

# Global Set of Climate Change Statistics and Indicators: Results of the Global Consultation, part 2



**Eighth Meeting of the Expert Group on Environment Statistics**  
**New York, 12-21 October 2021 (virtual)**  
**Session 1: Climate Change Statistics and Indicators: Global Set**



# Global Consultation, part 2

1. Responses
2. Results, key observations
3. Remaining gaps and challenges
4. What else needs to be done:
  - With EGES
  - Bilateral work



## Responses, part 2

- UNSD with the help of UNFCCC and EGES prepared a list which is comprehensive but not exhaustive and not mandatory
- 134 indicators, 194 statistics and metadata reviewed by **74 (out of 85)** countries and about **17 (out of 25)** int/reg. agencies
- Six info sessions and support by the regional commissions helped in the process
- UNSD provided feedback to all countries whose responses were received by about 30 sept; about **40 countries** improved their responses
- **Most** countries could assess the suggested indicators (unlike in the Pilot last year), with short answers on relevance, soundness and data availability, also additional information, links, clarifications and suggestion



## Results and key observations: completeness

- The overwhelming majority of comments provided by both countries and agencies were supportive and accepting in the proposed statistics and indicators
- 5 countries and 3 international agencies have proposed new indicators
- One country and one agency (FAO) proposed many
- IMF included also detailed metadata for new indicators
  1. Trade in low carbon technology products
  2. CO2 emissions in Gross Fixed Capital Formation of Direct Investment
  3. CO2 emissions in value added of Foreign Controlled Multinational Enterprises
- Several countries and agencies have proposed adjustments, modifications or proxies to the existing indicators/statistics
- Complementarity: CARICOM, GCC (ECE set, most indicators are included; EEA, Eurostat)



## Results and key observations: metadata

- Usefulness of the metadata was noted by many reviewers, while occasionally, suggestions for improvement were made
- Several countries and agencies provided comments on metadata for indicators/statistics of their knowledge, for example:
  - UN-Women listed all indicators where disaggregation by gender is desirable
  - IOM provided conceptual information to define displaced people
  - IMF on expenditures and taxes
- 2 agencies (FAO, WCMC) provided detailed comments on all the metadata which was suggested for their specialized review



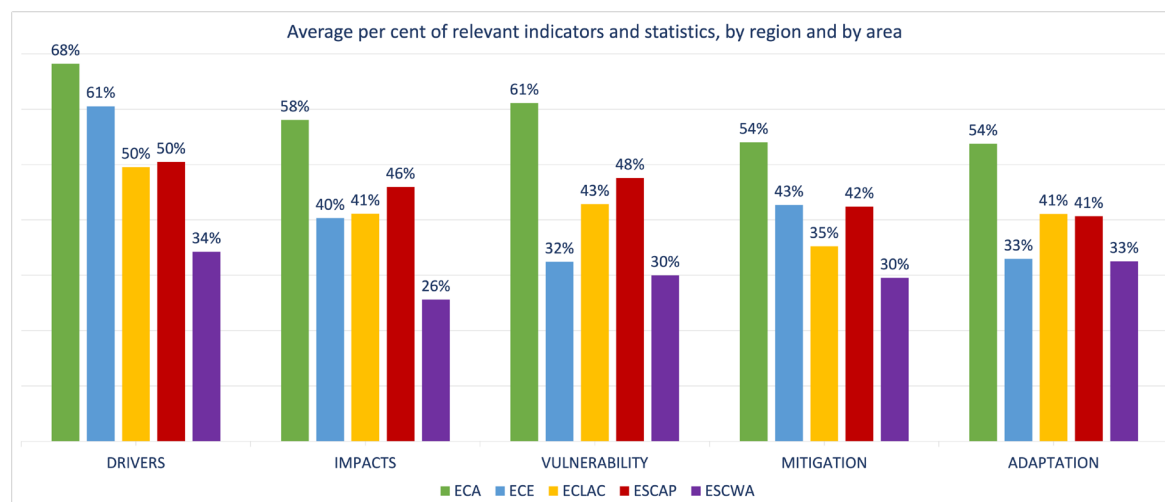
## Results and key observations: on relevance

Some countries assessed relevance for indicators, soundness and data for statistics, most assessed both.

Lowest is 12% (Sea ice cover), highest is 83% (Total emissions of direct greenhouse gases (GHGs, excluding LULUCF) (FDES 3.1.1.a))

- Average per area:

- Drivers – 56%
- Impacts – 43%
- Vulnerability – 41%
- Mitigation – 42%
- Adaptation – 39%



- Separations by development stage, SIDS, geography are likely important

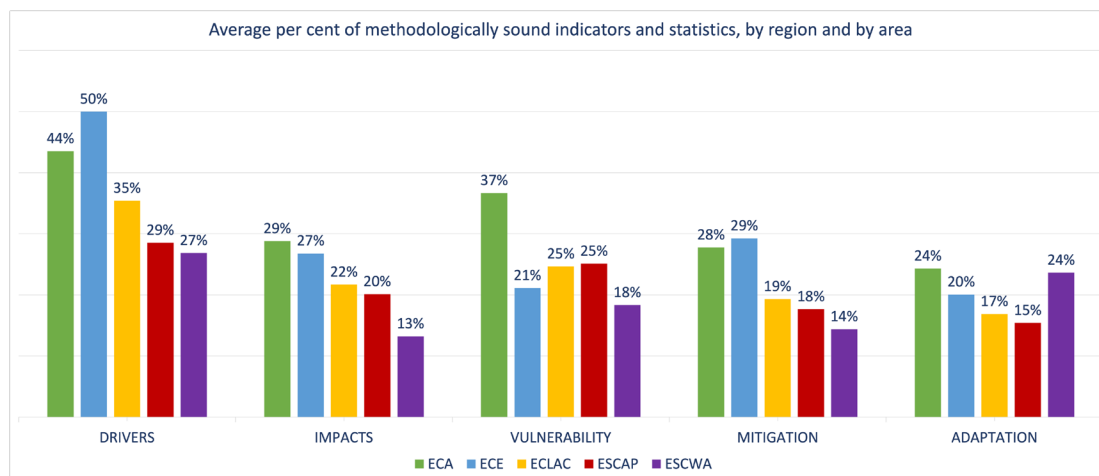


# Results and key observations: on soundness

Soundness is intended to inform comparability of the proposed indicators/statistics

Lowest is 3% (for ecosystem health and insurance premiums), highest is 61% (Total emissions of direct greenhouse gases (GHGs, excluding LULUCF) (FDES 3.1.1.a))

- Average per area:
  - Drivers – 36%
  - Impacts – 20%
  - Vulnerability – 21%
  - Mitigation – 21%
  - Adaptation – 16%



- Separations by development stage, SIDS, geography are likely important



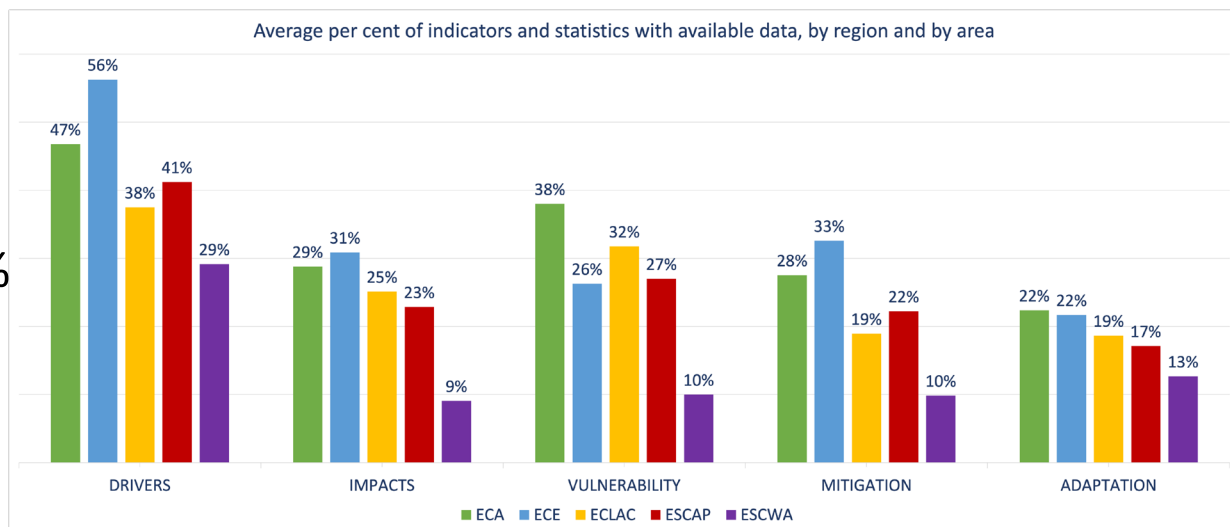
# Results and key observations: on data availability

Assesses readiness of countries to compile the proposed indicators/statistics

Lowest is 2% (Risk mitigation mechanisms (Subindicator of SDG 2.4.1) 3%for insurance premiums), highest is 78% (Total emissions of direct greenhouse gases (GHGs, excluding LULUCF) (FDES 3.1.1.a))

- Average per area:

- Drivers – 47%
- Impacts – 27%
- Vulnerability – 28%
- Mitigation – 26%
- Adaptation – 20%



- Separations by development stage, SIDS, geography are likely important





# Results and key observations: on data availability

Data availability used to revise the initial tiers:

- Tier 3 indicators/statistics with more than 20% of the countries with data

Code	Indicator	Statistics	Preliminary Tier	Themes	DATA	Updated Tier
8	<a href="#">Use of fossil fuels</a>		3	Fossil fuels	25%	
	-.....					
		[incidence/mortality from] Heat and cold related illnesses	3	Health	20%	2
		Soil organic carbon (SDG 15.3.1 subindicator)	3	Ecosystems	22%	2
		Area of rainfed agricultural systems	3	Agriculture	20%	2
		Population engaged in subsistence farming	3	Agriculture	29%	2
69	<a href="#">Vulnerable species</a>		3	Species	24%	2
		Red list of ecosystems	3	Ecosystems	24%	2
87	<a href="#">Proportion of population with disability</a>		3	Disability	39%	2
		Number of hybrid and electric driven vehicles	3	Technology	34%	2
104	<a href="#">Progress towards GHG emissions reduction target</a>		3	GHG emissions	28%	
127	<a href="#">Meteorological monitoring network</a>		3	Meteorology	32%	2
128	<a href="#">Air quality monitoring systems</a>		3	Meteorology	32%	2
129	<a href="#">Water monitoring systems</a>		3	Water	24%	2

# Results and key observations: on data availability

Data availability used to revise the initial tiers for tier 1 and tier 2:

- 16 tier 1 indicators with less than 50% data (3 of them are SDGs)
- 1 tier 2 indicator (Percent urban population) with more than 50% data; also 8 statistics
- **62 (out of 80) indicators and 134 (out of 194) statistics** retain the same tier

Area	Topic	Indicator	Indicator	Statistics	Code	Preliminary Tier	Themes	National Data Sources	Relevance		Methodological Soundness		Data Availability		Updated Tier
									Count	Per cent	Count	Per cent	Count	Per Cent	
<b>DRIVERS</b>					1										
<i>Total greenhouse gas (GHG) emissions</i>					101										
	1	<a href="#">Total greenhouse gas emissions per year (SDG 13.2.2)</a>			1020	1	GHG emission	Environment Agency/Na	49	64%	32	42%	46	61%	1
			Total emissions of direct greenhouse gases (GHGs, excluding land use, land-use change and forestry)		1021	1	GHG emission	Environment Agency/Na	63	83%	46	61%	59	78%	1
			Total emissions of indirect greenhouse gases (GHGs) (FDES)		1022	1	GHG emission	Environment Agency/Na	57	75%	39	51%	50	66%	1
			Greenhouse gas emissions from land use, land use change and forestry		1023	1	GHG emission	Environment Agency/Na	60	79%	43	57%	55	72%	1
	2	<a href="#">Total greenhouse gas emissions from the national economy (UN-ECE 09a, excluding land use, land-use change and forestry)</a>			1030	2	GHG emission	NSO	48	63%	24	32%	34	45%	2
					1031		GHG emissions		14	18%	9	12%	11	14%	
<i>Atmospheric concentration of greenhouse gases</i>					104										
	3	<a href="#">Global concentration of greenhouse gases</a>			1040	2	GHG concentration		35	46%	14	18%	16	21%	2
					1041		GHG concentration		14	18%	11	14%	10	13%	
<i>Energy production and supply</i>					105										
	4	<a href="#">Total primary energy production from fossil fuels</a>			1050	1	Energy	Ministry of Energy/Oil co	55	72%	38	50%	48	63%	1
					1051		Energy		9	12%	5	7%	7	9%	
	5	<a href="#">Total energy supply from fossil fuels</a>			1060	1	Energy	Ministry of Energy/Oil co	57	75%	39	51%	48	63%	1
					1061		Energy		6	8%	4	5%	5	7%	



# Remaining gaps & challenges

- Ensure that latest and complete statistical guidance is referenced as appropriate – CBD Global Biodiversity Monitoring Framework, DRR disasters classification, ESCAP DRSF, ECE set
- Gaps in the list: missing indicators/topics:
  - Gender (noted by UN-Women)
  - Aquaculture (noted by FAO)
  - One SDG missing 11.5.2
- Address the new indicators and proposed modifications
- Gaps in the metadata: rationale and limitations for each indicator, interpretation and compilation formulae
- Improve integration and links between the indicators and statistics



# Remaining gaps & challenges

- Tiers need to be revised (where discrepancies were found and issues were raised)
  - According to 50% rule to distinguish between tier 1 and 2 (except for the SDGs)
- Roadmap for tier 3 work
- Draft Global Set to be updated/consolidated in the report to the Statistical Commission by mid November
- Metadata to be updated to the extent possible and published in the background report by end of January 2022
- Further work will be done following the Commission (Tier 3, metadata, certain fields in metadata)



# Next steps with EGES

Wednesday group work-session to address:

- New indicators, proposed modifications, tier 3 work

UNSD has prepared a selection of the newly proposed indicators according to the following criteria:

- 1) link to one of the five climate change areas
- 2) suitability for national policy-making and monitoring purposes
- 3) fit into the area/topics structure in a balanced manner
- 4) possible to develop into the indicator/statistic/metadata structure

A selection of the newly proposed indicators will be reviewed at the group work session on Wednesday

Proposals for modifications will be reviewed also examples of work on tier 3 indicators for which some countries responded with national methodologies



## Bilateral work

Further work is needed to address gaps in existing/reviewed methodologies, gaps in metadata

- Draft Global Set, metadata and feedback were shared with the agencies with specialized statistical guidance where many indicators were sourced (FAO, UNEP, UNDRR, WHO, WMO, CBD/WCMC)
- Bilateral work was done with several agencies, more will follow including to address issues to be defined by the EGES
- Continuous discussions and improvements will follow in particular for tier 3 indicators, also to keep uptodate in other specialized areas



# Thank you for your attention!

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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](https://unstats.un.org/unsd/envstats/ClimateChange_StatAndInd_global.cshtml)

