Global Set of Climate Change Statistics and Indicators:

a tool to identify multi-purpose indicators on climate change





National workshop: Generating climate change and disasters indicators for policy decision-making in Saint Kitts and Nevis 22 - 24 June 2022



Outline

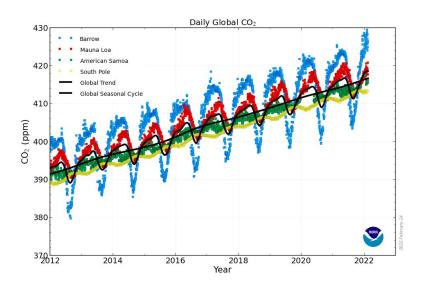
- 1. Background and process
- 2. Overview of the Global Set of Climate Change Statistics and Indicators
 - Methodological foundation
 - Main structure
 - Statistical references
 - Tiers
 - Indicators and statistics side-by-side
 - Metadata
- 3. Implementation support
 - Access and implementation support for the Global Set
 - Implementation steps
 - Draft Implementation guidelines (under development)
 - Self-assessment tool (based on the Global Consultation, under development)
 - Relevant examples and resources
- 4. Future work
 - Capacity development activities
 - Further development of the methodology
 - Development of training materials and strategies for capacity development and resource mobilization



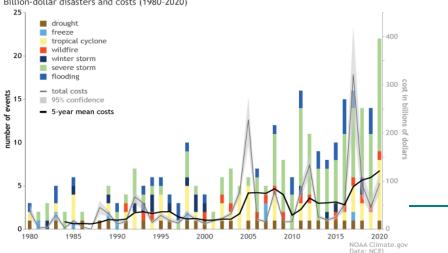
Role of NSOs at the country level

The need for monitoring climate change is more compelling than ever

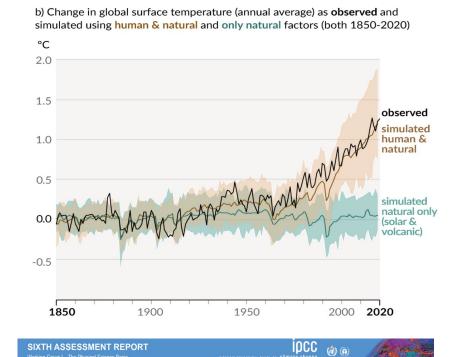
NOAA, Global Monitoring Laboratory - Carbon Cycle Greenhouse Gases (noaa.gov)



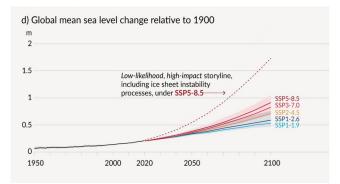
NOAA, https://www.climate.gov/disasters2020



AR6 Climate Change 2021: The Physical Science Basis — IPCC

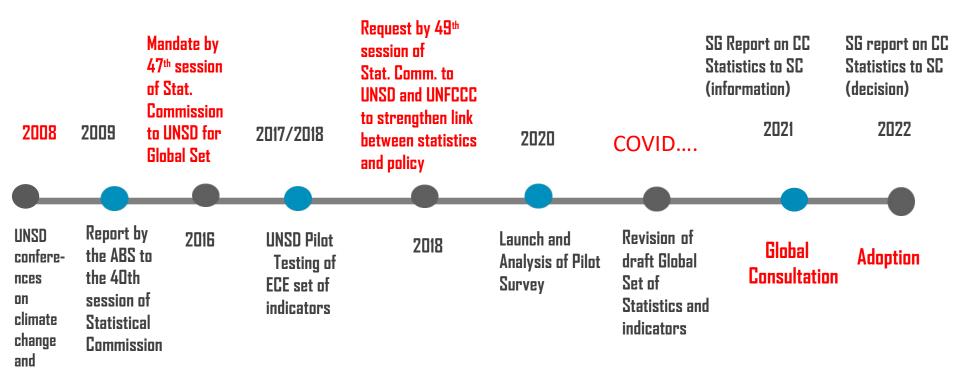


Human activities affect all the major climate system components, Figure SPM.8 with some responding over decades and others over centuries



Billion-dollar disasters and costs (1980-2020)

More than a decade long process: 2008 – present



Decisions of the Statistical Commission:

official

stats

(Oslo and

Seoul)

Decision 47/112 (2016), UNSD requested to develop a global set of climate change statistics and indicators, applicable to countries at various stages of development:

http://unstats.un.org/unsd/statcom/47th-session/documents/Report-on-the-47th-session-of-the-sta tistical-commission-E.pdf

Decision: 49/113 (2018), UNSD and UNFCCC to strengthen the link between statistics and policy
<u>https://unstats.un.org/unsd/statcom/49th-session/documents/Report-on-the-49th-session-E.pdf</u>
Decision 53/116 (2022), the Global Set was adopted at the 53rd session of the Statistical Commission:
https://unstats.un.org/unsd/statcom/53rd-session/documents/2022-41-EinalReport-E.pdf

Process and approach

UNSD prepared a draft Global Set, based on:

- Bottom up approach which started with systematic review of climate change statistics and indicators from 130 countries, with representative regional coverage, and identification of most commonly repeated statistics/indicators;
- discussions at several meetings of the UNSD-led Expert Group on Environment Statistics (EGES);
- bilateral consultations with specialized agencies and in-depth discussions with several countries; and
- inputs from an extensive Pilot Survey that took place in 2020 and a Global Consultation in 2021.

More information:

https://unstats.un.org/unsd/envstats/climatechange.cshtml and

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

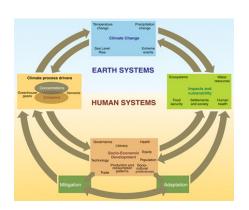


Global Set of Climate Change Statistics and Indicators

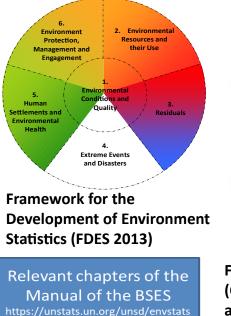


Methodological foundation

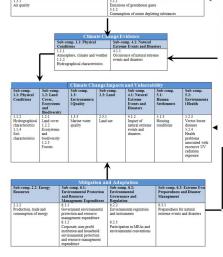
- Given that there was no underlying framework linking the reporting requirements stemming from the Paris Agreement and the necessary statistics or indicators to support climate policy action, UNSD worked closely with UNFCCC to develop such a framework explicitly for climate change.
- The Global Set, developed in close collaboration with UNFCCC, is structured according to the IPCC framework and FDES, with a tiering system as in the FDES and the SDG indicators.



IPCC, 2007, Fourth Assessment Report



/fdes/manual_bses.cshtml



FDES cross-cutting application (Chapter 5) links climate change and environment statistics based on the IPCC Framework



Goal 13

SENDAI FRAMEWORK FOR DISASTER RISK REDUCTION 2015-2030



United Nations Statistics Division

Main structure (1)

- •158 indicators, which serve to support developing and monitoring of national climate policies and international reporting requirements, in particular those under the Paris Agreement.
- •190 statistics, which serve three main purposes:
 - (i) to provide less complex options for countries with less developed statistical systems to initiate climate monitoring through official statistics;
 - (ii) to provide statistics needed to compile the indicators (for Tier 1 and 2); and
 - (iii) to provide inputs to further define and develop the Tier 3 indicators.
 - Statistics were not introduced for the indicators for which:
 - (i) indicator and statistic are identical (9 cases, denoted with 'Equivalent to the indicator' in the metadata sheets); and

(ii) indicators for which the statistics and their metadata are fully described within the cited methodology source, e.g. often from SDG and Sendai Framework indicators (21 cases, denoted with 'Refer to original source in metadata the metadata sheets).

Main structure (2)

- •Five areas: drivers, impacts, vulnerability, mitigation and adaptation. These events are applied as five top-level areas in the Global Set. Each indicator is assigned to one of the five IPCC areas as a primary belonging, while some indicators were also assigned as applicable in one or more additional areas.
- •34 topics, represent the quantifiable aspects of the areas taking into account the types and sources of the statistics needed to describe them.
- •Paris Agreement article: Correspondence between the indicator/statistic and the articles in the Paris Agreement specifying the reporting requirements.
- •PAWP-Katowice: Correspondence between the indicator/statistic and the decisions from the Paris Agreement Work Programme (PAWP), adopted in Katowice, specifying the reporting requirements.
- •Statistical references (next slide)



Statistical references

The main statistical references including the internationally accepted frameworks, standards and guidelines, are presented in abbreviated form in the last column (entitled Method):

- IPCC: the Intergovernmental Panel on Climate Change 2006 guidelines, (6 indicators and 4 statistics follow IPCC)
- FDES: the Framework for the Development of Environment Statistics and its Manual on the Basic Set of Environment Statistics (BSES), (10 indicators and 110 statistics follow the FDES, either verbatim, in 'similar to' or in a 'related to' form)
- SDG: Sustainable Development Goal indicators metadata, (43 indicators and 8 statistics match SDG indicators either verbatim, in 'similar to' or in a 'related to' form)
- Sendai: Sendai Framework for Disaster Risk Reduction 2015-2030, (9 indicators and 3 statistics follow Sendai guidance)
- UN-ECE: the Conference of European Statisticians set of core climate change-related indicators metadata, (25 indicators and 10 statistics match UN-ECE indicators either verbatim, in 'similar to' or in a 'related to' form)
- IRES: the International Recommendations for Energy Statistics, (7 indicators and 17 statistics follow IRES)
- SEEA-CF: the System of Environmental-Economic Accounting Central Framework (10 indicators and 13 statistics follow SEEA-CF)
- SEEA-EA: the System of Environmental-Economic Accounting–Ecosystem Accounting. (8 indicators and 15 statistics follow SEEA-EA)



Tiers

Defined by considering the relevance (to climate change), methodological soundness and data availability. The relevance or connection to climate change varies per indicator, however a certain relation to climate change has been identified for all the indicators included in the Global Set. Tier 1 indicators and statistics are shown in bold, Tier 2 are in normal text, Tier 3 are in italics. The Tiers were defined as follows:

o Tier 1 are relevant, methodologically sound, and for which more than 50 per cent of the countries that responded to the Global Consultation indicated that data are available. However, this rule was not applied for the SDG indicators included in the Global Set and the original SDG indicator Tiers are used. Nineteen indicators and 47 statistics are assessed as Tier 1.

o Tier 2 are relevant, methodologically sound, and for which less than 50 per cent of the countries that responded to the Global Consultation indicated that country data are available. However, this rule was not applied for the SDG indicators included in the Global Set and the original SDG indicator Tiers are used. Eighty-one indicators and 109 statistics are assessed as Tier 2.

o Tier 3 are relevant, but not methodologically sound, and country data may not be available. Fifty-eight indicators and 34 statistics are assessed as Tier 3.



Indicators and statistics side-by-side

AREA/ TOPIC	Indicator	Statistic	Tier	Paris Agreement	PAWP-Katowice	Method		
DRIVER	S							
TOTAL (GREENHOUSE GA	S EMISSIONS						
	1. Total greenho	use gas emissions per year	1	13.7a	Decision 18/CMA.1, chapter II, para. 47-49	IPCC; SDG; UN-ECE		
		Total emissions of direct greenhouse gases (excluding LULUCF)	1			IPCC; FDES		
	2. Total emission	is of indirect greenhouse gases	1	_		IPCC; FDES		
	3. Greenhouse g change and fore	as emissions from land use, land use stry	1			IPCC; FDES; UN-ECE		
	4. Total greenhou economy	house gas emissions from the national				SEEA-CF; UN-ECE		
	5. Greenhouse g	as emissions per capita	1			IPCC; FDES		
		Total emissions of direct greenhouse gases (excluding LULUCF) enhouse gas emissions in gross fixed capital ion of direct investment enhouse gas emissions in value added of foreign lled multinational enterprises GHG emissions in output of foreign- controlled multinational enterprises		13.7a	Decision 18/CMA.1, chapter II, para. 47-49	IPCC; FDES		
						SEEA-CF		
						SEEA-CF		
						SEEA-CF		
	GHG emissions in exports of foreign-controlled multinational enterprises		3			SEEA-CF		
	8. Carbon footpri		2			SEEA-CF; UN-ECE		
ATMOSI	PHERIC CONCENT	RATION OF GREENHOUSE GASES	1		1	1		
	9. Global concen	9. Global concentration of greenhouse gases				FDES		
ENERGY	PRODUCTION, S	UPPLY AND CONSUMPTION						
	10. Total prima	ry energy production from fossil fuels	1	4.8; 4.13; 13.7b	Decision 18/CMA.1, chapter III; Decision 4/CMA.1	IRES		
		Total energy production	1	- 15.70		IRES; FDES		
	11. Total energy	supply from fossil fuels	1	-		IRES		

Global set, metadata

36. Renewable freshwater resources per capita

Field	Description	Description											
Indicator	Renewable freshwater resourc	es per capita											
Statistics		Precipitation	Evapotranspiration	Inflow									
Area	Impacts												
Торіс	Freshwater resources	Freshwater resources											
Themes	Water resources	Water resources											
Paris Agreement article	7; 13.8	7; 13.8	7; 13.8	7; 13.8									
PAWP-Katowice	Decision 18/CMA.1, chapter IV; Decision 9/CMA.1	Decision 18/CMA.1, chapter IV; Decision 9/CMA.1	Decision 18/CMA.1, chapter IV; Decision 9/CMA.1	Decision 18/CMA.1, chapter IV; Decision 9/CMA.1									
FDES		1.1.1.b	2.6.1.b.1	2.6.1.a.2 [similar to]									
SDG				2									
Sendai Framework													
Tier	2	1	2										
Definition	The indicator measures the renewable freshwater resources divided by the population of the country. Renewable freshwater resources = Internal flow + Inflow of surface and groundwaters from neighbouring countries. Renewable freshwater (surface and groundwater) resources are replenished by precipitation (less evapotranspiration) falling over the territory of the country that ends up as runoff to rivers and recharge to aquifers (internal flow), and by surface waters and groundwater flowing in from	Total volume of atmospheric wet precipitation (rain, snow, hail, dew, etc.) falling on the territory of the country over one year, in millions of cubic metres. [UNSD/UNEP Questionnaire, https://unstats.un.org/unsd/en vstats/Questionnaires/2020/q2 020 Water English.pdf] [FDES BSES manual, Water resources, p.11, https://unstats.un.org/unsd/en vironment/FDES/MS%202.6%2 0Water%20Resources.pdf]	Actual evapotranspiration: Total actual volume of evaporation from the ground, wetlands and natural water bodies and transpiration of plants. According to the definition of this concept in Hydrology, the evapotranspiration generated by all human interventions is excluded, except unirrigated agriculture and forestry. The 'actual evapotranspiration' is calculated using different types of mathematical models, ranging from very simple algorithms (Budyko, Turn Pyke, etc.) to schemes that represent the hydrological cycle in detail.	Total volume of river run-off and groundwate generated over the period of a year, in natural conditions, exclusively by precipitation into a country. The internal flow is equal to precipitation less actual evapotranspiration and can be calculated or measured. If the river and groundwater generation are measured separately, transfers between surface and groundwater should be									

	1	1	1	
	neighbouring countries		[UNSD/UNEP Questionnaire,	netted out to avoid
	(inflow). [UNSD/UNEP		https://unstats.un.org/unsd/e	double counting.
	Questionnaire,		nvstats/Questionnaires/2020/	[UNSD/UNEP
	https://unstats.un.org/unsd/e		q2020 Water English.pdf]	Questionnaire,
	nvstats/Questionnaires/2020/ q2020 Water English.pdf]		[FDES BSES manual, Water	https://unstats.un.org/u
	d2020 Water English.pdf		resources, p.13,	nsd/envstats/Questionn
			https://unstats.un.org/unsd/e	aires/2020/q2020 Wate
	[FDES BSES manual, Water		nvironment/FDES/MS%202.6	r English.pdf
	resources, p.7, p.48,		%20Water%20Resources.pdf	
	https://unstats.un.org/unsd/e		<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	[FDES BSES manual,
	nvironment/FDES/MS%202.6			Water resources, p.12,
	%20Water%20Resources.pdf			https://unstats.un.org/u
				nsd/environment/FDES/
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Delawara	Function and the dividue of allow		ith is seen in a seen haven as a (Cl	OResources.pdf]
Relevance		ate change increase significantly w th large but better quantified unce		
	-	sions, which have stronger adverse		
		o. For each degree of global warm	•	
		renewable water resources of at le		
	-	s/uploads/2018/02/WGIIAR5-Chap		, F,
National data sources	Meteorological	Meteorological office/Ministry	Meteorological	Meteorological
	office/Ministry of natural	of natural resources/Water and	office/Ministry of natural	office/Ministry of
	resources/Water and related	related agencies	resources/Water and related	natural resources/Water
	agencies		agencies	and related agencies
Data collection methods		Monitoring systems	Monitoring systems	Monitoring systems
Update frequency		Monthly, annual	Annual	Annual
Category of measurement	Volume	Volume	Volume	Volume
Computation/compilation methods	Precipitation plus inflows	Interpolation of point	Residual of precipitation less	Sum of inflows from
	minus evapotranspiration	measurements over a	surface and sub-surface run-	other territories
	divided by the population	geographic area (GCWAS pg.	off (GCWAS pg. 71).	
		71). GIS modelling of		
		precipitation.		
International primary data reference	UNSD Environmental Indicators (Inland water	UNSD Environmental Indicators	UNSD Environmental	UNSD Environmental
	Indicators (Inland water	(Inland water resources);	Indicators (Inland water	Indicators (Inland water
	-			"
	resources);	AQUASTAT (FAO's Global	resources);	resources);
	resources);	Information System on Water	AQUASTAT (FAO's Global	AQUASTAT (FAO's
	-	Information System on Water and Agriculture),	AQUASTAT (FAO's Global Information System on Water	AQUASTAT (FAO's Global Information
	resources);	Information System on Water	AQUASTAT (FAO's Global	AQUASTAT (FAO's

org/aquastat/en/; FAOw.fao.org/aquastat/en FAOInternational primary data reference, descriptionRenewable freshwater resources per capita;Precipitation; Precipitation;Actual evapotranspiration; groundwaters fromInflow of surface and groundwaters from												
International primary data reference, descriptionRenewable freshwater resources per capita;Precipitation;Actual evapotranspiration;Inflow of surface and groundwaters from neighbouring countriesAQUASTAT (FAO's Global Information System on Water and Agriculture)AQUASTAT (FAO's Global and Agriculture)AQUASTAT (FAO's Global and Agriculture)AQUASTAT (FAO's Global AQUASTAT (FAO			FAO		Agriculture), <u>http://ww</u>							
International primary data reference, descriptionRenewable freshwater resources per capita;Precipitation;Actual evapotranspiration;Inflow of surface and groundwaters from neighbouring countriesAQUASTAT (FAO's Global Information System on Water and Agriculture)AQUASTAT (FAO's Global and Agriculture)AQUASTAT (FAO's Global Information System on WaterAQUASTAT (FAO's Global and Agriculture)Inflow of surface and groundwaters from neighbouring countries												
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AQUASTAT (FAO's Global Information System on Water Information System on Water Information System on Water and Agriculture) and Agriculture)	description	resources per capita;			-							
Information System on Water and Agriculture) and Agriculture) AQUASTAT (FAO's			•		neighbouring countries;							
			-	-								
and Agriculture) Global Information			and Agriculture)	and Agriculture)								
		and Agriculture)										
					System on Water and							
Agriculture)					Agriculture)							
	nternational primary data reference, URL	https://unstats.un.org/unsd/envstats/qindicators;										
http://www.fao.org/aquastat/en/		http://www.fao.org/aquastat/e										
Type C C C C	Гуре	С	С	С	С							
International secondary data references	nternational secondary data references											
Other data references	Other data references											
Potential aggregations and scales National National National National National	Potential aggregations and scales	National	National	National	National							
Regional												
	Methodological guidance	UNSD/UNEP Questionnaire, https://unstats.un.org/unsd/envstats/Questionnaires/2020/q2020 Water English.pdf;										
		FDES BSES manual, Water resources,										
		https://unstats.un.org/unsd/environment/FDES/MS%202.6%20Water%20Resources.pdf;										
		International Recommendations for Water Statistics,										
		<pre>http://unstats.un.org/unsd/EconStatKB/Attachment491.aspx?AttachmentType=1;</pre>										
		Draft Guidelines for the Compilation of Water Accounts and Statistics,										
		https://seea.un.org/sites/seea.un.org/files/guidelines comp water stats en.pdf;										
		Renewable Water Resources Assessment 2015 AQUASTAT methodology review,										
		http://www.fao.org/3/bc818e/bc818e.pdf;										
		Key water statistics in AQUASTAT, http://www.fao.org/3/19241EN/i9241en.pdf ;										
Review of world water resources by country, <u>http://www.fao.org/3/Y4473E/y4473e.pdf</u>		Review of world water resource	es by country, <u>http://www.fao.org</u>	/3/Y4473E/y4473e.pdf_								



The Global Set, concluding remarks

- The Global Set of Climate Change Statistics and Indicators is a comprehensive statistical framework, with statistics, indicators and metadata, designed to support countries in preparing their own sets of climate change statistics and indicators according to their individual concerns, priorities and resources.
- It will assist countries embarking on the development of climate change statistics programmes by providing the scope and coverage as to what may be considered relevant to climate change.
- It can also assist countries already involved in this area of statistics by providing a reference list.
- It will help to streamline the supply of data for national policies and international reporting by mapping the commonalities, overlaps and gaps under multiple policy demands and statistical methods/guidelines.



Implementation support



Access and implementation support for the Global Set

- The Global Set is introduced and briefly described in the Report of the Secretary-General on Climate Change Statistics to the Statistic cal Commission (E/CN.3/2022/17) available in the six UN languages: https://unstats.un.org/unsd/envstats/climatechange_docs_conf.cshtml
- The full description of the Global Set and its metadata is included in the Background document to the Report of the Secretary-General on Climate Change Statistics, entitled Global Set and metadata.
- Implementation support materials including a self-assessment tool and elearning materials will be disseminated via UNSD website: <u>https://unstats.un.org/unsd/envstats/climatechange.cshtml</u>
- In addition, if implementation advice and support are required (including the indicators and statistics in a spreadsheet form – Excel file) please contact UNSD at: envstats@un.org



Implementation steps

- 1. NSOs in collaboration with climate reporting authorities to conduct a self-assessment which will prioritize the nationally relevant indicators and statistics
- 2. Establish a committee/working group with relevant stakeholders
- 3. Map sources of available indicators/statistics and assess them in terms of quality and utility
- 4. Define and prioritize gaps in data and methods
- 5. Collect data and compile statistics and indicators
- 6. Contribute to national policy demands and international reporting requirements
- 7. Disseminate national climate change statistics and indicators



Draft Implementation guidelines (under development)



Global Set of Climate Change Statistics and Indicators

Implementation Guidelines (Draft)

- Description of the Global Set
- Key issues of climate change
- Self-assessment
- Institutional set-up
- Key stakeholders
- Technical committees
- Existing toolkits and templates
- Data sources
- Data collection and exchange
- Database building
- Dissemination and publication guidelines
- Capacity building and resource mobilization



Self-assessment tool (based on the Global Consultation, under development)

- Assessment guidance: short introduction and guidance for completing the selfassessment.
- **Part I: Institutional Dimension of Climate Change Statistics and Indicators**: aims at collecting general information on the institutional dimensions of climate change statistics.
- Part II: Assessment of Climate Change Statistics and Indicators: each individual indicator and statistic can be assessed in terms of relevance, methodological soundness and data availability.

111		1.1				i .					1.1	÷								
	Global Set, version 1 (2022)				Policy	Reference	ference Statistical Reference					Self Assessment								
							Global Regional				Relevance Methodological Soundness		Data Availability		General Comments					
Area	Topic	Number	Indicator	Statistic	Tier	Themes	Paris Agreement	PAWP- Katowice Climate Package	Method	FDES Reference	SDG Reference	Sendai Framework Feference	UN-ECE Reference	Yes/No	Reference/ Link	Yes/No/ Partially	Reference/ Link	Yes/No	Reference/ Link	
DRIVERS																				
	Total	greei	nhouse gas emissions																	
		1	Total greenhouse gas emissions per year		1	GHG emissions	13.7a	Decision 18/CMA.1, cha	IPCC; SDG; UN-E	CE	13.2.2 Total	greenhouse gas e	[Similar to] UN-	ECE 9b: Tot	al greenhouse g	as emissions	from the nation	al territory		
				Total emissions of direct greenh	1	GHG emissions	13.7a	Decision 18/CMA.1, cha	IPCC; FDES	[Similar to] FD	ES 3.1.1.a Tot	tal emissions of c	direct greenhous	e gases (GH	Gs), by gas					
		2	Total emissions of indirect greenhouse gase	Equivalent to the indicator	1	GHG emissions	13.7a	Decision 18/CMA.1, cha	IPCC; FDES	[Similar to] FD	ES 3.1.1.b To	tal emissions of i	indirect greenho	use gases (O	GHGs), by gas					
		3	Greenhouse gas emissions from land use, la	Equivalent to the indicator	1	GHG emissions	13.7a	Decision 18/CMA.1, cha	IPCC; FDES; UN-I	[Similar to] FD	ES 3.1.1.a Tot	tal emissions of c	[Similar to] UN-	ECE 11: Gre	enhouse gas em	issions from	land use change	(LULUCF)		
		4	Total greenhouse gas emissions from the na	a Equivalent to the indicator	2	GHG emissions			SEEA-CF; UN-EC				UN-ECE 09a: To	atal greenho	ouse gas emission	ns from the r	ational econom	y		
		5	Greenhouse gas emissions per capita		1	GHG emissions			IPCC; FDES	[Similar to] FD	ES 3.1.1.a Tot	tal emissions of c	direct greenhous	e gases (GH	Gs), by gas					
				Total emissions of direct greenh	1	GHG emissions	13.7a	Decision 18/CMA.1, cha	IPCC; FDES	[Similar to] FD	ES 3.1.1.a To	tal emissions of c	direct greenhous	e gases (GH	Gs), by gas					
		6	Greenhouse gas emissions in gross fixed cap	pital formation of direct investme	3	GHG emissions			SEEA-CF											
		7	Greenhouse gas emissions in value added o	of foreign controlled multinationa	3	GHG emissions			SEEA-CF											
				GHG emissions in output of fore	3	GHG emissions			SEEA-CF											
				GHG emissions in exports of for	3	GHG emissions			SEEA-CF											
		8	Carbon footprint	Equivalent to the indicator	2	GHG emissions			SEEA-CF; UN-EC				UN-ECE 15: Car	bon footpri	nt					
	Atmo	spher	ric concentration of greenhouse gases																	
		9	Global concentration of greenhouse gases	Equivalent to the indicator	2	GHG concentrati	on		FDES	FDES 1.3.1.b G	ilobal atmosp	heric concentrat	tions of greenho	use gases						
	Energ	y pro	duction, supply and consumption																	
		10	Total primary energy production from fossi	l fuels	1	Energy	4.8; 4.13; 13	Decision 18/CMA.1, cha	IRES											
				Total energy production	1	Energy	4.8; 4.13; 13	Decision 18/CMA.1, cha	IRES; FDES	[Similar to] FD	ES 2.2.2.a.1 P	roduction of ene	ergy: total produ	iction						

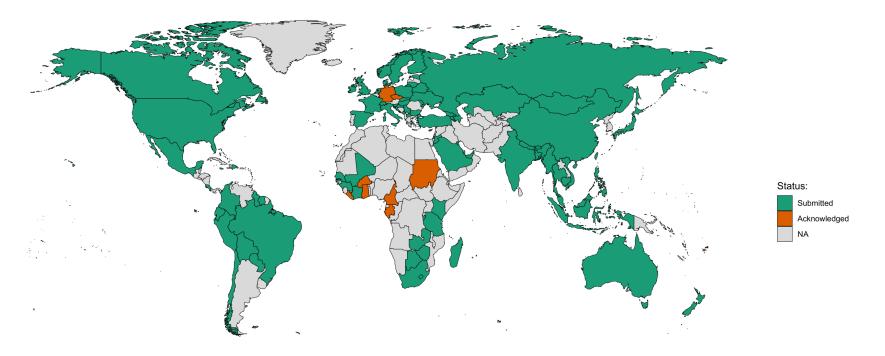
Relevant examples and resources

- Reports and compendia on:
 - environment statistics: <u>https://unstats.un.org/unsd/envstats/fdescompendia.cshtml</u> and
 - climate change statistics: <u>https://unstats.un.org/unsd/envstats/climatechange_reports.cshtml</u>
- Outcomes of the Global Consultation, responses and feedback were received from 86 States and areas and 26 agencies (see annex I in the Report of the Secretary-General on Climate Change Statistics to the Statistical Co mmission (E/CN.3/2022/17)). Detailed summaries and geographical analysis are presented in the background document entitled "Global Consultation on the Global Set".
- Other relevant resources are comprehensively reviewed in the above background report
- UNFCCC Operationalization of the Enhanced Transparency Framework: <u>https://unfccc.int/enhanced-transparency-framework</u>



Growing engagement of countries

Global Consultation (May- Sept 2021) – 86 countries (68 on part 1 and 75 part 2) and 26 organizations



- The engagement is wider than that, e.g. 14 member states acknowledged.
- UNSD funded consultancies helped 2 more countries to do the assessment, another 9 countries to improve their earlier assessments in Africa
- Ongoing regional initiatives are also strengthening climate change statistics in countries

"Acknowledged" means that the national statistical offices of the countries (to whom we sent out the invitations to participate) communicated with us regarding the Global Consultation after we sent out our invitation, but that they did not submit a response.



Current and future work



Capacity development activities

UNSD, in collaboration with the secretariat of the UNFCCC and other relevant bodies, would carry out capacity development activities with support from regional and other development partners by:

(a) Offering continuous (remote, online) support to countries in their efforts to set up national processes;

(b) Organizing regional workshops based on the findings of the global consultation, which highlighted pronounced geographical gaps;

(c) Leading advisory missions in countries based on raised demands and requests for support.



Further development of the methodology

UNSD, in collaboration UNFCCC and other relevant bodies, would further develop the methodology for climate change statistics and indicators by:

(a) Reviewing and updating the tier 3 indicators and completing their metadata. Consultations will be organized to advance towards internationally agreed methods;

(b) Following up ongoing statistical processes to ensure that latest guidance is reflected for the indicators at all tiers. These include the latest reports of the IPCC and advances in methodological guidance, as well as further work by the post-2020 global biodiversity framework of the CBD, ECE, the International Programme for Action on Climate (IPAC) of OECD and the climate change indicators dashboard of IMF, among others. Additional fields in the metadata, such as rationale and limitations, will also be considered for inclusion;

(c) Continuing to improve the attribution to climate change or the relevance of the indicators to climate change by narrowing the scope and definition of several indicators or introducing new disaggregation items. This requires the development of new classifications (e.g. on human health and diseases, and climate-induced disasters) or revision of existing ones (e.g. on expenditure and environmental activities);

(d) Following up policy and science to identify new indicators to be included in the global set of climate change statistics and indicators in future revisions, and also to possibly remove certain indicators from the list.



Development of training materials and strategies for capacity development and resource mobilization

UNSD, in collaboration with UNFCCC and other relevant bodies, would develop training materials and strategies for capacity development and resource mobilization by:

(a) Developing a strategy with key partners to promote bridging the gap between policy and statistics and between national statistical offices and climate change reporting agencies at the national level;

(b) Developing implementation guidelines for national consultations and data-sharing processes on climate change statistics;

(c) Developing training materials, including e-learning modules, organized according to thematic areas, along with guidance and best practices, on addressing climate change issues by including climate change-related questions in national censuses and surveys, and best practices on the dissemination of climate statistics;

(d) Mobilizing resources to facilitate the training of trainers, based on the assessment of the capacity development needs in the countries revealed by the global consultation;

(e) Developing a climate change assessment tool similar to the Environment Statistics Self-Assessment Tool



Role of NSOs at the country level

(a) Develop national climate change statistics programmes using the global set of climate change statistics and indicators as the framework for climate change statistics and indicators and continue to assess the availability of data for the indicators and statistics according to the tiering system;

(b) Continue to strengthen their collaboration with the national focal points for UNFCCC (or national authorities responsible for reporting climate change-related information);

(c) Continue to be more involved in the preparation of data submissions to UNFCCC, for supporting the implementation of the Paris Agreement;

(d) Advocate to have a more central role in coordinating climate change statistics based on their mandates to produce official statistics and their role in coordinating national statistical systems;

(e) Strengthen environment statistics, using the FDES, as the basis for developing climate change statistics, given their close interrelationship;

(f) Enhance data collection in the area of climate change statistics by conducting specialized climate change surveys or including related modules in existing surveys and censuses;

(g) Produce and disseminate climate change statistics via dedicated reports, websites or other means.



Thank you for your attention!

For more information please contact the Environment Statistics Section at the United Nations Statistics Division:

E-mail: envstats@un.org

Website: https://unstats.un.org/unsd/envstats/

Climate Change Statistics Website https://unstats.un.org/unsd/envstats/climatechange.cshtml

and

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





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