EUROPEAN COMMISSION
EUROSTAT

Directorate E: Sectoral and Regional Statistics
Unit E-2: Environmental statistics and accounts; sustainable development

EU SDG QUALITY ASSESSMENT 2023

DATA ASSESSED IN MAY 2023

24 May 2023

I Purpose of the documents and background

This document outlines the quality assessment criteria applied to the EU SDG (Sustainable Development Goals) indicators and is published as part of the yearly production cycle of the 2023 EU SDG package.

As a general requirement, each indicator selected for the EU SDG set and sourced from the European Statistical System (ESS) or other sources, must meet three requirements:

- be policy relevant
- meet the admissibility requirements and
- reach a minimum quality grade.

The three sets of selection requirements are based on the guiding principles of the [Code of Practice of European statistics](#) and the [Quality Assurance Framework of the ESS](#), most relevant for the EU SDG monitoring:

- users' needs and priorities are consulted and anticipated, users satisfaction is monitored and is systematically followed up;
- users are kept informed about the methodologies deployed, the quality of published indicators and the publication release dates;
- sound methodology for selection of indicators follows the ESS and other international standards, guidelines and good practices;
- when non-ESS data are used, the definitions and concepts are a good approximation to those required within the ESS;
- commitment to quality is based on the sound protocol that ensures regular monitoring and improvement of output quality.

II Requirement of policy relevance

To ensure policy relevance, indicators considered for the EU SDG indicator set should either

- be part of a high-level scoreboard of EU policies such as:
    - key indicators sets (such as the CAP indicators)
    - Social Scoreboard for the European Pillar of Social Rights
    - Zero Pollution Action Plan
    - Monitoring Framework for the 8th EAP etc.

or

- be designed to monitor a policy or initiative as reported in the staff working document "Key European action supporting the 2030 Agenda and the Sustainable Development" accompanying the communication on "Next steps for a sustainable European future" or new major policy initiatives such as those part of the European Green Deal.

Only for areas where no such indicators exist, other indicators are considered. All indicators should be aligned, where appropriate, with the UN list of global indicators.

Furthermore, policy relevance implies that all selected indicators allow an unambiguous interpretation of the desired direction of change as set out in the relevant EU policies and initiatives.

III Admissibility requirements

Indicators to be considered for the EU SDG indicator set must be produced and disseminated in line with the principles stipulated in the Code of Practice of European statistics. In particular, they must meet the following requirements:

(1) Readiness of statistical production: indicators must have at least one data point ready to use and published by their producer.

(2) Sustainability of statistical production: regular data production must be ensured, preferably by an official mandate and by adequate human (including quality of staff) and financial resources.

(3) Sound methodology and procedures: indicators and their underlying data must be produced according to a well-founded methodology and procedures.

(4) Accessibility and transparency: data on indicators must be accessible online and information on their data sources, methods of computation, etc. must be publicly available.

(5) Compliance: indicators must comply with international or EU standards where such standards exist (agreed methodology, definitions, classifications, standards and recommendations).

It is assumed that indicators provided by data producers with a strong commitment to quality, i.e. official statistics or other well established institutions having a quality policy and procedures in place to monitor and report on product quality, will fulfil the above requirements.

The admissibility requirements could only be relaxed in cases where there is a genuine lack of indicators that meet these criteria. In these cases, users will be informed as appropriate about the limitations of the affected indicators.

IV Requirements on statistical data quality

To be considered for the EU SDG indicator set, indicators have to

- be classified *at least at "low" level* for each criterion as shown in the rating table below and
- have to attain *a minimum average rating of 1.5 point*.

The average rating is calculated by dividing the total number of points by the number of applied criteria.

If a criterion does not apply to a proposed indicator, no weight is given for this criterion. In particular, this is the case for newly produced indicators for which only one data point is

available and therefore the length of the time series and the comparability over time cannot be assessed.

V. Outcome of the 2023 quality assessment

Quality assessments of the EU SDG indicators set is part of the regular yearly cycle of the EU SDG monitoring and the indicators are rated according to the set of criteria summed up in Annex 1. The Report on the quality assessment is published on the [Eurostat EU SDG dedicated website](#) in order to keep users informed about the quality of the indicators used for the SDG monitoring.

This section of the report describes the main results of the *statistical quality assessment* of the 2023 EU SDG indicators set.

Overall, the quality rating of the EU SDG indicators was high at 2.8 out of 3.0 points on average for all quality dimensions. Annex 2 shows that vast majority of indicators score at the highest rate across five out of six quality dimensions: out of 100 indicators, 88 showed the highest quality rate in *frequency of dissemination*, 87 in *reference area,* 80 in time coverage and 79 in *comparability over time*. Consistently with the last year assessment, *timeliness* proved to be the only dimension that showed a relatively low count of top scores across all indicators; still, 55 out of 100 indicators scored the top ranking (3 out of 3 points) in *timeliness*.

SDG indicators sourced from the ESS showed markedly higher quality ranking across five out of six dimensions compared to the ones coming from the non-ESS data providers. The only exception was *comparability over time*, where non-ESS indicators outperformed the ESS ones: 81 out of 100 non-ESS indicators scored at the highest rate compared to 78 out of 100 ESS indicators. *Reference area* and *geographical comparability* were the two dimensions that mainly drove the high ranking for the ESS indicators. *Timeliness* was the dimension that showed the lowest count for the top scoring among the non-ESS indicators. However, it should be kept in mind that many indicators sourced from non-ESS data providers describe environmental phenomena, which are evolving more slowly compared to social and economic ones and for which therefore timeliness is less critical.

Differently from the previous year assessment, **none of the SDGs had all six quality dimensions at the top ranking**. Still, six out of seventeen SDGs obtained 2.9 out of 3 points on average across six quality dimensions: SDG 5, SDG 7, SDG 8, SDG 9, SDG 16 and SDG 17. They were closely followed by SDG 1, SDG 3, SDG 10, SDG 11, SDG 12, SDG 13 and SDG 14 with 2.8 out of 3 points on average across all quality dimensions. SDG 6 showed the lowest quality ranking at 2.4 points.

Compared to the previous year results, SDG 2, SDG 3, SDG 5, SDG 12, SDG 14, SDG 15 and SDG 16 improved their average quality ranking, SDG 4, SDG 6, SDG 7, SDG 8, SDG 9, SDG 11, SDG 13 and SDG 17 showed the same average rating, while SDG 1 and SDG 10 obtained a slightly lower result.

Annex 2 provides more details by SDG and by quality dimension and allows monitoring ***the quality dimensions that drove high and low overall quality rankings*** for each SDG. Thus, the low result for SDG 6 was due to reference area and geographical comparability, while the

relatively low quality ratings for the SDG 4 was mainly driven by the comparability over time that was negatively impacted by the recent revision of the EU-LFS data.

Consistently with the previous year, ***timeliness proved to be the quality dimension with the lowest overall ranking*** for both ESS (2.6 out of 3) and non-ESS indicators (2.5 out of 3).

Annex 1. Eurostat Quality Assessment System for EU SDG indicators

	EUROSTAT QUALITY ASSESSMENT SYSTEM FOR EU SDG INDICATORS				
Quality concept	*Rating*			*Only for selection purpose:*	
	High (= 3 points)	*Medium (= 2 points)*	*Low (= 1 point)*	*not accepted (= 0 points)*	*Comments*
Frequency of dissemination	**Every year**	**Every 2 years**	**Every 3 years**	**More than 3 years** or **A-periodic** or **Not specified**	Indicators based on models: applies to the statistical input data as the frequency of running the model is not decisive for rating.
Timeliness (T = reference year)	**T+1 year**	**T+2 years**	**T+3 years**	**> T+3 years** or **Not specified**	Indicators based on models: applies to the statistical input data as the time of running the model is not decisive for rating.
Reference area	**All EU MS** Data for all EU MS and EU aggregate available	**> 75 % EU MS and EU-aggregate** EU MS data represent at least 75% of EU total and EU aggregate available	**50-75 % EU MS or no EU aggregate** EU MS data represent 50 - 75% of EU total or EU aggregate not available	**< 50 % EU MS** or **Only EU aggregate** EU MS data represent less than 50% of EU total (and assumed that no EU aggregate available) or only EU aggregate but no EU MS data available	Rating based on coverage according to the most recent data points. Data on EFTA & candidate countries are also desirable. Rating does not apply to a limited number of indicators which do not refer to individual countries (e.g. "Ocean acidity").
Comparability - geographical	**All EU MS** Data comparable between all EU MS	**> 75 % EU MS** Data comparable between EU MS representing at least 75% of EU total	**50-75 % EU MS** Data comparable between EU MS representing 50 to 75% of EU total	**< 50 % EU MS** Data comparable between EU MS representing less than 50% of EU total	Rating based on comparability according to the most recent data points. Rating does not apply to a limited number of indicators which do not refer to individual countries (e.g. "Ocean acidity").
Time coverage (in years)	**> 10 years**	**5 to 10 years**	**< 5 years**	---	Rating based on years between first data point and most recent data point presenting EU-aggregates. Rating applies only to indicators with at least 2 data points.
Comparability - over time (number of data points)	**> 4 data points**	**3 to 4 data points**	**< 3 data points**	---	Rating based on number of data points from last methodological break. Rating applies only to indicators with at least 2 data points.

Annex 2. Quality assessment of the 2023 EU SDG indicator set, average rate by SDG

		Frequency	Timeliness	Reference area	Comparability (GEO)	Time coverage	Comparability (TIME)	Overall
1	No poverty	3,0	3,0	3,0	3,0	2,5	2,3	2,8
2	Zero hunger	2,6	2,6	3,0	3,0	2,6	2,6	2,7
3	Good health and wellbeing	2,7	2,2	3,0	3,0	2,8	3,0	2,8
4	Quality education	2,5	2,7	3,0	3,0	2,5	1,7	2,6
5	Gender equality	3,0	2,8	2,8	3,0	3,0	2,6	2,9
6	Clean water and sanitation	2,5	2,2	1,8	1,8	3,0	3,0	2,4
7	Affordable and clean energy	3,0	2,2	3,0	3,0	3,0	3,0	2,9
8	Decent work and economic growth	3,0	2,8	3,0	3,0	3,0	2,7	2,9
9	Industry, innovation and infrastructure	3,0	2,5	3,0	2,8	3,0	3,0	2,9
10	Reduced inequalities	3,0	3,0	2,8	3,0	2,8	2,0	2,8
11	Sustainable cities and communities	3,0	2,3	3,0	2,8	2,8	2,8	2,8
12	Responsible consumption and production	2,8	2,5	2,8	2,8	3,0	3,0	2,8
13	Climate action	3,0	2,6	3,0	3,0	2,8	2,4	2,8
14	Life below water	3,0	2,5	3,0	2,7	2,7	2,7	2,8
15	Life on land	2,5	2,4	3,0	3,0	2,5	2,5	2,7
16	Peace, justice and strong institutions	3,0	2,7	3,0	3,0	2,5	3,0	2,9
17	Partnership for the goals	3,0	2,7	3,0	3,0	2,8	2,8	2,9
	All indicators	2,9	2,6	2,9	2,9	2,8	2,7	2,8
	ESS indicators	2,9	2,6	2,9	2,9	2,8	2,6	2,8
	Non-ESS indicators	2,8	2,5	2,8	2,8	2,8	2,7	2,7

Annex 3. Quality assessment of the 2023 EU SDG indicator set, by quality dimension

	Number of SDG indicators with H, M or L rating:		
	High (=3)	Medium (=2)	Low (=1)
All EU SDG indicators (100 indicator)			
Frequency of dissemination	88	3	5
Timeliness	55	43	0
Reference area	87	4	3
Comparability - geographical	86	5	3
Time coverage (in years)	80	17	2
Comparability - over time (number of data points)	79	6	14
EU SDG indicators sourced from the ESS (64 indicators)			
Frequency of dissemination	58	2	2
Timeliness	37	27	0
Reference area	59	4	0
Comparability - geographical	59	4	0
Time coverage (in years)	53	9	2
Comparability - over time (number of data points)	50	2	12
EU SDG indicators sourced from non-ESS providers (36 indicators)			
Frequency of dissemination	30	1	3
Timeliness	18	16	0
Reference area	28	0	3
Comparability - geographical	27	1	3
Time coverage (in years)	27	8	0
Comparability - over time (number of data points)	29	4	2

Note: number of indicators across the three quality ratings may not sum up to a true total because for several indicators some quality criteria were not applicable and rating was not calculated. For example, geographical comparability does not apply to ocean acidity because this indicator doesn't refer to an individual country.