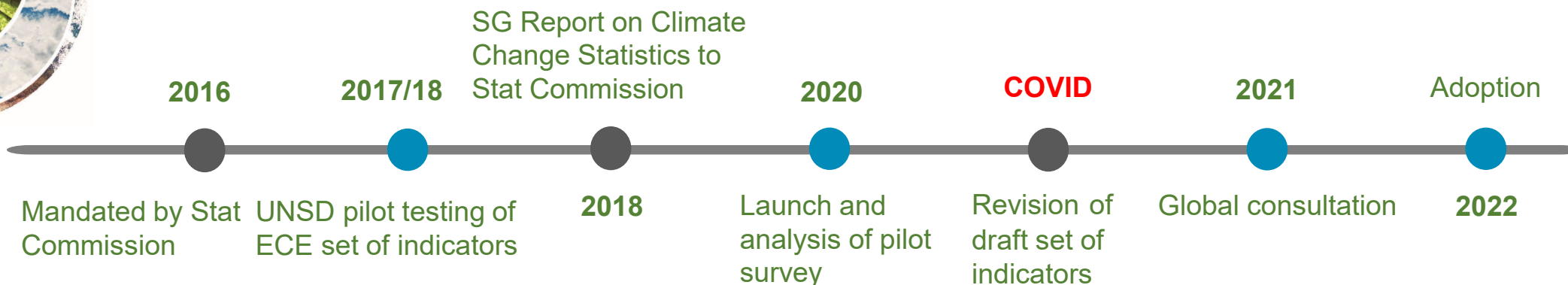
- UNSD, in collaboration with UN-ECE and UNFCCC, prepared the Report of the Secretary-General on Climate Change Statistics to the 49th session of the Statistical Commission (E/CN.3/2018/14)
- Main decision: UNSD and UNFCCC to strengthen the link between statistics and policy, for example, by: (i) undertaking joint initiatives in the development of climate change statistics and indicators; (ii) encouraging joint capacity building efforts and trainings with other partners, and (iii) exploring ways to encourage NSOs to be more involved in the preparation of data submissions to the UNFCCC secretariat, for supporting the implementation of the Paris Agreement.

https://unstats.un.org/unsd/envstats/climatechange_docs_conf.cshtml





Timeline of the Global Set



- Environment statistics (FDES 2013) and climate change statistics (IPCC)
- Statistical Commission (47th session) – relationship between FDES and climate change statistics
- Environment statistics as a basis for climate change statistics
- Statistical Commission (49th session) – linking climate change statistics and policy; and countries to contribute to pilot survey and global consultation

- UNSD: globalizing climate change statistics and indicators
- Pilot Survey and impact of global pandemic
- Pilot Survey responses, observations, conclusions
- Consultations on the development of the global set
- Global set: structures and metadata examples
- **Next steps:** finalize pilot survey, prepare global consultation, develop inventory, report to Stat Commission.



Pilot Survey

17 countries and 13 organizations responded

1. Sweden	10. Palestine	a. UNFCCC	j. WMO
2. Netherlands	11. Tanzania	b. ECE	k. FAO-Water
3. Hungary	12. Luxembourg	c. IPCC	l. UNDRR
4. Slovenia	13. Finland	d. WCMC	m. WHO
5. UAE	14. Estonia	e. UNEP	
6. Brazil	15. Philippines	f. Eurostat	
7. Suriname	16. St Lucia	g. WFP	
8. Mauritius	17. Grenada	h. UNU	
9. Russian Federation		i. IUCN	





Global Set Structure Example

Indicators and statistics side-by-side, with main metadata details.
Detailed metadata will be transformed into individual metadata sheet for each indicator.

	A1. Topic	Indicators	Statistics	C1. Definition reference	E1. Potential aggregations	F1. Category of Measurement	G1. Data reference	H1. Data type	I1. Paris Agreement	I2. Katowice package	I2. SDG	I3. FDES	I4. Sendai Framework	J. Tier (UNSD)
IMPACTS	Freshwater resources								7; 13.8	Decision 18/CMA.1, chapter IV;	2.6.1			
IMPACTS		Renewable freshwater resources per capita		FDES-BSES manual (water	Volume	UNSD Environr	C	7; 13.8				1.1.1.b. 1. Annual average (Tier 1		1
IMPACTS			Precipitation (1.1.1.b/2.6.1.a)											
IMPACTS			Variation in rainfall volume (Brazil)											
IMPACTS			Evapotranspiration (2.6.1.6.1)											
IMPACTS			Inflow (2.6.1.b.2)											
IMPACTS			Population											
IMPACTS			freshwater extent (UNEP)											
IMPACTS			groundwater extent (UNEP)											
IMPACTS	Freshwater abstraction, supply and use								7; 13.8	Decision 18/CMA.1, chapter IV;	2.6.2			
IMPACTS		Freshwater abstracted as proportion of renewable freshwater resou		FDES-BSES manual (water	Percent	UNSD Environr	C	7; 13.8			6.4.2 Level of water stress: freshwater withdrawal as a			1
IMPACTS			Freshwater abstracted											
IMPACTS			Renewable freshwater resources											
ADAPTATI	Water management and treatment					Volume			7; 13.8					
ADAPTATION		Proportion of wastewater treated		FDES (pg 6	By types of trea	Percent	UNSD Environr	C	7; 13.8		6.3.1 Proportion of wastewater safely treated (Tier 2)			2
ADAPTATION			Total wastewater generated (3.2.1.a)		By ISIC economic activity									
ADAPTATION			Wastewater treated (3.2.2.b)		By types of plants									
ADAPTATION		Water use per capita		FDES BSES	By ISIC econom	Volume	UNSD Environr	C	7; 13.8	Decision 18	6.4.1 Change in water use efficiency over time (Tier 2)			2
ADAPTATION			Total freshwater available for use						7; 13.8	Decision 18/CMA.1, chapter IV; Decision 9/CMA.1				
			Population			Number								



Thank You!

UNSD Environment Statistics Section

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