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Adapting the methodology of the Measuring Distance to the SDG Targets study to go beyond OECD countries, with an application to selected Latin American countries

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Guillaume Cohen, OECD Centre for Well-Being, Inclusion, Sustainability and Equal Opportunity (WISE), +33 (0)1 45 24 85 68, Guillaume.COHEN@oecd.org.

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How to measure distance to SDG targets anywhere: Adapting the methodology of the Measuring Distance to the SDG Targets study to go beyond OECD countries, with an application to selected Latin American countries

Guillaume Cohen and Michal Shinwell,
OECD Centre for Well-Being, Inclusion, Sustainability and Equal Opportunity (WISE)[1]

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Abstract / Résumé

Achieving the 2030 Agenda requires understanding how far countries are from achieving its 17 goals and their 169 targets. To assist member countries in this assessment, the OECD *Measuring Distance to the SDG Targets* study applied a specific methodology showing how far OECD countries will have to travel to achieve the 2030 targets. This paper expands the methodology for use in different settings, including in non-OECD countries. It also illustrates the impact of different methodological choices on this assessment. The paper also uses an innovative approach to classify SDG indicators along the input-process-output-outcome chain, and presents a case study of adapting the methodology in the setting of select LAC countries.

Keywords: Sustainable Development Goals, SDGs, Gender, measurement
JEL Classification: Q010, 020, 021, J16

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Atteindre les 17 objectifs et les 169 cibles l'Agenda 2030 nécessite de comprendre où les pays se situe vis-à-vis de ceux-ci. Afin d'assister les pays membres dans cette évaluation, l'étude de l'OCDE *Mesurer la distance à parcourir pour atteindre les cibles des ODD* applique une méthodologie spécifique permettant cette évaluation de la distance restant à parcourir. Le présent document se propose d'étendre cette méthodologie à d'autres contextes, permettant ainsi d'inclure des pays non-membres de l'OCDE. Ainsi, elle illustre l'impact des différents choix méthodologiques nécessaires à cette évaluation. Elle utilise aussi une approche innovante afin de classifier les indicateurs ODD en terme d'intrants, processus, extrants et réalisations. Enfin, il présente une étude de cas afin d'adapter cette méthodologie à une sélection de pays d'Amérique Latine.

Mots-clés: Objectifs de Développement Durable, ODD, genre, mesure
Classification JEL: Q010, 020, 021, J16

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1. Introduction

1. The 2030 Agenda for Sustainable Development, adopted in September 2015 by world leaders at the UN General Assembly, presents an exceptional challenge for countries to achieve by 2030. It is a call for action to all countries to act for a better and more sustainable future for all. The Agenda is broad and ambitious, with 17 Sustainable Development Goals (SDGs) and 169 targets to be achieved globally by 2030. Most of these goals and targets are drawn from many previous international agreements, especially concerning development, environment and human rights. The goals are presented as *"integrated and indivisible, global in nature and universally applicable".*

2. While the SDGs are to be achieved globally, the 2030 Agenda clearly states that implementation at the national level will be in accordance with national circumstances:

> *"The Sustainable Development Goals and targets are integrated and indivisible, global in nature and universally applicable, taking into account different national realities, capacities and levels of development and respecting national policies and priorities."*

3. Implementation in accordance to countries' circumstances and capacities requires understanding current performance as well as the ambition of the various targets. The difficulty in achieving the targets varies significantly among different countries, whether due to greater resources, different priorities, or different levels of development. So, in developing a methodology to assess countries' performance on SDGs based on the *Measuring Distance to the SDG Targets* study (herewith, *OECD Distance to Targets*), it is important to consider what set of countries to use as reference group in light of the Agenda's recognition of implementation according to different national circumstances. Monitoring achievement and implementation in accordance with national priorities and circumstances is critical in order to achieve the goals globally.

4. The United Nations Statistical Commission (StatCom) created the Inter-Agency Expert Group on SDG indicators (IAEG-SDGs) to develop and implement a global indicator framework for the goals and targets of the 2030 Agenda (henceforth, the *Global SDG Indicator Framework*). These indicators are at different stages of development, with some indicators already well developed and regularly collected and others at early stages of conceptual development and data collection. Many countries have developed measurement frameworks based on the *Global SDG Indicator Framework*, adapted to national circumstances when appropriate.

5. With the aim of helping its member countries with implementation, and at their request, the OECD's Statistics and Data Directorate developed a unique methodology for measuring the distance OECD countries have to travel to achieve SDG targets. First published in July 2016, the third and most recent edition of the *Measuring Distance to the SDG Targets* study was published in May 2019 (OECD, 2019[1]). The study showed OECD average and country-level distances from achieving the SDG targets for 105 of the 169 targets, based on 132 indicators from UN and OECD databases. It also presented the current data gaps, identifying areas where statistical development would be crucial to show exhaustive country-level assessments of distances from targets for OECD countries.

6. The *OECD Distance to Targets* study focused on OECD countries only. Its methodology was also used in several bilateral projects aimed at assisting governments in aligning their national strategic plans with the 2030 Agenda (Slovenia, Poland, and the Slovak Republic). The underpinning methodology is based on a comparative approach, using the cross-country dispersion of outcomes for comparison across fields (normalisation). Extending the methodology to other countries and geographical areas thus

requires reconsidering some underlying hypotheses, such as how to set end-values to be achieved by 2030, how to normalise countries' performance, and what the comparison group of countries should be.

7. The methodology that was applied to OECD countries requires adjustments for implementation in different settings for several reasons. First, because of differences in the characteristics of the countries assessed, such as the availability of data, the level of development and the appropriate level of achievement for the targets. Secondly, the challenges and priorities may also differ across countries. For example, target 2.1 which aims to end hunger worldwide is less pertinent in OECD countries, where hunger is relatively rare. These differences also require a more tailored approach for identifying the most appropriate group of comparison, going beyond a narrow approach of GDP per capita to consider multidimensional factors.

8. With the aim of contributing to a toolkit assisting countries in their implementation of the 2030 Agenda, this paper explores different methodological questions and presents several possible approaches to measuring distances to the SDG targets. These options can be adapted for different groups of countries beyond the OECD, as well as for country-focused analyses. This paper responds to growing demand from non-OECD countries, agencies and organisations for assessing their distance from SDG targets, as well as from OECD countries in their role as providers of official development assistance (ODA) and broader official and officially supported resources to promote sustainable development in developing countries. This work complements ongoing activities conducted at the OECD such as the OECD's Development Co-operation Directorate work on aligning development aid to SDG-oriented results and on tracking the SDG focus of development finance activities, the work on Policy Coherence for Sustainable Development, and the work on well-being and national development strategies conducted by the OECD Development Centre.

1.1. The *Measuring Distance to the SDG Targets* methodology

9. The *OECD Distance to Targets* study was first published as a pilot in July 2016, in response to demand from member countries to leverage the OECD data and expertise in order to help countries navigate the complexity of the 2030 Agenda. Specifically, it aimed at assessing how far countries are from achieving the targets by 2030 in a way that allows comparison across indicators, targets and goals. This assessment is intended to help countries identify areas of strengths and weaknesses, and to inform policy prioritisation in light of the SDGs.

10. The first pilot study was a voluntary study, with six countries participating in the country level assessment. The second edition was published in June 2017 with a further seven countries assessed, expanded target and indicator coverage and a revised methodology. Following the publication, ten additional OECD countries requested and received a country-level analysis based on the study findings. The third edition, published in May 2019, further expanded the country coverage as well as the indicator and target coverage. It also included an exploration of two issues: measuring trends in achieving SDGs, and measuring the transboundary aspects of the Agenda.

11. The methodology and findings of the *OECD Distance to Targets* study were also used for further in-depth analysis on a bilateral level with OECD countries. In Slovenia, the results and indicators were used to help identify indicators and target levels for the *National Development Strategy 2030*. In the Slovak Republic, the methodology was used as a basis for aligning the *National Investment Plan 2030* with SDGs and developing an indicator framework for monitoring it. The *OECD Distance to Targets* study was also used

in the Czech Republic as reference for the national SDG indicator framework. The results and study were also referenced in seven of the OECD countries Voluntary National Reviews (VNRs), submitted to the annual UN High Level Political Forum on SDGs.

12. The *OECD Distance to Targets* study applies a standardised method to measure the distance between OECD countries' current performance and where they should be in 2030. Its methodology rests on three elements: (1) selecting indicators and data; (2) setting end-values for the indicators; and (3) normalising the values to a common basis, so as to allow assessing distances across different fields.

1. **Indicators and data**:

13. In order to select the indicators and identify the data that could be used, *OECD Distance to Targets* uses the *Global SDG Indicator Framework* as a starting point. Data were selected from either the *UN Global SDG Database* (UN Statistics Division, 2019[2]) or from OECD databases according to the following rules:

a. Where OECD data aligned with the *Global SDG Indicator Framework* exist, *OECD Distance to Targets* takes OECD data.

b. Where no OECD data sources exist, data are extracted from the *UN Global SDG Database*.

c. Where neither OECD nor *UN Global SDG Database* data are in full alignment with the *Global SDG Indicator Framework*, *OECD Distance to Targets* relies on data that are considered suitable as close proxies of the IAEG indicators.

2. **End-values (targets)**:

14. For each indicator used, in order to measure the distance from achieving the target, an appropriate end-value (target level) must be set. However, the 2030 Agenda does not always specify the end-value to be attained. Therefore, *OECD Distance to Targets* uses a four-step process for setting end-values:

a. Wherever possible, target levels specified in the 2030 Agenda are used. This is typically a fixed value identified in the wording of the target (e.g. maternal mortality ratio below 70 per 100 000 live births for target 3.1) or, in a small number of cases, expressed as a relative improvement (e.g. reduce at least by half the proportion of people living in poverty for target 1.2). These are classified as type-A targets.

b. Where no target value is identified in the text of the 2030 Agenda, target levels were drawn from other international agreements (e.g. reduce $PM_{2.5}$ pollution to less than 10 micrograms per cubic meter, according to the WHO) or based on OECD expert judgment (e.g. water stress is considered to be low if total freshwater abstraction is below 10% of total internal renewable resources (OECD, 2017[3])). These are classified as type-B targets.

c. If no target value can be identified from either the 2030 Agenda or expert sources, then the target level is based on current "best performance" among OECD countries. This is defined as the level attained by the top 10% of OECD countries (e.g. a recycling rate of municipal waste). These are classified as type-C targets.

d. Finally, for indicators lacking a clear normative direction (e.g. the share of manufacturing in value added), no target level is set and therefore no "distance" is measured.

3. **Normalisation**:

15. In order to compare performance across different targets, indicator values are normalised using a modified version of the z-score[2] (i.e. distance is expressed as the number of OECD standard deviations[3] a country is from reaching the target level).[4] In the results that follow, this is described as the "standardised difference" between the country's current position and the target end-value. The higher the distance, the further the country needs to travel to achieve its target. A zero distance means the country has already achieved the 2030 target. Negative scores mean the country already exceeds the target and, for the purpose of the study, are reported as 0 (i.e. no premium for going beyond the target).

16. Adapting the *OECD Distance to Targets* methodology to different country settings requires understanding how the three elements of the methodology, i.e. which indicators and data to use, what target levels to set, and how to normalise the indicators, need to be adjusted to account for the specificities of different country settings. These choices are driven by the comparative nature of the study, which uses the performance of a group of countries both for the normalisation (standard deviation) and target levels (end values). In addition, special attention needs to be paid to the composition of the group of benchmark countries as it will affect the indicators and data that can be used. This paper discusses these choices and presents some illustrative calculations of their impacts.

17. The paper is structured as follows. The next section details the steps of the methodology used in *OECD Distance to Targets* and the choices available for each step, discussing the impacts of each choice and presenting a concise review of all steps and the practical implications for different analyses. Section 3 presents an application of this methodology to a set of Latin American countries, while Section 4 concludes.

2. Adapting the *OECD Distance to Targets* methodology for multiple uses

18. Having adopted the 2030 Agenda, countries around the world are faced with the immense challenge of implementing the 17 SDGs and their associated targets. One of the responses to this challenge is to assess the current situation of the country vis-à-vis the 2030 Agenda. By using a unified metric, the OECD methodology allows comparing performance across targets and against other relevant countries', with a view of identifying effective policies to accelerate progress and taking corrective actions when off-track. The unique methodology of OECD *Distance to Targets* provides such an assessment, measuring the distance from achieving the SDG targets using a unified metric, and comparing across the targets in order to identify countries' strengths and weaknesses vis a vis the 2030 Agenda. This section delineates the different components underlying the methodology of *OECD Distance to Targets*, and explains how this methodology needs to be adjusted to a country setting which is different from the one of OECD members. The impacts of these choices are assessed using data from the *UN Global SDG Database.* The section closes with a practical summary of the methodological choices for different applications.

[2] The normalisation is defined by $\max\left(\frac{T-x_i}{\sigma}, 0\right)$ where T refers to the target level, xi to the current outcome in country i and σ refers to the standard deviation among OECD countries in the most recent year.

[3] "OECD standard deviation" refers to the standard deviation computed within the OECD group of countries.

[4] In a standard z-score normalisation, the distance is expressed as the number of standard deviations away from the mean score.

2.1. Establish the purpose of the assessment

19. The *OECD Distance to Targets* methodology can be used, and has in fact been used, to serve different purposes. Its original goal was to assess a group of countries that have similar economic circumstances, as members of the OECD, in a way that supports each country in identifying strengths and weaknesses across the SDGs. It has also been used in work with governments to help align national strategic plans to the 2030 Agenda, in which cases the comparison groups, indicators and data used, and end-values selected, were set according to their relevance for the country in focus. The methodology could also be applied in other settings, adapting the various methodological choices to fit the context and circumstances of the assessment.

20. Several types of assessments can be identified; a **single country** assessment, such as a benchmarking exercise to support aligning national priorities to the 2030 Agenda; the assessment of a **region**, such as in reports of several UN regional commissions; the assessment of a **common group of countries**, such as in OECD (2019[1]), or a **global assessment**. Additionally, the timing and commitment for the assessment should also be considered – whether it is a regular and repeated exercise, in which case setting strict criteria serves to maintain coherence across time, or a one-off assessment, in which case the decisions should be guided by the context and relevance at the time. For example, a post-Covid-19 analysis could specifically prioritise the indicators and targets which are most affected by the crisis in order to analyse the impact on SDGs. In each case, the methodological choices made should be aligned to the objectives of the assessment.

2.2. Set a comparison group

21. At its base, *OECD Distance to Targets* uses a comparative approach in order to gauge country's performance on SDGs. Both the normalisation method, which uses the dispersion among OECD countries performance, and the setting of end-values, based on best performance, are comparative in nature. The first step of the analysis is to define and select the group for comparison (the benchmark group). Primarily, the comparison group should be set in light of the purposes of the analysis undertaken.

22. While in some cases, the benchmark is set in the nature of the comparison, as in the case of a regional assessment where all countries in the region are included, in other cases it is not immediately obvious. Common characteristics such as income or region can suffice for selecting the benchmark countries, but in some cases the benchmark group can be less obvious. For instance, a range of contextual factors such as income level, area, population size, geographical locations and climate risks can be taken into account to derive the benchmark group. This kind of multidimensional approach is used in the OECD Development Centre's Multidimensional Country Reviews (MDCRs), which set a benchmark group according to a range of factors in order to assess a country's performance. Additionally, some countries might be excluded from the analysis for statistical reasons (very specific conditions might be considered as outliers) or for geopolitical choices (what is considered a country). In any case, the comparison group should be set carefully as it will affect the results. For example, if the analysis focuses on a high-income country, gauging its performance using a low-income country's yardstick will produce different results than when using a high-income yardstick, pointing to different policy implications.

23. In this paper, the analysis of impacts of the methodology on the assessment of distances to SDG targets is assessed based on the *UN Global SDG Database* and using data for all 193 UN member states. Different hypotheses are systematically tested against four distinct benchmark approaches:

- Global: all 193 UN member states or only those with population over one million;
- Economic: using the World Bank income level classification,[5]
- Geographic: based on the UN geographical regions and sub-regions,[6]
- SDG data availability: based on a cluster analysis[7] of the data available in the *UN Global SDG Database.*

24. These four benchmarking groups are detailed in Table 2.1, as well as the number of countries in each group. In the analysis of the methodological choices that follows, we use these 33 groups to assess the impact of each methodological choice on the assessment results.

Table 2.1. Country groupings used in the paper

Global		Economic		Geographic				SDG Data availability	
		World Bank classification		Continental regions		Sub regions			
All countries	193	High income	58	Africa	54	Northern Africa	6	Group 1	36
		Upper middle income	58			Sub-Saharan Africa	48	Group 2	20
All countries over 1m population	155	Lower middle income	46	Americas	35	Latin America and the Caribbean	33	Group 3	57
		Low income	31			Northern America	2	Group 4	6
				Asia	47	Central Asia	5	Group 5	36
						Eastern Asia	5	not classified	38
						South-eastern Asia	11		
						Southern Asia	9		
						Western Asia	17		
				Europe	43	Eastern Europe	10		
						Northern Europe	10		
						Southern Europe	14		
						Western Europe	9		
				Oceania	14	Australia and New Zealand	2		
						Melanesia	4		
						Micronesia	5		
						Polynesia	3		

Source: Population data comes from the United Nation Population Division (https://un.org/en/development/desa/population/index.asp). The "Economic Classification" is developed by the World Bank (https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups), the "Geographic Classification" is based on the UNSD "Standard Country or Area Codes for Statistical Use" (https://unstats.un.org/unsd/methodology/m49/), while the classification based on data availability is developed by the OECD.

[5] The World Bank assigns the world's economies into four income groups – high, upper-middle, lower-middle, and low. It bases this assignment on gross national income (GNI) per capita calculated using the Atlas method. The units for this measure and for the thresholds is current USD.

[6] The list of geographic regions presents the composition of geographical regions used by the United Nation Statistics Division in its publications and databases. Each country or area is shown as belonging to one region only. These geographic regions are based on continental regions; which are further subdivided into sub-regions and intermediary regions drawn in order to obtain greater homogeneity in terms of population, demographic circumstances and accuracy of demographic statistics.

[7] SDG data availability grouping has been defined using "cluster analysis", i.e. a statistical method aiming at grouping a set of objects in such a way that objects in the same group (cluster) are more similar to each other than those in other groups. In this case, countries are clustered using a set dummy variables equal to 1 when a specific data series is available and to 0 when the data series is not available.

2.3. Select the indicators and data

25. When constructing a set of indicators to monitor policy goals, quality selection criteria ensure that the indicators are a good fit for the purpose of the assessment. Quite often, strengths and weaknesses of any assessment based on data are largely derived from the quality of the underlying indicators. Quality is here defined as "fitness for use" in terms of user needs. This definition is broader than what was previously considered as quality statistics, when quality was equated with accuracy. It is now generally recognised that there are other important dimensions, beyond and in addition to accuracy. Even when data are accurate, they cannot be said to be of good quality if they are produced too late to be useful, cannot be easily accessed, are not relevant to the issue or appear to conflict with other data. Thus, data quality is a multi-faceted concept. The importance of quality characteristics depends on the user's perspectives, needs and priorities, and will vary across groups of users. Ideally, all indicators should be selected on the basis of their relevance, accuracy, credibility, timeliness, accessibility, interpretability, coherence and cost-efficiency (OECD, 2011[4]). However, not all dimensions are pertinent for the analysis in this paper. We focus in this section mainly on relevance, accuracy, timeliness, and another important criterion: availability. Finally, this section also discusses how to classify the different indicators for policy relevant analysis.

2.3.1. Relevance and accuracy

26. First, indicators need to be **relevant and accurate**, meaning that *"the data need to address the purposes for which they are sought by users"* and they should *"correctly describe the quantities or characteristics they are designed to measure"* (OECD, 2011[4]).

27. The *Global SDG Indicator Framework,* curated by the IAEG-SDGs, serves as a basis for selecting the indicators. Intrinsically, these indicators are meant to be relevant and accurate to monitor the SDG targets. However, accuracy might depend on context. The 2030 Agenda explicitly leaves scope for countries to prioritise among targets and indicators, acknowledging that not every target applies to every country, and that not every indicator applies to every country (UN, 2015[5]). It notes that:

> *"Targets are defined as aspirational and global, with each Government setting its own national targets guided by the global level of ambition but taking into account national circumstances. Each Government will also decide how these aspirational and global targets should be incorporated into national planning processes, policies and strategies."*

28. The *UN Global SDG Database* compiles the data collected for populating the *Global SDG Indicator Framework* for all countries and is regularly updated. Alternative data-sources could also be considered for a country comparison, such as the World Bank's World Development Indicators (World Bank[6]), Eurostat's SDG Indicators (Eurostat[7]), and others, but these are not aligned with the *Global SDG Indicator Framework.* This means that using these sources requires selecting the relevant indicators and aligning them with the IAEG list (matching goals and targets to indicators). For the analysis in this paper, we use the *UN SDG Global Database*[8] as the only data source. The process of adapting the database for the analysis is described in Box 2.1.

[8] As of December 2019, so that the 2020 revision of the indicator framework is not reflected in the analysis.

Box 2.1. Adapting the *UN Global SDG Database* for a *Measuring Distance to SDG Targets* analysis

As of December 2019, the *UN Global SDG Database* included data for 177 of the 244 indicators, covering 126 of the 169 SDG targets. It covers 312 geographical entities, spanning a timeline from 1974 to 2019. The database is fully aligned with the *Global SDG Indicator Framework*, meaning that each data series is identified by the SDG indicator to which it corresponds. However, for some data series, a slightly different structure than the SDG indicator is used by the UN Database, which need to be taken into account before conducting an analysis. First, the *UN Global database* includes an extra level of analysis beyond goals, targets and indicators, as it delineates data series for each indicator. The 177 indicators are thus detailed by 391 different data series (533 data series when taking duplicates). Around half of the indicators are covered by a single data series while others are covered by multiple series, and 8 indicators are covered by more than 10 data series.* In some cases, this multiplicity reflects the multidimensional aspect of the indicator (e.g. indicator 1.3.1 on social protection is assessed through 15 distinct indicators tracking different aspects of social protection such as unemployment, invalidity or maternity). In other cases the indicator is backed up with the intermediary data series that allow users to reconstruct the "main" indicator (e.g. indicator 5.5.1 on gender representation in parliaments includes the total number of seats in national parliament, the number of seats held by women as well as the proportion of seats held by women). In addition, the same indicator can be available for different groups such as by gender, age and disability status but also, depending on the data series, by mode of transportation or type of product. This wide range of definitions increases the number of different data series up to 1 501.

For the purpose of this paper, some actions are taken to structure the database in support of the analysis. First, the database has been restricted to the 193 UN member states and to the most recent observation per series/country. Additionally, some variables have been transformed to make them relevant for the analysis, for instance by converting monetary variable into constant PPPs or by attributing specific values to data expressed as a range (e.g. "<5" became 5). Additionally, each observation is matched with the corresponding population size for the country/year in question. These revisions resulted in dropping 5 indicators from the analysis (2.b.1, 8.4.1, 12.2.1, 14.4.1 and 16.10.1) as they are not available at country level.

Then, for every series/country, the "main" population is defined, so that other series are considered as "disaggregation". In most cases, the choice is obvious. For instance, the proportion of fatal occupational injuries per 100 000 employees (indicator 8.8.1) is available by migratory status and by gender but also for total population, which was set as the main data series. In a few remaining cases, it was not possible to consider a specific data series as more representative than the other. For example, the number of deaths attributed to non-communicable diseases (3.4.1) is available for four different diseases (cardiovascular disease, cancer, diabetes or chronic respiratory disease). For these data series, all the different versions of the indicator are considered. From 1 501 data series, these choices enabled a reduction of the list to less than 600 different data series. Finally, as detailed in section 2.4, a normative direction and an end-value was set for every single data series.

* Indicators 1.3.1, 1.5.1, 4.5.1, 6.6.1, 11.5.1, 11.5.2, 13.1.1 and 17.2.1

2.3.2. Data availability: indicator and country coverage

29. Next, the **availability of data** is considered for assessing the quality of the data. The lack of relevant data limits the ability to build sound and sufficiently comprehensive analysis. Data availability for the *Global SDG Indicator Framework* across the 17 goals and 169 targets is still far from complete. Many of the indicators on the list are still at various stages of definition and data collection, with 92 indicators classified as Tier II (i.e. data not regularly produced) and 20 as Tier III (i.e. no established methodology) (IAEG-SDGs, 2019[8]).[9][10] While the *OECD Distance to Targets* study built on the wealth of OECD data to complement the UN data, the coverage was still limited with to only 62% of targets. The *UN Global SDG Database* has data available at country level for 73% of targets (124 of 169 targets), but no single country has reached this share, meaning that no country has data available for all 124 targets. Indeed, two different types of data availability should be considered:

- Missing country(ies) – data may be missing for a country/some countries for an indicator, i.e. there are data for the indicator but not for all countries. This can be because the indicator is not regularly produced by all countries, but only by some (e.g. Tier II indicators in the *Global SDG Indicator Framework)*. This prevents a complete benchmarking analysis, as for some indicators the comparison group will be smaller due to missing data.
- Missing indicator – data are missing for an indicator for all countries in the dataset (or for a minimum threshold of countries). This can be because there are no internationally established methodologies or standards available for the indicator (e.g. Tier III indicators). This prevents a comprehensive assessment of the 2030 Agenda, so that for some targets no indicators may be available in order to assess the distance from achieving the target (as described in the previous paragraph).

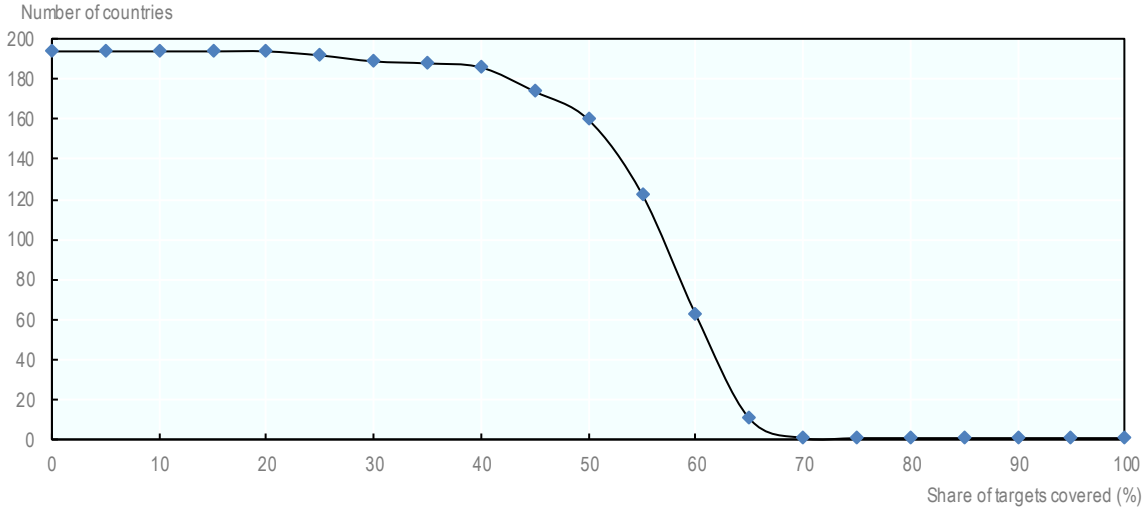
30. Figure 2.1 shows that across countries, target coverage varies widely. Data availability across countries ranges from less than one quarter of targets covered in Liechtenstein and the Federated States of Micronesia to almost 70% coverage in Colombia, Mexico and Peru. Overall, for a significant number of countries (159 of the 193), data are available for over 50% of targets. This share however drops off sharply and there are only 10 countries with data covering over 65% of targets.

[9] To facilitate the implementation of the UN Global Indicator Framework, all indicators were classified by the IAEG-SDGs into three tiers based on their level of methodological development and the availability of data at the global level. As of 11 December 2019: the updated tier classification contains 116 Tier I indicators, 92 Tier II indicators and 20 Tier III indicators. In addition to these, there are 4 indicators that have multiple tiers (different components of the indicator are classified into different tiers).

[10] The IAEG-SDGs proposed 36 major changes to the framework in the form of replacements, revisions, additions and deletions as part of the 2020 Comprehensive Review; these changes were approved by the 51st meeting of the UN Statistical Commission in March 2020. As of 17 July 2020 the Global SDG indicators contains 123 Tier I indicators, 106 Tier II indicators and 2 indicators that have multiple tiers.

Figure 2.1. Most countries in the UN Global database have data available for over 50% of targets

Shares of targets covered by number of countries



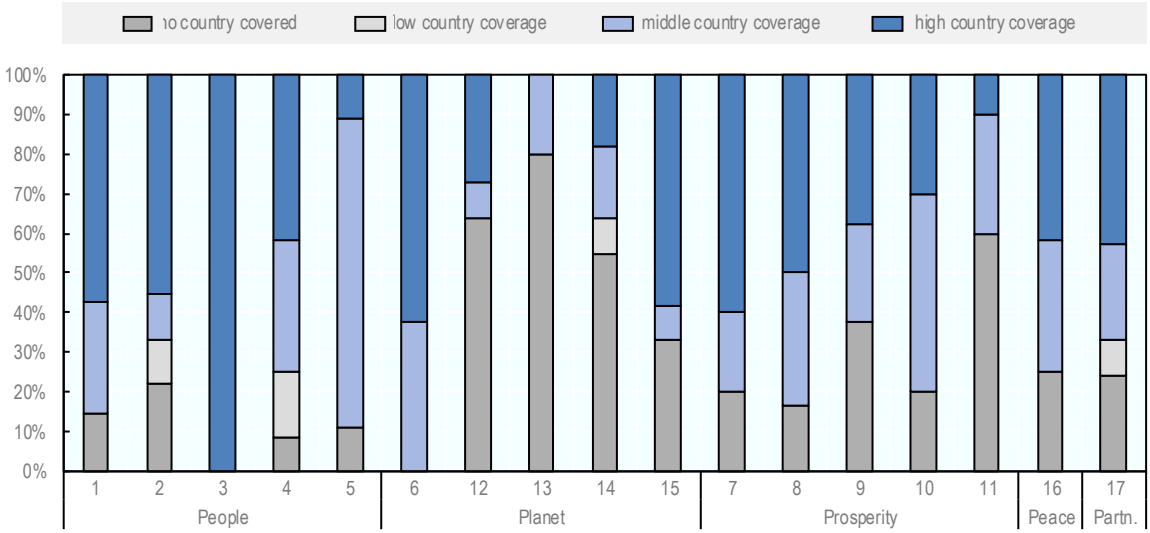
Source: Authors computations based on (UN Statistics Division, 2019[2]), *United Nations Global SDG Database*, https://unstats.un.org/sdgs/indicators/database/.

31. Focusing next on limited data availability due to missing indicators, we find that data coverage is uneven across the 17 goals. Data availability for the indicators in the *Global SDG Indicator Framework* differs significantly, with some goals relatively rich in data while others featuring very scant data. Figure 2.2 shows that Health (Goal 3) is the only goal with all targets covered by at least one indicator, for most countries. It is followed by Goal 9 on Infrastructure and Goal 4 on Education. Conversely, most goals pertaining to the Planet category (Goals 6, 12, 13, 14 and 15) as well as Goal 11 on Cities have very poor indicator coverage with most targets covered by few indicators or none at all. It is thus important to acknowledge that findings from any assessment need to be considered in light of what data are available to measure the 2030 Agenda. The unequal indicator coverage of the *Global SDG Indicator Framework* needs to be considered when providing an assessment, as partial coverage will affect results and should be accounted for. Additionally, alternative sources of data or use of proxy could be considered.[11]

[11] Using alternative indicators is useful to bridge data gaps but it is important to consider their limitations in hindering comparability. Additionally, as the *Global SDG Indicator List* is still evolving and developing, following it allows staying up to date with these changes.

Figure 2.2. Data availability in the UN Global database varies significantly across goals and targets

Share of targets for which there is at least one indicator per country, by goal and country coverage



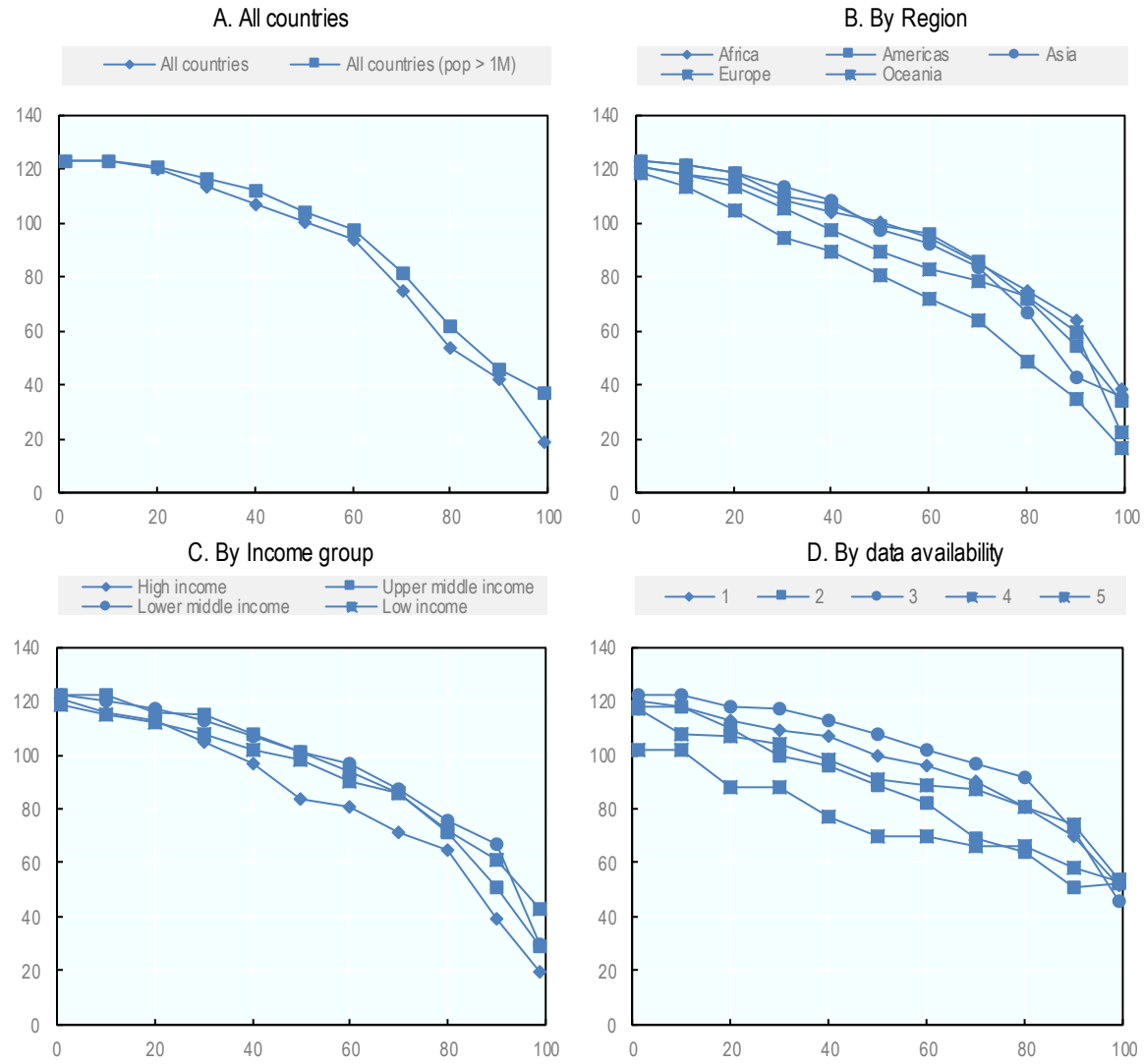
Notes: Dark grey bars (labelled "no country covered") indicate that the targets cannot be measured for any of the 193 UN member states; light grey bars (labelled "low country coverage") indicate that for these targets, data are available for less than 25% of UN member states (48 countries) for at least one indicator relating to the target; light blue bars (labelled "middle country coverage") indicate that, for these targets, data are available for 25% to 75% of UN member states (from 49 to 144 countries) for at least one indicator relating to the target; dark blue bars (labelled "high country coverage") indicate that for these targets, data are available for more than 75% of UN member States (145 countries) for at least one indicator relating to the target.
Source: Authors computations based on (UN Statistics Division, 2019[2]), *United Nations Global SDG Database*, https://unstats.un.org/sdgs/indicators/database/.

32. Considering data availability across countries (rather than across indicators), Figure 2.3 shows that country coverage varies when considered for a specific indicator. As target coverage grows (displayed on the y-axis), country coverage (displayed on the x-axis) falls. This pattern is similar across three of the four groups of analysis (global, geographic, and economic), and (obviously) less pronounced for the data-availability groups. For most of the groups, around 80 indicators are available for at least half of the countries in each group, a pattern likely driven by the minimum criterion used in the *Global SDG Indicator Framework* for *Tier I* indicators (a 50% threshold of countries and of the population in every region where the indicator is relevant). Figure 2.3 shows that there is a clear trade-off between the number of countries included in the analysis, and the number of indicators and targets covered.

33. While partial *indicator* coverage hinders a comprehensive analysis, partial *country* coverage raises a different issue: the comparative approach used for the assessment. As the *OECD Distance to Targets* methodology uses a comparative approach to gauge a country's performance on SDGs, an incomplete distribution is likely to affect the results. Both the normalisation method – which uses the dispersion among countries performance – and the target-setting – with some end-values based on best performance – are comparative in nature and can thus be affected by a limited country coverage.

Figure 2.3. The trade-off between country coverage and target coverage in the UN Global Database

Number of targets covered by at least one indicator in the UN Global SDG Database by share of countries of the group



Note: The graphs show the target coverage on the y-axis, and the country coverage on the x-axis. The analysis is presented for the four types of country grouping used in this paper.
Source: Authors computations based on (UN Statistics Division, 2019[2]), *United Nations Global SDG Database*, https://unstats.un.org/sdgs/indicators/database/.

What to do about missing data?

34. Missing data will hinder a robust analysis, so how best to deal with them? As discussed above, there are two types of missing data to consider: missing indicator from the complete set of indicators, or missing countries for one or several of the indicators. For both, there are two general methods for dealing with missing data: (i) omission and deletion, or (ii) imputation. The first method is to simply omit, or disregard, the missing records (either only the data point or the complete series) from the analysis. However, this overlooks the issue of possible systematic differences between complete and incomplete samples, and can produce skewed or biased estimates. In particular, if the missing data points are not randomly distributed, even though this is hard to confirm, there will be bias

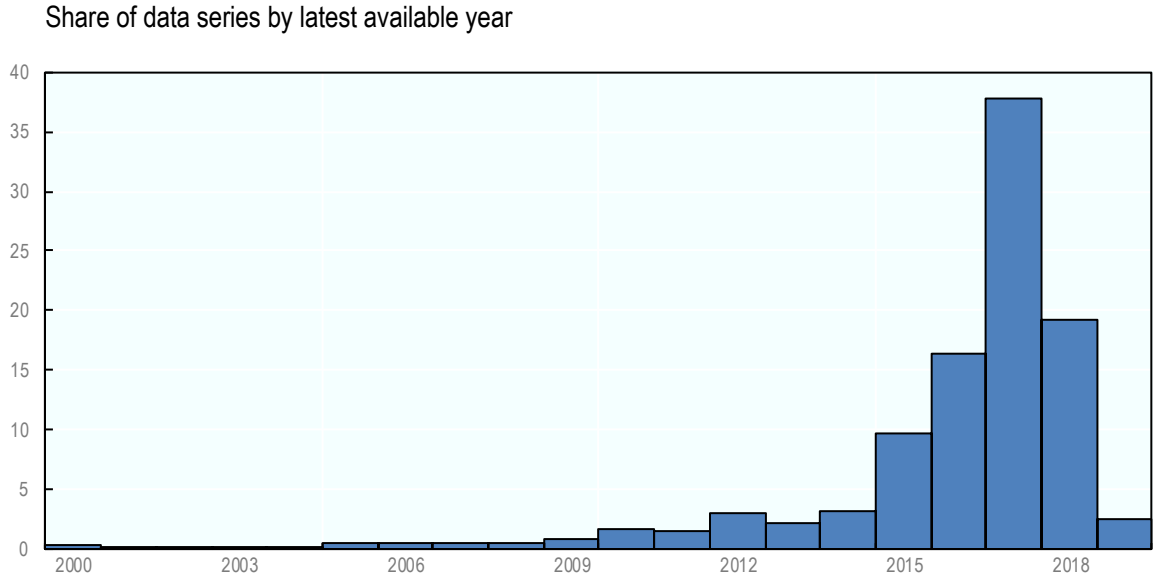
in the estimation results. For example, if several poorly performing countries are consistently missing from data then the results will be biased towards better performing countries. Additionally, standard errors will generally be smaller to what they should be in this reduced sample, given that less information is used – and thus distances would be over-estimated.

35. The second method considers the missing data in the analysis by imputing values for this data. Values can be imputed either through single imputation (the missing value is replaced by a single value such as mean/median/mode of a distribution of interest or using regression imputation), or multiple imputation (the missing value is replaced by a range of possible values estimated using the Markov Chain or the Monte Carlo algorithm). Data imputation however does come with costs, as no imputation model is free of assumptions. The imputation results should hence be thoroughly checked for their statistical properties, such as distributional characteristics, as well as heuristically for their meaningfulness (e.g. some data series has natural boundaries, such as a share cannot be above 100%, a number of people cannot be below 0, etc.). In either case, whether missing data is deleted (ignored) or imputed, the impact on the results should be considered and communicated appropriately.

2.3.3. Timeliness

36. **Timeliness** should also be taken into account in the selection of indicators and data. The timeliness of data reflects the length of time between their availability and the event or phenomenon they describe. The benefit of including outdated data should be considered against the risk of using information that is no longer accurate. Sometimes, wrong and outdated information can be worse than no information at all. Timeliness in the *UN Global SDG Database* varies across the data, but as presented in Figure 2.4, the latest year for over 85% of the data is 2015 and onwards, and for 90% of the data is from 2012 onwards.

Figure 2.4. Most data in the *UN Global SDG Database* are relatively up to date



Source: Authors computations based on (UN Statistics Division, 2019[2]), *United Nations Global SDG Database*, https://unstats.un.org/sdgs/indicators/database/.

37. In the selection of indicators and data for analysis, there are several factors to consider. In the context of an assessment of SDGs, should the data align with the *Global SDG Indicator Framework*, and if so, does it? Is the data sufficiently timely? How does the choice of the comparison group (economic, geographic, other) affect data availability? What should the minimum threshold for country coverage be? How to treat missing data? Limited data availability can hinder the assessment of countries' distances to SDG targets, but it is also helpful to understand where data are missing in order to prioritise future data development and collection for expanding the assessment. The analyses presented in this section shed some light on these issues, showing the trade-off between country coverage and target coverage, the timeliness of the *UN Global SDG Database,* addressing the issue of data availability and dealing with missing data.

2.3.4. Applying a policy results-chain perspective to the SDG indicators

38. The multitude of indicators for tracking progress on the 2030 Agenda, together with the patchy data coverage for these indicators, makes for an increasingly challenging mission for National Statistical Systems and policy makers. For the first, filling data gaps needs to be prioritised under limited resources and with conflicting interests, in order to maximise the use and relevance of the data. For the latter, a prerequisite for action is prioritisation, which relies on relevant and accurate data in order to assess the current situation and support decision making. The *Global SDG Indicator Framework* includes 247 indicators of different nature, conflating inputs, processes, outputs and outcomes. This diversity calls for different approaches to implementation and evaluation (Kanbur, Patel and Stiglitz, 2018[9]).

39. The *policy results chain* provides a useful conceptual approach to the assessment of distance to the SDG targets, introducing a policy perspective to the structure of the SDG indicators (OECD, 2009[10]). The *policy results chain* details the different parts of policy intervention described by the indicators, from the inputs (resources) used, through to the policy process, then the outputs of the policy intervention, and finally, the outcomes, meaning the impacts on people's lives, the economy and the planet.[12] This approach is grounded in the OECD Well-being Framework (OECD, 2011[11]), which focuses on *outcomes* for current well-being, i.e. states of being, rather than inputs or processes which may affect the outcomes (but are poor proxies for these).[13]

40. In order to assess the SDG indicators according to the *policy results chain* structure, we have classified all 247 in the *Global SDG Indicator Framework*,[14] as either input,[15]

[12] An example of the well-being results chain in the case of education would be: resources invested (government education expenditure, teachers, etc.) as an input, the curriculum set for schools by the government as a process, the enrolment rate as an output and gained skills (e.g. through test scores) as an outcome.

[13] A different approach is adopted by the OECD Development Assistance Committee to classify the SDGs according to results from the perspective of ODA providers (OECD Development Co-operation Directorate, forthcoming).

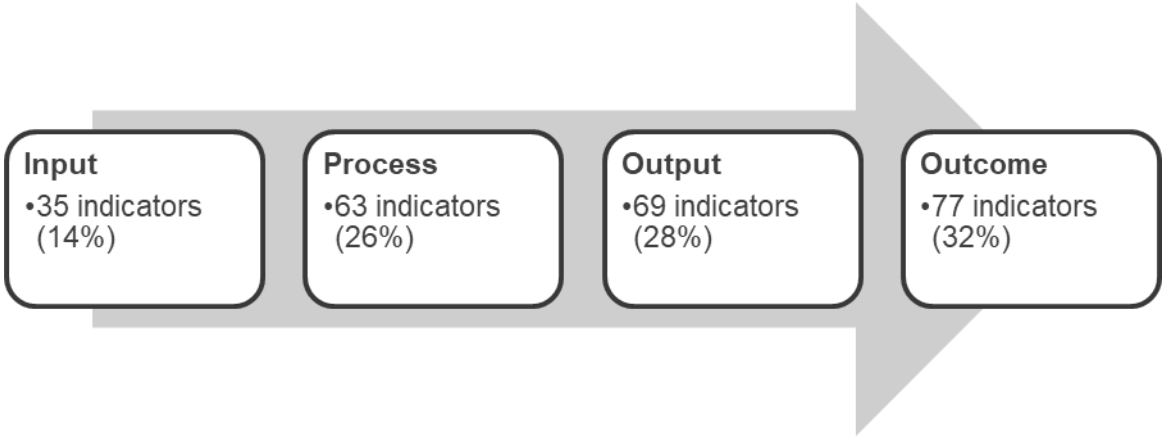
[14] The analysis uses the Global SDG Indicator Framework as of December 2019, before the 2020 indicator update.

[15] Indicators classified as inputs, for example: 3.b.2 Total net official development assistance to medical research and basic health sectors; 17.1.2 Proportion of domestic budget funded by domestic taxes.

process,[16] output[17] or outcome[18] (see Annex A for full list). Figure 2.5 shows the results of this classification across the Global SDG Indicator Framework. We find that, of the 244 indicators, the largest group of indicators are outcomes (32%, 77 indicators), whereas 28% are outputs, 26% are processes and 14% are inputs. However, this classification is also important when it comes to applying the methodology used in this paper because of its implications for setting target levels, hence for assessing the normative direction, for each indicator. While a normative direction (hence the possibility to assess distances) is implicit in the case of both outcome indicators (e.g. reducing the number of people living below a poverty line) and process indicators (e.g. proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national ones), this is not necessarily the case for either inputs (e.g. share of government revenue in GDP) or outputs indicators (e.g. share of medium and high-tech industry in total value added). Because of these reasons, outcomes indicators represent 43% of the measures of distances presented in this paper, as compared to 30% and 23% for outputs and processes, and only 4% for inputs. The classification of indicators based on the policy result chain is also important to allow countries to identify the critical gaps they face in order to attain the SDG targets. For example, a country having small distances for targets related to processes but large distances for targets related to outcomes may need to focus more on implementation mechanisms.

41. This distribution of indicators across the results chain suggests that an assessment of SDGs with a focus on the *policy results chain* would focus on the relevant categories. For instance, in order to assess whether the outcomes warranted by the 2030 Agenda have been achieved, an analysis might focus only on assessing distance to target for up to the 77 outcome indicators, whereas an assessment focusing on whether the necessary inputs and resources are being directed towards the SDGs, would focus on the 35 input indicators.

Figure 2.5. Mapping the *Global SDG Indicator Framework* across the results chain



Source: Based on authors' analysis of the *Global SDG Indicator Framework*.

[16] Indicators classified as process, for example: 10.7.2 Number of countries with migration policies that facilitate orderly, safe, regular and responsible migration and mobility of people; 5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex.

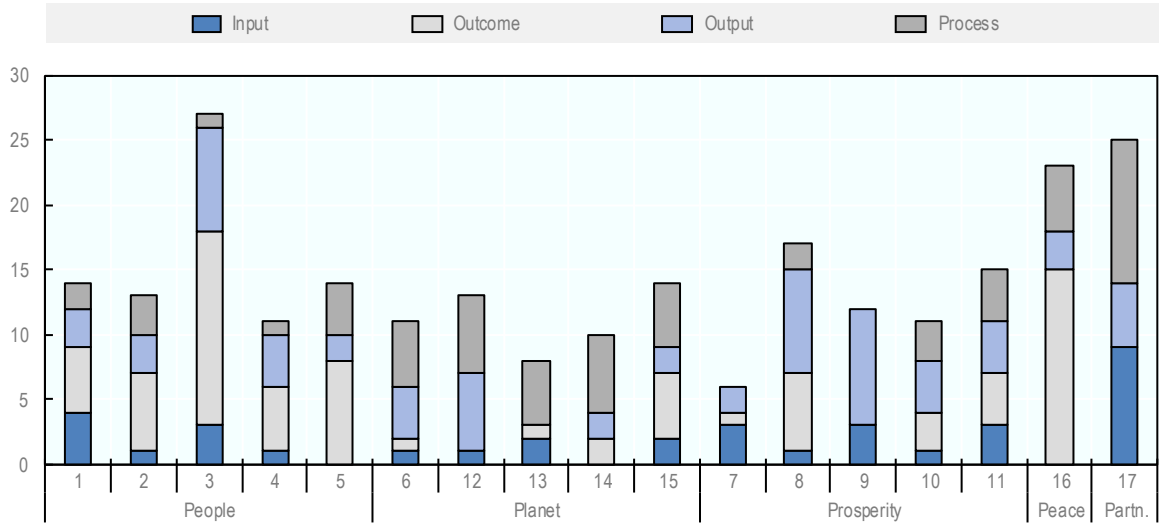
[17] Indicators classified as output, for example: 5.b.1 Proportion of individuals who own a mobile telephone, by sex; 1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP).

[18] Indicators classified as outcome, for example: 3.1.1 Maternal mortality ratio; 1.4.1 Proportion of population living in households with access to basic services.

42. Looking further into the distribution of the SDG indicators across the results chain, Figure 2.6 shows the distribution across the 17 goals. As presented earlier, the indicators in the *Global SDG Indicator Framework* are not spread evenly across goals, with some goals measured by over 20 indicators while others by less than 10. The same unevenness applies across goals, with some goals markedly more outcome-oriented than others, such as Goal 3 on Health, Goal 5 on Gender disparities and Goal 16 on Institutions with more than half of the SDG indicators being outcome-oriented. Conversely, goals such as Infrastructure, Sustainable Production and Partnerships (Goals 9, 12 and 17) have no outcome indicators at all. These findings can help prioritising data development, identifying not just general data gaps across the SDGs but also data gaps across the *results chain*, and to identify possible complementing indicators sets.

Figure 2.6. Distribution of the SDG indicators across the results chain, by goal

Number of indicators falling is each category of the results chain



Source: Authors computations based on the *Global SDG Indicator Framework*.

2.4. Determine end-values (targets)

43. After indicators have been selected, and the relevant data sources have been identified, end-values for each data series must be set in order to measure the distance between the current value of the indicator and the end-value to be achieved by 2030. The 2030 Agenda is the outcome of a political effort to achieve a vision for 2030 that all countries could agree to, and as such reflects a compromise across a variety of interests, priorities and national conditions. This explains the heterogeneous nature of the goals and targets, which range from eliminating extreme poverty and achieving gender equality, to reducing premature deaths and protecting marine areas. The targets are at times clear and quantitative, e.g. target 3.1 to *"reduce the global maternal mortality ratio to less than 70 per 100,000 live births";* at other times broad, abstract and aspirational, e.g. target 9.1 to *"develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure"* or target 16.5 to "substantially reduce corruption and bribery in all their forms". In addition, some explicit end values set in the Agenda (e.g. on maternal and infant mortality, or access to electricity, mobile, internet and sanitation) are an ambitious challenge for some developing countries while they have already been met in most developed countries. More generally, as underlined by several authors in the case of

the Millennium Development Goals, collective targets could not (and should not) be directly equated with national targets (Vandemoortele, 2011[12]; Fukuda-Parr, Yamin and Greenstein, 2013[13]). In this section we consider the choice of end-values (meaning the target values to be achieved by 2030), assess how it may affect the assessment, and describe best practice to deal with this challenge.

44. In order to assess the distance from the SDG targets, end-values need to be set, i.e. the level which needs to be achieved by 2030 according to the 2030 Agenda. This can be done by either applying a universal set of rules, as in *OECD Distance to Targets*, or by aligning to pre-existing policies, or by using an ad-hoc approach, informed by local context. For example, Eurostat relies on end-values that are aligned with the EU's 2020 Strategy,[19] whereas the mixed approach applied in Belgium combines absolute end-values for a some indicators and the direction of change for other indicators. In order to assess a group of countries, or one country against a group of peers, consistent rule to set targets ensures a relatively fair and unbiased assessment, controlling for the different settings and priorities of each country.

45. End-values are defined in this paper with the purpose of shedding light on global trends in OECD countries on the SDGs based on available indicators, and with the objective of providing technical guidance on a possible way to use the *IEAG Global Indicator Framework* as a tool to advance and sustain evidence-based policies. However, in the context of a specific country, defining end-values should be the result of a process that considers the political, economic, social and environmental circumstances of each country, taking into account national strengths and weaknesses, accompanied by a consultative process with local stakeholders. Box 2.2 details how several countries approached this process differently, each in accordance with their own circumstances. The end-values used in *OECD Distance to Targets* are meant to provide a comparative assessment based on the SDG indicators, to provide additional information for policy makers. They do not correspond to any political decision or prioritisation process, hence they should not be regarded as a rule or as a hard policy recommendation – although they are indicative of a desirable and reachable outcome.

[19] Europe 2020 Strategy: https://ec.europa.eu/eurostat/web/europe-2020-indicators#:~:text=The%20Europe%202020%20strategy%20is,a%20sustainable%20social%20market%20economy.

Box 2.2. Setting national SDG indicator frameworks and targets in practice: Lessons from four countries

Most countries around the world have established national planning and priority-setting mechanisms that spell their overall development priorities, targets and indicators (OECD/UNDP, 2016[14]), and many have developed well-structured institutional processes to formulate and monitor these priorities (OECD/UNDP, 2019[15]). Since the approval of the 2030 Agenda in 2015, these national mechanisms have been progressively put in action to address national priorities in SDG terms.

An ongoing OECD review of the organisational processes adopted by four countries (Bangladesh, Peru, American Samoa and Uganda) is illustrative of how SDG indicators are prioritised, how targets are set, and the commonalities and differences between these national initiatives. In general, these governments are in an advanced stage in the definition of SDG priorities and targets. They tend to follow four common steps in narrowing down to their stated national SDG priorities, detailed in Table 2.2 below, although the sequence these governments follow in carrying out those steps results in very diverse outcomes (OECD, 2019[16]). These steps are: (A) an in-depth assessment of SDG needs, trends, synergies etc.; (B) a bottom-up consultative process to define needs and targets; (C) assessing current availability of SDG data and (D) identifying current policy and political preferences.

Table 2.2. Setting national SDG targets and indicators: Common steps and considerations

		Type of driver / constraint	
		Technical	Political
Cost	**High**	**A. In-depth assessment** of national SDG needs, future trends, synergies, etc.	**B. Bottom-up consultative process** to define or validate national SDG needs and targets
	Low	**C. Current availability of SDG data** in national statistical system	**D. Incumbent's political/policy preferences** used to define or validate SDG needs and targets

The case of Peru, an upper middle-income county, is very illustrative. In Peru, the national strategic planning ministry (CEPLAN) carried out a series of in-depth assessments and foresight exercises in 2018 (item A in Table 2.2) that helped the government define an initial set of SDGs and targets relevant for the country's present and future development. A mapping exercise of current data availability (C) soon followed, showing a moderately good level of SDG data availability, and generating a work programme by the National Statistics Office and other government data gathering entities to ensure fuller data availability in the near future. During 2019, the government carried out a series of territorial and social consultations across the country to help refine the initial SDG approach (B), which is also well inserted within the new cycle of national strategic planning. The outcomes of these processes will be finally validated and endorsed by the Centre of Government institutions in 2020 (D).

In contrast, in Samoa, a small island developing state situated in the Pacific, the government adopted an approach that suited the regional governance practices and country capacities. Initially, leaders of Pacific nations met in 2017-18 to define and prioritise a subset of the SDG framework, about half of the SDG indicators, which was consider relevant for Pacific island countries (D). In a second stage, the national statistics office estimated capacity to monitor 44 SDG indicators using national data (B), which narrowed down the SDG focus and analysis (A) to those areas. Existing

consultative processes with villages and communities include those SDG areas (although not always explicitly) when gathering information on socioeconomic needs (C). Recent efforts in 2020 have led Samoa to report on progress in 63 SDG indicators using national data, and up to 108 SDG indicators when relying on regional and global data sources for other missing indicators.

In Bangladesh and Uganda, national policy priorities of the incumbent government (D) and the development of assessments and diagnostics that could help prioritise and set SDG targets (A) have gone hand-in-hand, in an iterative way, to reach good levels of national SDG uptake. The outcomes of those processes have been put for consultation (B) while also highlighting the need to invest in expanding the capacity of their national statistical systems to respond to new SDG data needs. In Uganda, SDG data availability (C) played an important role in defining what could be monitored and reported. In Bangladesh, given a well-established tradition of centralized national planning, baselines, targets and indicators are all available.

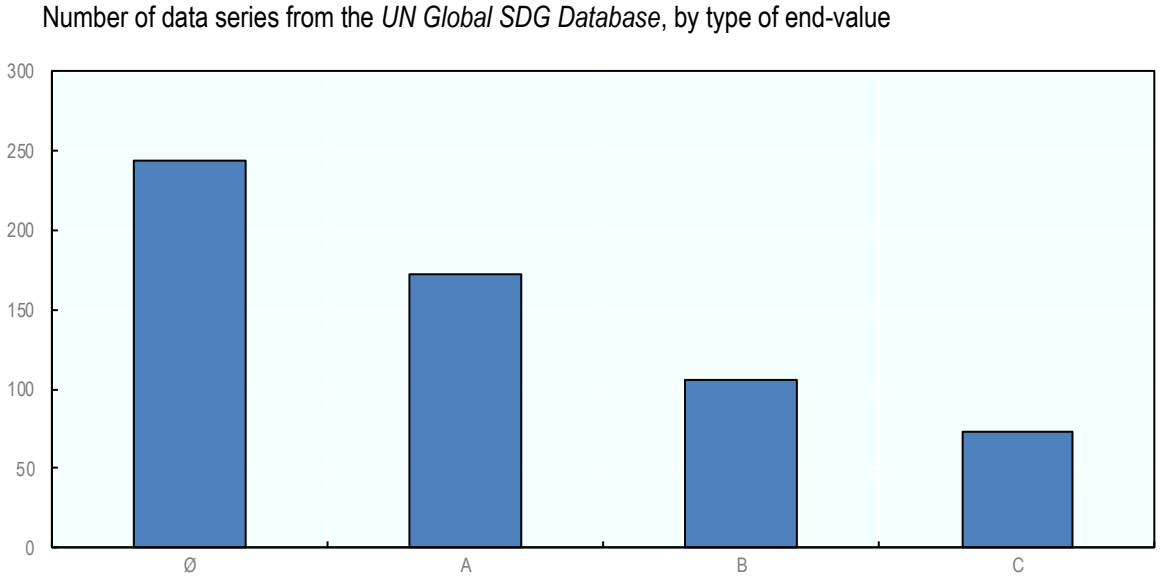
Source: OECD (Forthcoming). *Sustainable Results in Development Co-operation: Strengthening Results-Based Approaches in the SDG Era*, OECD Publishing.

46. As described, *OECD Distance to Targets* sets end-values based, first, on the explicit text of the Agenda (classified as A-type targets), second based on international norms and agreements (classified as B-type), and otherwise using the current best performance (defined as the top 10th percentile) across OECD countries (classified as C-type). For indicators lacking a clear normative direction, targets are not set (and distances are not computed). When adapting the methodology to go beyond OECD countries, it is clear that using the OECD best performance to set end-values would be implausible. At the same time, other targets may be inappropriate for non-OECD countries, such as ODA donor commitments for countries that are ODA recipients. What is the best approach in this case? We consider several options below.

47. Figure 2.7 shows the distribution of end-values across the data series in the *UN Global SDG Database* (A, B, and C-type, and null). Most of the data series in the UN database are identified as null end-value type (244 of the 595 available data series), meaning that end-values could not be set. The reasons for this are varied, such as when some data series are a subcomponent of the main one.[20] This could also be the case of indicators lacking an accepted normative direction (e.g. indicator 17.1.1 "Total government revenue as a proportion of GDP", where ideal rate depend on context and are not universal). Within the data for which end-values can be set, explicit end-values (A) are the majority (172), followed by end-values based on international agreements and norms (106), while the smallest group in the database (73 indicators) is made up of indicators whose target values can be based on best performance among comparator countries (C). The dominance of explicit end-values (A-type) in the database ensures that the analysis is as close as possible to the 2030 Agenda as agreed by UN member states, without having to use additional interpretation or information to set the end-values, such as international norms and best performance.

[20] For example, indicator 5.5.1 is composed of "Number of seats held by women in national parliaments", "Number of seats in national parliaments" and "Proportion of seats held by women in national parliament", but the end-value of 50% can only be set for the latter measure.

Figure 2.7. Distribution of data series in the UN Global database by type of end-values



Note: The graph shows the number of data series classified according to the different type of targets namely A-type (explicit end-values in the 2030 Agenda), B-type (end-values based on international agreements and norms), C-type (end-values based on best performance among the comparator group) and null (no end-value can be determined).
Source: Secretariat calculations, based on the *UN Global SDG Database.*

48. Using international agreements and norms to set end-values (B-type) requires research into the relevant areas considered. While the approach used in *OECD Distance to Targets* is based on evidence pertaining to OECD countries, different applications of the methodology may not be as comprehensive. Alternatively, for data series whose end-values are not explicit (A-type) and when B-type end-values cannot be proposed, the best performance approach (C-type) seems to be the only alternative. A similar methodology is used in other assessment of SDGs (Sachs et al., 2019[17]; UN-ESCAP, 2019[18])

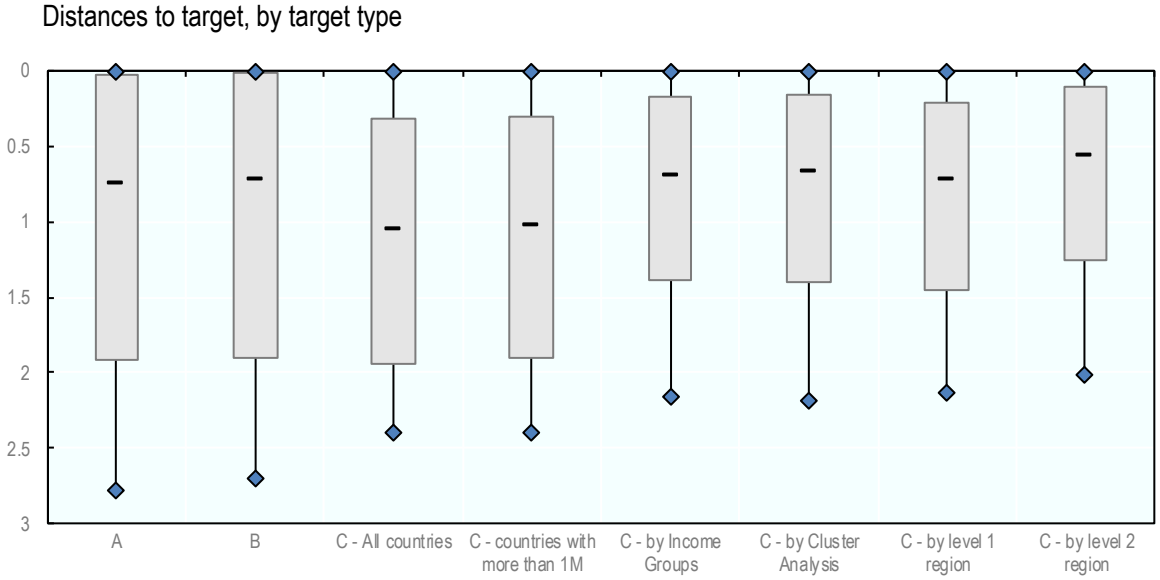
49. C-type end-values, set by best performance, apply to 73 data series in the *UN Global SDG Database*. These end-values can be set using different approaches. For example, for a specific economic group (e.g. higher middle income), target values can be set as the average performance of the higher level economic group (e.g. high income). Alternatively, the ideal performance can be set according to the top performer within the (higher middle income) group. A global top performance end-value could also be considered, set according to the top 5th or 10th percentile or any other function of the distribution. These different options should be considered according to the various contexts and uses of the assessment.

50. In order to assess the impact of setting different best performance based end-values (type C), we examine the spread of results across all data series and for all countries, i.e. the distance from target, for each type of end-value. All distances are normalised using the standard deviation of the world distribution in order to avoid other effects on the results. For C-type targets, we use the top 10th percentile for each group of countries (global, economic, geographic and data availability) .In other words, for each country, C-type end values are set by the best performance within its own group. For example, designing the appropriate target level to be achieved on infant mortality (target 3.2.1) in Uganda would be highly dependent on the benchmarking group. If the target was set using all countries (or only those with more than 1 million inhabitants), then the target would be around 3 deaths per 1 000 births. If the target was set relatively to African countries, the target

would be at 20 deaths per 1 000 births. Finally, if the benchmarking group was restricted to Sub-Saharan African countries or to low income countries, then the target would be around 30 deaths per 1 000 births..

51. Figure 2.8 shows the spread for each end-value type (A, B), as well as for different options for setting best performance (C).The spread of scores for A and B-type targets is the widest, with 80% of the distances ranging between 0 (where all scores are cut off) and 2.8 for A-type indicators and 2.7 for B-type. However, for C-type targets, results vary according to the grouping. The range is smaller than for A and B-target for all groupings, with the smallest spread for the Geographic region-2 grouping (the grouping with the smallest sizes (see Table 2.1) and, quite likely, more homogenous). For example, if all countries were performing equally, then the end-value would be the actual performance of all countries so that all distances would be equal to 0. The size and homogeneity of the group should be considered when assessing strengths and weaknesses vis-à-vis SDG targets. If high homogeneity would not allow comparison; conversely extreme performances would unduly distort the analysis. In addition, the spread of the A-type values should be considered as the closer to the spirit of the 2030 Agenda.

Figure 2.8. Distribution of countries' distances to SDG targets by type of end-values



Notes: The charts shows the distribution of countries' distances from achieving the 2030 target clustered by type of target. Distances are expressed in standardised units based on spread of current performances across all countries, with 0 indicating that the level for 2030 has already been attained and 3 being the distance that most countries have already travelled. Middle line refers to the median distance. The bar boundaries indicate the top and bottom quartiles of the country distribution. The bottom and top diamonds indicate, respectively, the 10th percentile and the 90th percentile of the country distribution.
Source: Secretariat calculations, based on the *UN Global SDG Database.*

52. It is important to underscore that end-values set according to the 2030 Agenda or top performance do not account for the characteristics of countries. Due to structural differences and circumstances, some countries will never be able to match the achievement mandated by the Agenda or that of the best performers. For instance, forest area (SDG 15.1.1) in countries with a desert climate such as Yemen, Egypt or Mauritania will never be as high as in countries such as Gabon, Finland or Japan, where more than two-third of total land is covered by forest. Thus, in some cases it may be important to identify end-values relevant to the phenomena being studied.

53. Any methodology designed with the purpose of helping countries identify strengths and weaknesses in performance on the SDGs will be affected by the different assumptions retained. In our analysis, end-values must be determined in order to measure the distance from achieving the target. However, as shown by.

54. Figure 2.8, different methods to set end-values will provide different conclusions. Hence robustness tests should be carried out to assess the impact of the different ways to set end-values on results.

55. There are two possible effects of the change in end-values:

- The relationship between targets changes for each country – how does using different end-values affect the scores within countries when indicators are ranked according to distance from target? In other words, do different end-values translate into different strengths and weaknesses being identified in each country?
- The relationship between countries changes – how does using different end-values affect the scores between countries when indicators are aggregated? In other words, will countries rankings compared to other countries change due to the change in target setting?

56. Assessing the impact of within and between country effects can be done by measuring the degree of similarity of rankings (e.g. based on Spearman rank correlation coefficient). In our case, such an analysis suggests very low between-country effects (all rankings correlated to each other with coefficient higher than 0.97). The within countries effect also seems low (most rankings are above 0.90) meaning that how targets are set has a minor impact on countries' strengths and weaknesses. However, for some countries, defining end-values using top performance within sub-regions lead to lower correlation coefficients, implying a significant impact on countries' priority setting.

2.5. Normalise distances

57. Comparing results across different indicators requires creating a common metric, as the indicators have different measurement units. The literature proposes a wide variety of normalisation methods (OECD/European Union/JRC, 2008[19]), and the best choice for a normalisation method should respect both the theoretical framework as well as the nature of the data. The assessment used in *OECD Distance to Targets* is static. Extensions of this methodology to measure within country variations (when results are presented at national level they omit territorial variations (OECD, 2020[20]; OECD et al., 2019[21])) and evolution over time, would require additional considerations.

58. In *OECD Distance to Targets*, indicators are normalised using a modified z-score, meaning that the standard deviation is used to gauge the distance between current position and the end-value to be achieved by 2030. Other normalisation techniques can also be considered, and several of these are detailed in Box 2.3. The standard deviation provides a functional unit to gauge distances between observations within a distribution, as well as mirroring the dispersion of data. When outcomes are spread across a wide range, the standard deviation will be larger, and when outcomes are closer to the central value the standard deviation is smaller. As there is an inverse relationship with the distance to target; the smaller the standard deviation, the more units are needed to reach the target, and thus the greater the distance as measured in these units.[21]

[21] Using a measure of dispersion to assess distances the targets conveys information on the effort necessary to achieve a target. For example, consider a target that all countries are still far from achieving, so that the standard deviation is relatively small. In this case, the distance as

Box 2.3. Alternative normalisation methods

In the pilot study of the *Measuring Distance to SDG Targets* (2016), indicator were normalised using "ratio-scale". In other terms, scores were placed on a common scale running from 0 to 100, with 100 being the end-value and 0 being the value that only 10% of OECD countries failed to reach in the base year. Ratio-scale is still used in other assessments of distance to SDGs (Sachs et al., 2019[17]; UNSD, 2020[22]).

An advantage of ratio-scale is that it generated a good spread of results against possible target values, which can be applied to all targets, irrespective of their nature. A drawback is that floors set in this way exclude "outliers" – unusually low scores that would otherwise unduly extend the scale. In other terms, as the results are bounded between 0 and 100, this normalization does not allow monitoring countries below the lower bound. Furthermore, the interpretation could be misleading, as the min-max normalisation does not show the distance the country already travelled to the target since a determined point in time but rather the one travelled from the worst performers to the target.

A different type of normalisation that could be used to convey the idea of distance from the targets is the Time Distance method, which described the time needed to reach a specific target. One example of time-distance is the S-Time Distance (Sicherl, 2011[23]) whereby the difference between two countries with respect to an indicator is measured by the difference between two countries for a given indicator as time distance between those countries. For example, as female life expectancy reached a level of 75 years by 1960 in Sweden and by 1970 in the United Kingdom, the time distance between the two is 10 years.* Time distance is a dynamic measure of temporal disparity between two series expressed in units (time) readily comparable across indicators. However, it requires time series or projections, implying that poor data availability may hamper its use.

* In formal terms, let x_{qi} be the level of indicator q for country i. The time distance $S_{ij}(x_q)$ can be written: $S_{ij}(x_q) = T_i(x_q) - T_j(x_q)$, i.e. the difference in time which divides country i and country j for the same level of indicator x_q.

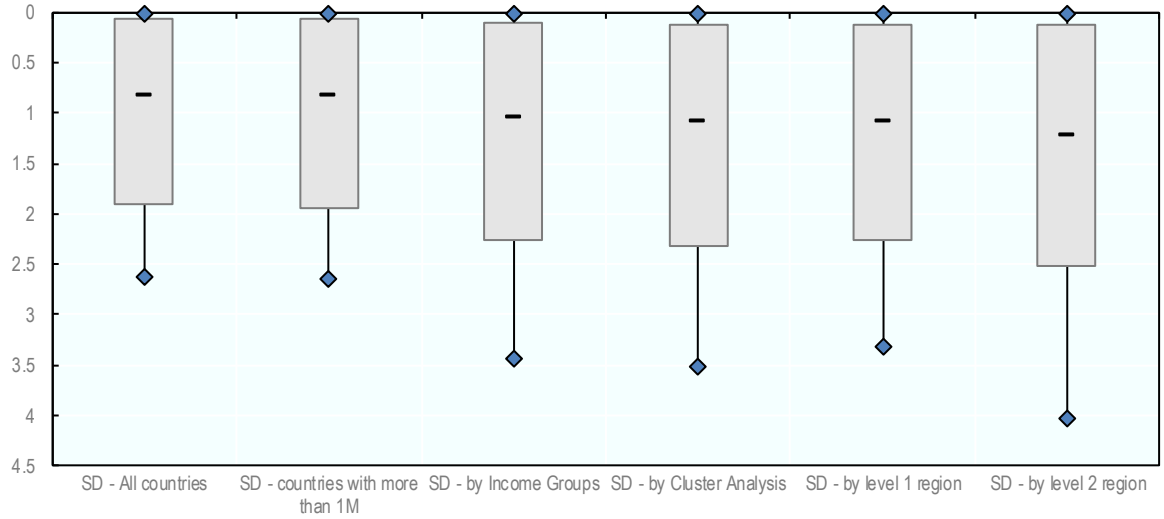
59. The normalisation method used in *OECD Distance to Targets* implies that all possible outcomes are measured and no lower bound is imposed. However, some drawbacks remain. For instance, the normalisation applied is linear, implying that the effort needed to achieve the target is constant across time and levels of developments. However, progress can have different patterns, such as technological 'leap-frog' jumps or severe stagnation and diminishing returns, which cannot be capture by this method.

60. In *OECD Distance to Targets*, the standard deviation is computed across all OECD countries. The group is broad enough to show a wide range of possible outcomes; but when

measured in standard deviations will be greater (more units away from the end-value) than if dispersion was wider. This can be interpreted as implying that a country faces a considerable challenge to achieve this target, thus greater measured distances implying that a greater effort is needed. More generally, when countries are clustered around a given value, it could mean that: 1) Countries have reached an optimal level of achievement. For example, in all OECD countries, almost all households are connected to electricity; the variance across countries is thus small across countries, and the normalised distance are also small for all countries. 2) Making progress towards the target is difficult. For instance, the share of students below the minimum levels of achievements in literacy and numeracy is between 20% and 35%, for most OECD countries while the end-value is at 0%. In this case, the normalised distance would be large for all countries.

a group is very homogenous, the standard deviation converges to zero and distances increase proportionally. Figure 2.9 shows how the range of countries distances changes when using standard deviations computed for different groups of countries. The dispersion of countries' results is smallest when the standard deviation is computed across all countries, whether or not excluding countries with a population of less than 1 million; it is greatest when the standard deviation refers to the geographical group of countries by level 2 region, meaning for the smallest groups of countries.

Figure 2.9. Countries' distances from target differ when the standard deviation used to normalise scores refers to a different set of countries



Notes: The charts shows the distribution of countries' distances from achieving the 2030 target based on different standard deviation for normalisation. Distances expressed in standardised units based on all countries, with 0 indicating that the level for 2030 has already been attained and 3 for the distance that most countries have already travelled. The middle line refers to the median distance. The bar boundaries indicate the top and bottom quartiles of the country distribution. Bottom and top diamonds indicate, respectively, the 10th percentile and the 90th percentile of the country distribution.
Source: Secretariat calculations, based on the *UN Global SDG Database.*

61. The normalisation procedure could impact on results, thus affecting the identification of strengths and weaknesses. Therefore, a combination of uncertainty and sensitivity analysis can help gauge the robustness of the results,[22] (OECD/European Union/JRC, 2008[19]).

62. As in the case of setting end-values, we can assess the impacts of different standard deviation for both within and between country effects by using the Spearman rank correlation. In this case, analysis suggests low between country effects with the exception of the standard deviation computed on the smaller regions: most rankings are correlated to each other with coefficient higher than 0.85, while in the case of small regions the correlation coefficient varies between 0.50 and 0.60. Overall, the within countries effect seems low, meaning that the target has a minor impact on the identification of strengths and weaknesses (most coefficients are above 0.85).

[22] Uncertainty analysis focuses on how uncertainty in the input factors propagates and affects final results. Sensitivity analysis assesses the contribution of the individual source of uncertainty to the output variance.

2.6. All together now: a "how-to" guide

63. Previous sections have described the choices that need to be made for each stage of the methodology, and their impacts on the results of the assessment. Each section presented methodological choices in isolation, i.e. one by one. To recap, this section presents a concise review of all the steps and the practical implications for different analyses.

64. A comparative assessment of countries' performance on SDG targets needs to make choices on selecting the comparison group, the indicator set, setting end-values and normalisation. The purpose of the assessment should drive these choices: an assessment constructed to serve a national process of implementation will differ from a regional assessment meant to provide a comparative overview of the region. Whether the assessment will be repeated in the future should also influence those choices, as replicability and reliability can be differently supported by these choices. More focused analyses can require more precise choices, higher thresholds for data and more customised and context-relevant end-values. These considerations are summarised in Table 2.3 below.

Table 2.3. Steps and considerations for applying the methodology

Steps	Actions	What to consider	Implications for the group size	Choices made in *OECD Distance to Targets*
Purpose of the assessment	Clarify and determine the purpose of the assessment, to help drive decisions in the next steps	• Is it a dynamic or static assessment? • Will the assessment be recurring or is it a one-off? For a recurring assessment, a strict set of decision rules will increase replicability and ensure coherence across assessments. For a single assessment, the relevance at the time should be prioritised. • Comparing many countries or one against its peers. • Focus on specific population groups, e.g. gender / children.		*OECD Distance to Targets* assesses a group of (OECD) countries with common economic circumstances, allowing countries to identify relative strengths and weaknesses vis a vis the 2030 Agenda.
Comparison group	Select countries (or entities) to compare to	• Set the comparison group in light of the purposes of the analysis undertaken, whether a single country assessment; a region; the assessment of a group of countries, or in a global assessment. • Criteria for comparison group could be based on: income, geography, size, data availability, or a mix of multidimensional criteria.	Dependent on the type of analysis	The *OECD* (2019[11]) study included all the 36 OECD countries (at the time)
Indicator selection	Identify indicators and data sources	• Setting minimum thresholds for indicators and countries. Low minimum thresholds will increase data covered but decrease robustness of analysis. • Alignment with *the UN Global Indicator Framework*. Alignment ensures staying close to the intentions and interpretations of the IAEG-SDGs, but is not always appropriate for every country or region. Using a different set of indicators might allow to align it with the (17) Goals but not the (169) Targets. • Prioritise certain types of indicators, for example using the policy results chain as described in section 2.2.4, according to	Small number of countries increases the likelihood of common indicator coverage.	The *OECD Distance to Targets* study stayed as close as possible to the *Global SDG Indicator Framework*. It included data from the *UN Global SDG Database*, complemented by OECD data, with a minimum threshold for data availability of 20 countries (55%).

Steps	Actions	What to consider	Implications for the group size	Choices made in *OECD Distance to Targets*
		temporal relevance (e.g. Covid-19, applying a gender lens etc.), or focusing on the most pressing development challenges.		
Setting end-values	For each data-series, set the end-value to be achieved by 2030, from which distance is measured.	• Level of ambition versus realistic goals, considering what is achievable. • Possible benchmark for end-values which are not explicitly set in the 2030 Agenda: top performance, median performance of more advanced countries, OECD top performance, or expert judgement. • Unified approach vs. ad-hoc, per target and according to local context. If the assessment is a recurring exercise, a unified approach is preferable.	Mixed – small number of similar countries increases the likelihood of meaningful end-values while high numbers of countries offer a greater range of option and give a better spread of results.	End values were computed through a three step procedure (explicit end-values from the agenda, international agreements and experts judgement, top performance).
Normalisation	Normalise values to enable measuring distance from end-values.	• Static or dynamic assessment, i.e. measuring the distance from one point in time or across a range and forecasting future attainment. • Consider impact of normalisation, respecting both theoretical framework and data properties (e.g. presence of outliers, skewness, etc.). • The modified z-score can be based on the standard deviation of the group being assessed or a different one, e.g. a larger group.	High number of countries increases the likelihood of stable SDs.	Current level of achievement of the SDG targets was assessed using a modified version of the z-score.

3. Applying the methodology: a case study for select Latin American countries

65. As an example of how the *OECD Distance to Targets* methodology could be applied to a different set of countries, this section applies these principles to a select group of Latin American countries, as part of an ongoing project to assess well-being and sustainable development in the region.[23] The OECD, the European Commission and ECLAC, the UN regional commission for Latin America and the Caribbean are cooperating on a project on *Metrics for Policies for Well-being and Sustainable Development in Latin America and the Caribbean*,[24] which aims to support the development and use of metrics in policy making for achieving sustainable development.

66. As discussed in Section 2.1, the first step is to define the scope and objective of the analysis, in particular before deriving the benchmarking group. For a high-level assessment, measuring progress for the eleven LAC project countries against all other countries globally is useful. Once the objectives of the measurement and the benchmarking group are defined, indicators can be selected and normalised. These steps should also be aligned with the overall objective. If the aim is to assess the readiness of countries to

[23] The 11 countries are: Argentina, Brazil, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, Mexico, Paraguay, Peru and Uruguay.

[24] For further details, see https://oecd.org/statistics/lac-well-being-metrics.htm.

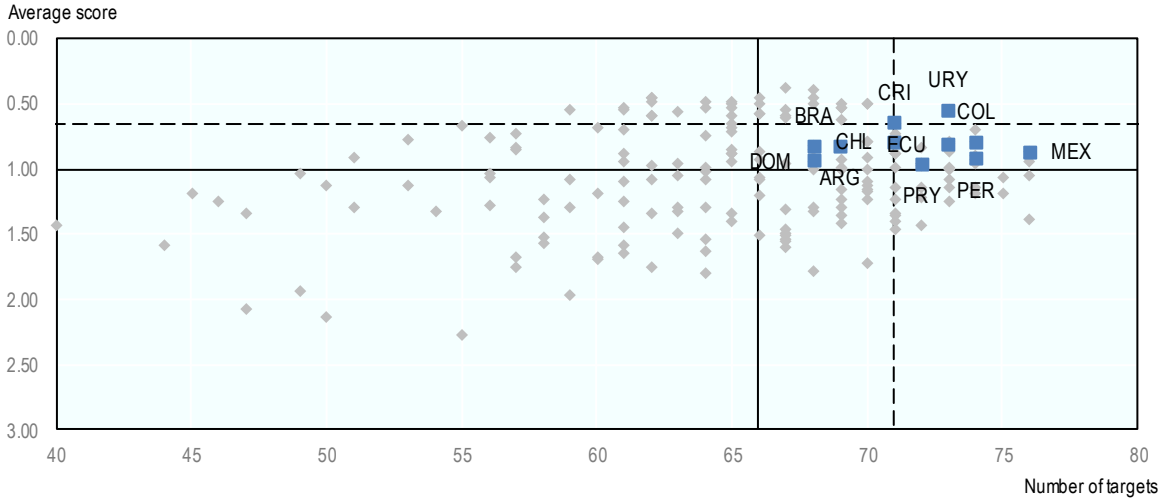
achieve the SDGs, the criteria to select indicators should be quite flexible even if this comes at the expense of data quality. For this example, the following criteria are used:

- no limit in terms of timeliness, meaning that data in the UN Global Database are included regardless of their latest year of measurement;
- the threshold for minimum target coverage is set at 25% of targets (42 of the 169 targets), meaning countries are included only if they have data for at least one-quarter of the 169 targets for that country; and
- the threshold for minimum country coverage is set at 50% of countries, meaning that indicators are included only if the UN Global Database has data for at least half of the 193 countries.

67. Figure 3.1 shows how the eleven LAC countries are doing compared to all the other countries covered by the UN Global Database on two dimensions: their average distance to target and target coverage. All the eleven LAC countries are in the upper right corner of the figure, meaning that they are in the top half of performance both in terms of both coverage and of average distance. Eight of the eleven countries (except Argentina, Brazil and the Dominican Republic) have data covering more than 70 targets, a level that only one in five countries meets globally. This is probably indicative of the leading role of some Latin American countries in initiating the 2030 Agenda (Caballero, 2016[24]; Hege et al., 2019[25]). Conversely, while being higher than the median distance to targets across all countries in the UN Global Database, only two of the countries (Costa Rica and Uruguay) are in the top 20% in terms of performance. As underscored by Kharas et al (Kharas, Prizzon and Rogerson, 2014[26]), many of these LAC countries belong to the "missing middle", i.e. they are middle-income countries facing problems that are common to both poor and rich countries.

Figure 3.1. The 11 LAC project countries are relatively well-positioned compared with other countries in terms of their distance from SDGs targets

Average distance to targets and target coverage, global



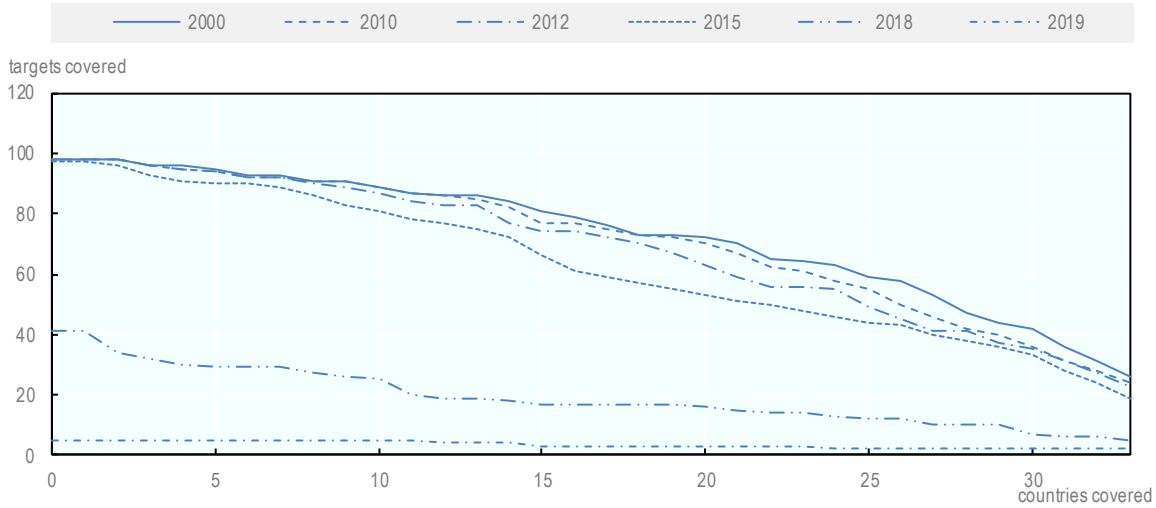
Note: This graph shows the average performance among available targets versus the number of targets covered by country. It includes all countries covered by more than 42 indicators and all data series covering more than 50% of the countries. Black lines stands for the median of the two distribution, i.e. the level that only half of the countries had been able to reach. Dashed lines stands for the 20th percentiles, i.e. the level that that only 20% of the countries had been able to reach.

Source: Secretariat calculations, based on the *UN Global SDG Database.*

68. For a more in depth assessment, benchmarking against all countries in the UN Global Database might not be the best choice and it might be useful to set more restrictive criteria. Together with Sub-Saharan Africa, the LAC region is one of the only sub-region covering more than 30 countries. It is thus likely to feature enough heterogeneity, with performance significantly distinct from each other. Conversely, restricting the analysis to a more homogenous group is likely to increase indicator coverage and contextualise targets defined relatively to top performers, thus helping to make the comparison more meaningful.

69. With the focus of the analysis is on generating more detailed results, selecting indicators should be done even more carefully. As mentioned above, there are at least three criteria to take into account: timeliness, country coverage and target/indicator coverage. Figure 3.2. shows how these criteria inter-relate with each other, presenting the target coverage versus country coverage for different thresholds of timeliness. Using data from 2010 onwards, covering at least 20 LAC countries (whether there are part of the project on *Metrics for Policies for Well-being and Sustainable Development in Latin America and the Caribbean* or not) would allow a relatively high degree of comparison, making it possible to assess distances for 72 distinct targets.[25] When limiting the analysis to data available since 2015, while keeping the same number of LAC countries covered (20), the number of targets that can be assessed falls to around 60. Conversely, when comparison is based on 10 LAC countries (less than one quarter of the region) and on data available since 2010, the assessment of countries' distance can extend to more than 90 targets.

Figure 3.2. Interaction between timeliness, country coverage and target coverage



Note: The figure shows the number of targets for which data are available in the UN Global Database (y-axis) and the number of countries for which data are available (x-axis), for different thresholds for latest year of available information (2000, 2010, 2012, 2015, 2018 and 2019).
Source: Secretariat calculations, based on the *UN Global SDG Database.*

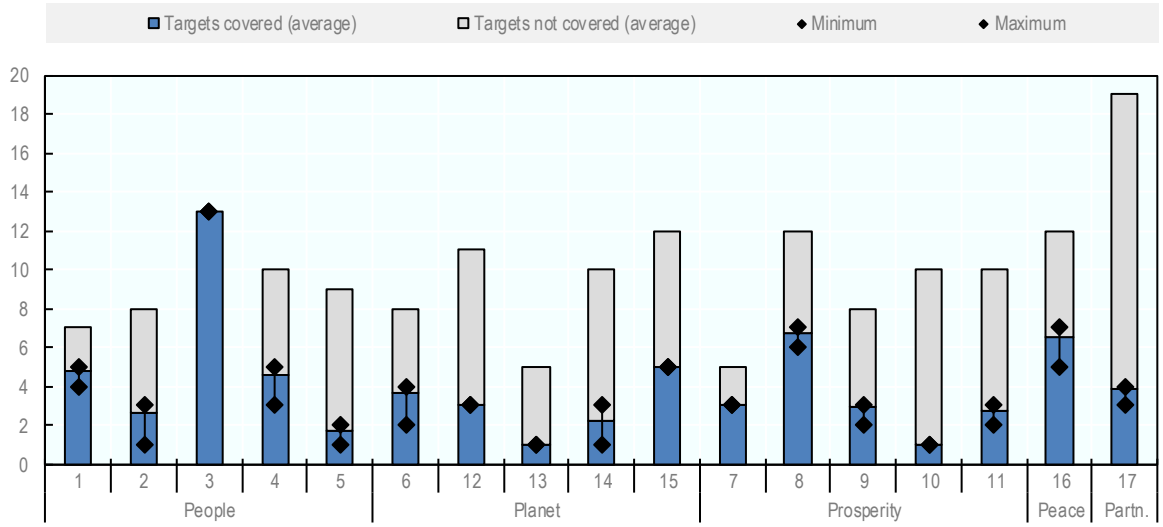
70. Across the 17 goals, average data availability across the 11 LAC project countries is quite varied (Figure 3.3), with some goals having coverage for all targets (e.g. Goal 3 on Health), whereas for other target coverage is very partial. This is especially the case for

[25] Data are available for 96 targets but of these, 24 targets are covered by data series that do not have a clear normative direction, so that the distance from target cannot be measured.

goals on Climate (Goal 13), Inequalities (Goal 10), Gender (Goal 5) and Cities (Goal 11) with less than one-third of targets covered. Limited data coverage explains some of the results, which may be far from the reality experienced in these countries.

Figure 3.3. Data availability for the 11 LAC project countries differs across the 17 goals

Share of targets covered by at least one indicator, by goal

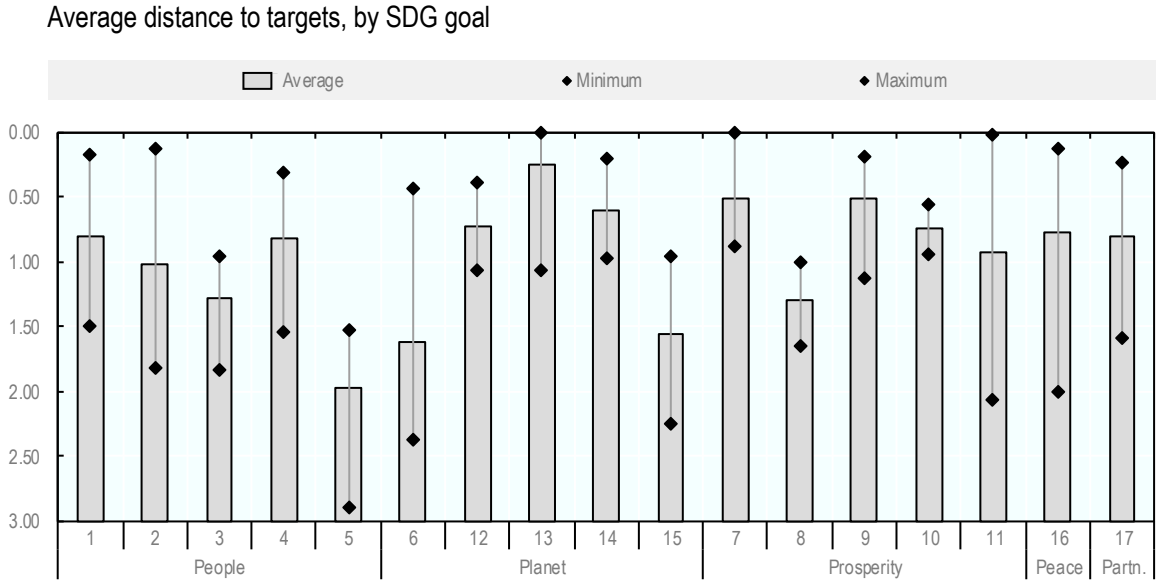


Note: The figure shows the number of targets according to data availability. Blue bars represent the number of targets for which data are available for at least one indicator (on average for the 11 countries), and grey bars represent the average number of targets for which data are not available. Diamonds represent the minimum and maximum number of targets for which data are available for at least one indicator across the 11 countries.
Source: Secretariat calculations, based on the *UN Global SDG Database.*

71. Overall, the 11 LAC project countries are closer to meeting targets relating to Energy (Goal 7), Infrastructure and innovation (Goal 9), Climate (Goal 13) and Oceans (Goal 14). Conversely, these countries are further away from targets on Gender equality (Goal 5), Water (Goal 6) and Biodiversity (Goal 15). However, two elements shape this assessment. First, there are large differences between countries, in particular on Water and Cities (Goals 6 and 11). Second, the assessment need to be considered in light of missing information. For instance, while the distances measured are closest to the targets on Climate (Goal 13), data in the UN Global Database covering only one of the five targets.[26]

[26] The data series for Climate are number of directly affected persons attributed to disasters per 100 000 population and number of deaths and missing persons attributed to disasters per 100 000 population.

Figure 3.4. Distances from targets for the 11 LAC project countries vary across the 17 goals



Note: This figure shows the average distance the 11 countries of the project need to travel to reach each SDG. Distances are measured in standardised units, from 0 indicating that the 2030 level has already been attained, to 3 as most countries have already reached this distance. Bars show countries' average performance against all targets under the relevant Goal for which data are available. Whiskers show the range of outcomes.
Source: Secretariat calculations, based on the UN Global SDG Database.

72. Average distances to targets for these countries provide an overall picture, but we can also go into more detail, exploring results for each country. Table 3.1 shows results at goal level for each country (based on the average of the distances pertaining to all targets within a given goal), across the 17 goals. Most LAC project countries are closest to targets on Climate (Goal 13), except for Brazil (which is closest on Oceans), the Dominican Republic (which is closest to targets on Infrastructure), and Paraguay and Uruguay (which are closest on Energy). The goal which is second closest to target varies across countries. While Peru is closer to achieving targets on Education (Goal 4), Brazil is closer on Energy (Goal 7), Argentina is closer on Implementation (Goal 17); Colombia and Mexico are closest on Oceans (Goal 14), and Costa Rica, Ecuador and Paraguay are closest on Infrastructure (Goal 9). The challenges that the countries face also vary, although for most countries, Gender equality (Goal 5) is furthest from targets across all 11 countries, with the exception of Argentina, Ecuador and Peru, which are furthest from targets relating to Water (Goal 6).

Table 3.1. Distance to targets vary across countries, with different strengths and weaknesses

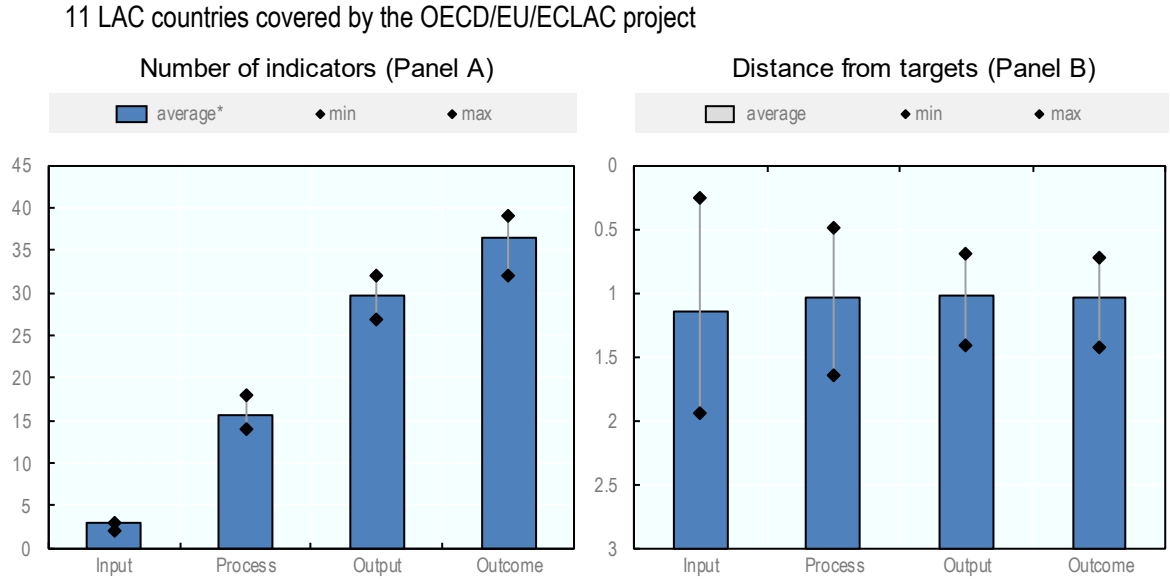
Average distance to target, goal level

		ARG	BRA	CHL	COL	CRI	DOM	ECU	MEX	PER	PRY	URY
People	1 – Eradicate poverty	0.62	0.97	0.17	1.49	0.53	1.26	0.82	0.92	1.05	0.86	0.19
	2 – Food	0.15	0.13	0.88	0.76	1.23	1.41	1.60	1.16	1.65	1.82	0.50
	3 – Health	1.44	1.25	1.37	1.09	0.95	1.83	1.16	1.03	1.27	1.47	1.25
	4 – Education	0.82	0.70	0.52	0.67	0.73	1.38	0.92	0.84	0.58	1.54	0.31
	5 – Gender equality	1.59	1.99	2.50	2.37	1.72	2.89	1.53	1.56	1.60	2.12	1.82
Planet	6 – Water	1.75	1.09	2.38	1.28	1.46	1.98	1.84	1.53	2.09	1.97	0.43
	12 – Sustainable production	0.73	0.52	1.06	0.38	0.49	0.80	1.06	0.39	0.89	0.91	0.80
	13 – Climate	0.23	n.a.	0.11	0.45	0.02	n.a.	0.00	0.20	0.17	1.07	0.05
	14 – Oceans	1.50	0.21	0.36	0.21	0.98	0.97	0.45	0.30	0.78	n.a.	0.35
	15 – Biodiversity	1.66	1.25	2.01	1.99	1.13	0.95	1.57	2.25	1.83	1.42	1.14
Prosperity	7- Energy	0.79	0.22	0.55	0.50	0.36	0.70	0.70	0.88	0.76	0.25	0.00
	8 – Economy	1.28	1.40	1.23	1.34	1.00	1.13	1.31	1.25	1.65	1.50	1.21
	9 – Infrastructure	0.56	0.34	0.60	0.55	0.21	0.35	0.57	0.55	1.12	0.60	0.19
	10 – Reduced Inequality	0.55	0.65	0.94	0.62	0.80	0.69	0.85	0.65	0.78	0.87	0.79
	11 – Cities	0.60	1.01	1.03	2.07	0.52	0.76	0.86	0.93	1.78	0.64	0.01
Peace	16 – Institutions	0.47	0.79	0.13	0.48	0.46	1.46	0.62	0.84	0.73	2.00	0.46
Partnership	17 – Implementation	0.23	0.54	0.28	1.06	0.31	1.44	1.01	0.51	1.58	1.56	0.30
	Targets covered	66	62	68	70	67	66	69	72	70	68	69

Note: This table shows the average distance the 11 LAC countries covered by the OECD/EU/ECLAC project need to travel to reach each SDG. Distances are measured in standardised units, from 0 indicating that the 2030 level has already been attained. Distances are computed as the average of the distances across targets belonging to a specific goal.
Source: Secretariat calculations, based on the *UN Global SDG Database*

73. Prioritising action according to the indicators furthest from targets can also take into account the role of the different indicators across the policy results chain. As detailed in Section 2.3.3, the indicators of the *UN Global List* range across the whole policy results chain, i.e. it includes inputs, processes, outputs and outcomes. For the eleven LAC countries, although there are data for all stages, only 3 indicators relate to inputs and 16 to processes, while outcomes are well covered with 36 indicators, and outputs with 29 (Figure 3.5, Panel A). This could help identify data gaps and alternative data sources for the analysis, considering that the analysis is based on the *UN Global SDG Database*, and additional relevant data may be available in other sources. Reviewing the distances to targets while applying the lens of the results chain can also assist in prioritisation. For the 11 LAC countries, distances to targets average at around 1 for processes, outputs and outcomes, while slightly more for the few indicators measuring inputs. In spite of this convergence in distances measured, the categorisation according to the results chain can allow a focus on each stage separately, such as starting from the outcomes, and working back across the results chain.

Figure 3.5. Indicators and distances from targets across the results chain helps identify policy priorities



Note: Panel A shows the number of indicators available for the 11 LAC countries covered by the OECD/EU/ECLAC project across the *results chain,* with the minimum and maximum represented by diamonds. Panel B shows the distance from target across the *results chain*, with minimum and maximum represented by diamonds.
Source: Secretariat calculations, based on the *UN Global SDG Database.*

4. Conclusion

74. This paper presents how the methodology applied by OECD (2019) to member countries could be adapted in different settings. It explores the impacts of the choices that need to be done at each stage of the methodology, from selection of indicators, to setting end-values and normalising the data, to utilising the global data from the UN Global SDG Database to test the impacts on real data. The paper also applies this methodology to a set of countries that are not all members of the OECD, demonstrating how methodological choices can be made and how results can be presented. The paper also shows some innovative approaches, such as using the policy results chain to differentiate between and select indicators.

75. The methodology allows for a high-level overview of performance on SDGs, based on the *Global SDG Indicator Framework* and thus a high level of alignment with the SDGs. The analysis can be used as a starting point for defining priorities and designing implantation programs, or for monitoring achievement and taking stock of progress made. It also assists with identifying data gaps and directing resources for bridging these gaps. While the methodology provides a snapshot of current achievement, it does not show a dynamic picture, nor does it highlight the interlinkages across SDGs and how these might affect progress. Further work could be done to expand the methodology to include both dynamic assessments (over time) and on the impacts of interlinkages.

76. This paper provides a basis for future work related to measurement of progress on the SDG Agenda in various settings. It could be used for bilateral projects, regional analysis as well as global assessment of SDG progress. These foundations could also be used in more granular and focused analyses, such as an assessment of progress on SDGs for specific population groups.

References

Caballero, P. (2016), "A Short History Of The SDGs", https://impakter.com/short-history-sdgs/. [24]

ECLAC (2019), *Report on the activities of the Statistical Coordination Group for the 2030 Agenda in Latin America and the Caribbean*, Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribbean, https://cea.cepal.org/10/en/documents/report-activities-statistical-coordination-group-2030-agenda-latin-america-and-caribbean (accessed on 9 June 2020). [31]

ECLAC (2018), *Report of the prioritization of indicators for regional follow-up to the sustainable development goals in Latin America and the Caribbean*, Statistical Conference of the Americas of the Economic Commission for Latin America and the Caribbean, https://www.cepal.org/en/publications/44122-report-prioritization-indicators-regional-follow-sustainable-development-goals (accessed on 23 December 2019). [28]

Eurostat (n.d.), *SDG Indicators*, https://ec.europa.eu/eurostat/web/sdi/indicators (accessed on 20 February 2020). [7]

Fukuda-Parr, S., A. Yamin and J. Greenstein (2013), *Synthesis Paper - The Power of Numbers: A Critical Review of MDG Targets for Human Development and Human Rights*. [13]

Hege, E. et al. (2019), *Initial assessment and conditions for success of the 2030 Agenda for Sustainable Development*. [25]

IAEG-SDGs (2019), *Tier Classification for Global SDG Indicators*, UN Statistics Division, https://unstats.un.org/sdgs/files/Tier-Classification-of-SDG-Indicators-11-December-2019-web.pdf (accessed on 19 February 2020). [8]

IAEG-SDGs (n.d.), *IAEG-SDGs - Tier Classification for Global SDG Indicators*, https://unstats.un.org/sdgs/iaeg-sdgs/tier-classification/ (accessed on 19 February 2020). [29]

Kanbur, R. (2018), *Sustainable Development Goals and the measurement of economic and social progress*, OECD Publishing, https://doi.org/10.1787/9789264307278-4-en. [30]

Kanbur, R., E. Patel and J. Stiglitz (2018), "Sustainable Development Goals and the measurement of economic and social progress", in *For Good Measure: Advancing Research on Well-being Metrics Beyond GDP*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264307278-4-en. [9]

Kharas, H., A. Prizzon and A. Rogerson (2014), *Financing the post-2015 Sustainable Development Goals*. [26]

OECD (2020), *A Territorial Approach to the Sustainable Development Goals: Synthesis report*, OECD Urban Policy Reviews, OECD Publishing, Paris, https://dx.doi.org/10.1787/e86fa715-en. [20]

OECD (2019), *Measuring Distance to the SDG Targets 2019: An Assessment of Where OECD Countries Stand*, OECD Publishing, Paris, https://dx.doi.org/10.1787/a8caf3fa-en. [1]

OECD (2019), *Sustainable Results in Development: Using the SDGs for Shared Results and Impact*, OECD Publishing, Paris, https://dx.doi.org/10.1787/368cf8b4-en. [16]

OECD (2017), *Green Growth Indicators 2017*, OECD Green Growth Studies, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264268586-en. [3]

OECD (2011), *How's Life?: Measuring Well-being*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264121164-en. [11]

OECD (2011), *Quality Framework for OECD Statistical Activities*, https://www.oecd.org/sdd/qualityframeworkforoecdstatisticalactivities.htm (accessed on 13 December 2019). [4]

OECD (2009), *Measuring Government Activity*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264060784-en. [10]

OECD et al. (2019), *Latin American Economic Outlook 2019: Development in Transition*, OECD Publishing, Paris, https://dx.doi.org/10.1787/g2g9ff18-en. [21]

OECD/European Union/JRC (2008), *Handbook on Constructing Composite Indicators: Methodology and User Guide*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264043466-en. [19]

OECD/UNDP (2019), *Making Development Co-operation More Effective: 2019 Progress Report*, OECD Publishing, Paris, https://dx.doi.org/10.1787/26f2638f-en. [15]

OECD/UNDP (2016), *Making Development Co-operation More Effective: 2016 Progress Report*, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264266261-en. [14]

Sachs, J. et al. (2019), *Sustainable Development Report 2019*, Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN). [17]

Sicherl, P. (2011), *New Understanding and Insights from Time-Series Data Based on Two Generic Measures: S-Time-Distance and S-Time-Step*, https://doi.org/10.1787/5kg1zpzzl1tg-en. [23]

UN (2015), *Transforming our world: the 2030 Agenda for Sustainable Development*. [5]

UN Statistics Division (2019), *United Nations Global SDG Database*, United Nations Statistics Division, https://unstats.un.org/sdgs/indicators/database/ (accessed on 28 November 2019). [2]

UN-ESCAP (2019), *Asia and the Pacific SDG Progress report*, United Nations Publication, Bangkok. [18]

United Nations (2017), *Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development*, United Nations, https://undocs.org/A/RES/71/313 (accessed on 28 November 2019). [27]

UNSD (2020), *Technical Note for Progress Chart Assessment*. [22]

Vandemoortele, J. (2011), "The MDG Story: Intention Denied", *Development and Change*, Vol. 42/1, pp. 1-21, http://dx.doi.org/10.1111/j.1467-7660.2010.01678.x. [12]

World Bank (n.d.), *WDI: Sustainable Development Goals*, http://datatopics.worldbank.org/sdgs/ (accessed on 20 February 2020). [6]

Annex A. Classification of SDG indicators by the inputs-process-outputs-outcomes chain

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
Goal 1. End poverty in all its forms everywhere		
1.1 By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than $1.25 a day	1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	Outcome
1.2 By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2.1 Proportion of population living below the national poverty line, by sex and age	Outcome
	1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Outcome
1.3 Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	1.3.1 Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work-injury victims and the poor and the vulnerable	Output
1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	1.4.1 Proportion of population living in households with access to basic services	Outcome
	1.4.2 Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure	Output
1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters	1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Outcome
	1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)	Output
	1.5.3 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	Process
	1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Process

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
1.a Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions	1.a.1 Proportion of domestically generated resources allocated by the government directly to poverty reduction programmes	Input
	1.a.2 Proportion of total government spending on essential services (education, health and social protection)	Input
	1.a.3 Sum of total grants and non-debt-creating inflows directly allocated to poverty reduction programmes as a proportion of GDP	Input
1.b Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gender-sensitive development strategies, to support accelerated investment in poverty eradication actions	1.b.1 Proportion of government recurrent and capital spending to sectors that disproportionately benefit women, the poor and vulnerable groups	Input
Goal 2. End hunger, achieve food* security *and improved nutrition and promote sustainable agriculture		
2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	2.1.1 Prevalence of undernourishment	Outcome
	2.1.2 Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	Outcome
2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	2.2.1 Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age	Outcome
	2.2.2 Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)	Outcome
2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	2.3.1 Volume of production per labour unit by classes of farming/pastoral/forestry enterprise size	Output
	2.3.2 Average income of small-scale food producers, by sex and indigenous status	Outcome
2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality	2.4.1 Proportion of agricultural area under productive and sustainable agriculture	Process
2.5 By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	2.5.1 Number of plant and animal genetic resources for food and agriculture secured in either medium- or long-term conservation facilities	Output
	2.5.2 Proportion of local breeds classified as being at risk, not at risk or at unknown level of risk of extinction	Outcome

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
2.a Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular least developed countries	2.a.1 The agriculture orientation index for government expenditures	Process
	2.a.2 Total official flows (official development assistance plus other official flows) to the agriculture sector	Input
2.b Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round	2.b.1 Agricultural export subsidies	Process
2.c Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility	2.c.1 Indicator of food price anomalies	Output
Goal 3. Ensure healthy lives and promote well-being for all at all ages		
3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	3.1.1 Maternal mortality ratio	Outcome
	3.1.2 Proportion of births attended by skilled health personnel	Output
3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births	3.2.1 Under-5 mortality rate	Outcome
	3.2.2 Neonatal mortality rate	Outcome
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	3.3.1 Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	Outcome
	3.3.2 Tuberculosis incidence per 100,000 population	Outcome
	3.3.3 Malaria incidence per 1,000 population	Outcome
	3.3.4 Hepatitis B incidence per 100,000 population	Outcome
	3.3.5 Number of people requiring interventions against neglected tropical diseases	Outcome
3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	Outcome
	3.4.2 Suicide mortality rate	Outcome
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	3.5.1 Coverage of treatment interventions (pharmacological, psychosocial and rehabilitation and aftercare services) for substance use disorders	Output
	3.5.2 Harmful use of alcohol, defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in litres of pure alcohol	Output

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	3.6.1 Death rate due to road traffic injuries	Outcome
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	3.7.1 Proportion of women of reproductive age (aged 15–49 years) who have their need for family planning satisfied with modern methods	Output
	3.7.2 Adolescent birth rate (aged 10–14 years; aged 15–19 years) per 1,000 women in that age group	Outcome
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all	3.8.1 Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn and child health, infectious diseases, non-communicable diseases and service capacity and access, among the general and the most disadvantaged population)	Output
	3.8.2 Proportion of population with large household expenditures on health as a share of total household expenditure or income	Output
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	3.9.1 Mortality rate attributed to household and ambient air pollution	Outcome
	3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	Outcome
	3.9.3 Mortality rate attributed to unintentional poisoning	Outcome
3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	3.a.1 Age-standardized prevalence of current tobacco use among persons aged 15 years and older	Output
3.b Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all	3.b.1 Proportion of the target population covered by all vaccines included in their national programme	Output
	3.b.2 Total net official development assistance to medical research and basic health sectors	Input
	3.b.3 Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis	Input

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	3.c.1 Health worker density and distribution	Input
3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	3.d.1 International Health Regulations (IHR) capacity and health emergency preparedness	Process
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all		
4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	4.1.1 Proportion of children and young people (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Outcome
4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education	4.2.1 Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	Outcome
	4.2.2 Participation rate in organized learning (one year before the official primary entry age), by sex	Output
4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university	4.3.1 Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	Output
4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	Outcome
4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated	Outcome
4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy	4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	Outcome
4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Process
4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	4.a.1 Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)	Output

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries	4.b.1 Volume of official development assistance flows for scholarships by sector and type of study	Input
4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States	4.c.1 Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country	Output
Goal 5. Achieve gender equality and empower all women and girls		
5.1 End all forms of discrimination against all women and girls everywhere	5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex	Process
5.2 Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	Outcome
	5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence	Outcome
5.3 Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation	5.3.1 Proportion of women aged 20–24 years who were married or in a union before age 15 and before age 18	Outcome
	5.3.2 Proportion of girls and women aged 15–49 years who have undergone female genital mutilation/cutting, by age	Outcome
5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location	Outcome
5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments	Outcome
	5.5.2 Proportion of women in managerial positions	Outcome
5.6 Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	5.6.1 Proportion of women aged 15–49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	Outcome
	5.6.2 Number of countries with laws and regulations that guarantee full and equal access to women and men aged 15 years and older to sexual and reproductive health care, information and education	Process
5.a Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance and natural resources, in accordance with national laws	5.a.1 (a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	Output
	5.a.2 Proportion of countries where the legal framework (including customary law) guarantees women's equal rights to land ownership and/or control	Process

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
5.b Enhance the use of enabling technology, in particular information and communications technology, to promote the empowerment of women	5.b.1 Proportion of individuals who own a mobile telephone, by sex	Output
5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels	5.c.1 Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment	Process
Goal 6. Ensure availability and sustainable management of water and sanitation for all		
6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all	6.1.1 Proportion of population using safely managed drinking water services	Output
6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	Output
6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	6.3.1 Proportion of wastewater safely treated	Output
	6.3.2 Proportion of bodies of water with good ambient water quality	Outcome
6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	6.4.1 Change in water-use efficiency over time	Process
	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources	Process
6.5 By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	6.5.1 Degree of integrated water resources management implementation (0–100)	Process
	6.5.2 Proportion of transboundary basin area with an operational arrangement for water cooperation	Process
6.6 By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	6.6.1 Change in the extent of water-related ecosystems over time	Output
6.a By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies	6.a.1 Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan	Input
6.b Support and strengthen the participation of local communities in improving water and sanitation management	6.b.1 Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management	Process
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all		
7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	7.1.1 Proportion of population with access to electricity	Outcome
	7.1.2 Proportion of population with primary reliance on clean fuels and technology	Output

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
7.2 By 2030, increase substantially the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption	Input
7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity measured in terms of primary energy and GDP	Output
7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems	Input
7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support	7.b.1 Investments in energy efficiency as a proportion of GDP and the amount of foreign direct investment in financial transfer for infrastructure and technology to sustainable development services	Input
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all		
8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries	8.1.1 Annual growth rate of real GDP per capita	Output
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	8.2.1 Annual growth rate of real GDP per employed person	Output
8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services	8.3.1 Proportion of informal employment in non-agriculture employment, by sex	Outcome
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-Year Framework of Programmes on Sustainable Consumption and Production, with developed countries taking the lead	8.4.1 Material footprint, material footprint per capita, and material footprint per GDP	Output
	8.4.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Output
8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	Outcome
	8.5.2 Unemployment rate, by sex, age and persons with disabilities	Outcome

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
8.6 By 2020, substantially reduce the proportion of youth not in employment, education or training	8.6.1 Proportion of youth (aged 15–24 years) not in education, employment or training	Outcome
8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	8.7.1 Proportion and number of children aged 5–17 years engaged in child labour, by sex and age	Outcome
8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status	Outcome
	8.8.2 Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status	Process
8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products	8.9.1 Tourism direct GDP as a proportion of total GDP and in growth rate	Output
	8.9.2 Proportion of jobs in sustainable tourism industries out of total tourism jobs	Output
8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	8.10.1 (a) Number of commercial bank branches per 100,000 adults and (b) number of automated teller machines (ATMs) per 100,000 adults	Output
	8.10.2 Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider	Output
8.a Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Trade-related Technical Assistance to Least Developed Countries	8.a.1 Aid for Trade commitments and disbursements	Input
8.b By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the International Labour Organization	8.b.1 Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy	Process
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation		
9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	9.1.1 Proportion of the rural population who live within 2 km of an all-season road	Output
	9.1.2 Passenger and freight volumes, by mode of transport	Output
9.2 Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries	9.2.1 Manufacturing value added as a proportion of GDP and per capita	Output
	9.2.2 Manufacturing employment as a proportion of total employment	Output
9.3 Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets	9.3.1 Proportion of small-scale industries in total industry value added	Output
	9.3.2 Proportion of small-scale industries with a loan or line of credit	Output

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	9.4.1 CO_2 emission per unit of value added	Output
9.5 Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	9.5.1 Research and development expenditure as a proportion of GDP	Input
	9.5.2 Researchers (in full-time equivalent) per million inhabitants	Input
9.a Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States	9.a.1 Total official international support (official development assistance plus other official flows) to infrastructure	Input
9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities	9.b.1 Proportion of medium and high-tech industry value added in total value added	Output
9.c Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	9.c.1 Proportion of population covered by a mobile network, by technology	Output
Goal 10. Reduce inequality within and among countries		
10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	Outcome
10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status	10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities	Outcome
10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	10.3.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law	Outcome
10.4 Adopt policies, especially fiscal, wage and social protection policies, and progressively achieve greater equality	10.4.1 Labour share of GDP, comprising wages and social protection transfers	Output
10.5 Improve the regulation and monitoring of global financial markets and institutions and strengthen the implementation of such regulations	10.5.1 Financial Soundness Indicators	Output

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
10.6 Ensure enhanced representation and voice for developing countries in decision-making in global international economic and financial institutions in order to deliver more effective, credible, accountable and legitimate institutions	10.6.1 Proportion of members and voting rights of developing countries in international organizations	Process
10.7 Facilitate orderly, safe, regular and responsible migration and mobility of people, including through the implementation of planned and well-managed migration policies	10.7.1 Recruitment cost borne by employee as a proportion of monthly income earned in country of destination	Output
	10.7.2 Number of countries with migration policies that facilitate orderly, safe, regular and responsible migration and mobility of people	Process
10.a Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements	10.a.1 Proportion of tariff lines applied to imports from least developed countries and developing countries with zero-tariff	Process
10.b Encourage official development assistance and financial flows, including foreign direct investment, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes	10.b.1 Total resource flows for development, by recipient and donor countries and type of flow (e.g. official development assistance, foreign direct investment and other flows)	Input
10.c By 2030, reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent	10.c.1 Remittance costs as a proportion of the amount remitted	Output
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable		
11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing	Outcome
11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Output
11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1 Ratio of land consumption rate to population growth rate	Input
	11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	Process

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4.1 Total expenditure (public and private) per capita spent on the preservation, protection and conservation of all cultural and natural heritage, by type of heritage (cultural, natural, mixed and World Heritage Centre designation), level of government (national, regional and local/municipal), type of expenditure (operating expenditure/investment) and type of private funding (donations in kind, private non-profit sector and sponsorship)	Input
11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Outcome
	11.5.2 Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters	Output
11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities	Output
	11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	Outcome
11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Output
	11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months	Outcome
11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	11.a.1 Proportion of population living in cities that implement urban and regional development plans integrating population projections and resource needs, by size of city	Process
11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels	11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	Process
	11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Process

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	11.c.1 Proportion of financial support to the least developed countries that is allocated to the construction and retrofitting of sustainable, resilient and resource-efficient buildings utilizing local materials	Input
Goal 12. Ensure sustainable consumption and production patterns		
12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries	12.1.1 Number of countries with sustainable consumption and production (SCP) national action plans or SCP mainstreamed as a priority or a target into national policies	Process
12.2 By 2030, achieve the sustainable management and efficient use of natural resources	12.2.1 Material footprint, material footprint per capita, and material footprint per GDP	Output
	12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP	Output
12.3 By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses	12.3.1 (a) Food loss index and (b) food waste index	Output
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment	12.4.1 Number of parties to international multilateral environmental agreements on hazardous waste, and other chemicals that meet their commitments and obligations in transmitting information as required by each relevant agreement	Process
	12.4.2 Hazardous waste generated per capita and proportion of hazardous waste treated, by type of treatment	Output
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	12.5.1 National recycling rate, tons of material recycled	Output
12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	12.6.1 Number of companies publishing sustainability reports	Process
12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities	12.7.1 Number of countries implementing sustainable public procurement policies and action plans	Process
12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	12.8.1 Extent to which (i) global citizenship education and (ii) education for sustainable development (including climate change education) are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment	Process

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	12.a.1 Amount of support to developing countries on research and development for sustainable consumption and production and environmentally sound technologies	Input
12.b Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	12.b.1 Number of sustainable tourism strategies or policies and implemented action plans with agreed monitoring and evaluation tools	Process
12.c Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities	12.c.1 Amount of fossil-fuel subsidies per unit of GDP (production and consumption) and as a proportion of total national expenditure on fossil fuels	Output
Goal 13. Take urgent action to combat climate change and its impacts[2]		
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	13.1.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Outcome
	13.1.2 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	Process
	13.1.3 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	Process
13.2 Integrate climate change measures into national policies, strategies and planning	13.2.1 Number of countries that have communicated the establishment or operationalization of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production (including a national adaptation plan, nationally determined contribution, national communication, biennial update report or other)	Process
13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	13.3.1 Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula	Process
	13.3.2 Number of countries that have communicated the strengthening of institutional, systemic and individual capacity-building to implement adaptation, mitigation and technology transfer, and development actions	Process

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
13.a Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly $100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	13.a.1 Mobilized amount of United States dollars per year between 2020 and 2025 accountable towards the $100 billion commitment	Input
13.b Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	13.b.1 Number of least developed countries and small island developing States that are receiving specialized support, and amount of support, including finance, technology and capacity-building, for mechanisms for raising capacities for effective climate change-related planning and management, including focusing on women, youth and local and marginalized communities	Input
Goal 14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development		
14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	14.1.1 Index of coastal eutrophication and floating plastic debris density	Outcome
14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	14.2.1 Proportion of national exclusive economic zones managed using ecosystem-based approaches	Process
14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations	Outcome
14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics	14.4.1 Proportion of fish stocks within biologically sustainable levels	Output
14.5 By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	14.5.1 Coverage of protected areas in relation to marine areas	Process
14.6 By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation[3]	14.6.1 Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing	Process
14.7 By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism	14.7.1 Sustainable fisheries as a proportion of GDP in small island developing States, least developed countries and all countries	Output

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
14.a Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries	14.a.1 Proportion of total research budget allocated to research in the field of marine technology	Process
14.b Provide access for small-scale artisanal fishers to marine resources and markets	14.b.1 Degree of application of a legal/regulatory/ policy/institutional framework which recognizes and protects access rights for small-scale fisheries	Process
14.c Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want"	14.c.1 Number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources	Process
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss		
15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	15.1.1 Forest area as a proportion of total land area	Outcome
	15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type	Process
15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally	15.2.1 Progress towards sustainable forest management	Process
15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	15.3.1 Proportion of land that is degraded over total land area	Outcome
15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	15.4.1 Coverage by protected areas of important sites for mountain biodiversity	Process
	15.4.2 Mountain Green Cover Index	Outcome

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	15.5.1 Red List Index	Outcome
15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed	15.6.1 Number of countries that have adopted legislative, administrative and policy frameworks to ensure fair and equitable sharing of benefits	Process
15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	15.7.1 Proportion of traded wildlife that was poached or illicitly trafficked	Output
15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	Process
15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	15.9.1 Progress towards national targets established in accordance with Aichi Biodiversity Target 2 of the Strategic Plan for Biodiversity 2011–2020	Outcome
15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	15.a.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	Input
15.b Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation	15.b.1 Official development assistance and public expenditure on conservation and sustainable use of biodiversity and ecosystems	Input
15.c Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities	15.c.1 Proportion of traded wildlife that was poached or illicitly trafficked	Output
Goal 16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels		
16.1 Significantly reduce all forms of violence and related death rates everywhere	16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age	Outcome
	16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause	Outcome
	16.1.3 Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months	Outcome
	16.1.4 Proportion of population that feel safe walking alone around the area they live	Outcome
16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	16.2.1 Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month	Outcome
	16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	Outcome

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
	16.2.3 Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18	Outcome
16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all	16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms	Output
	16.3.2 Unsentenced detainees as a proportion of overall prison population	Output
16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime	16.4.1 Total value of inward and outward illicit financial flows (in current United States dollars)	Outcome
	16.4.2 Proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments	Process
16.5 Substantially reduce corruption and bribery in all their forms	16.5.1 Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months	Outcome
	16.5.2 Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months	Outcome
16.6 Develop effective, accountable and transparent institutions at all levels	16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)	Process
	16.6.2 Proportion of population satisfied with their last experience of public services	Outcome
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	16.7.1 Proportions of positions in national and local institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups	Outcome
	16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group	Outcome
16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance	16.8.1 Proportion of members and voting rights of developing countries in international organizations	Process
16.9 By 2030, provide legal identity for all, including birth registration	16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age	Output
16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	16.10.1 Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months	Outcome
	16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information	Process

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime	16.a.1 Existence of independent national human rights institutions in compliance with the Paris Principles	Process
16.b Promote and enforce non-discriminatory laws and policies for sustainable development	16.b.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law	Outcome
Goal 17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development		
Finance		
17.1 Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection	17.1.1 Total government revenue as a proportion of GDP, by source	Input
	17.1.2 Proportion of domestic budget funded by domestic taxes	Input
17.2 Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries	17.2.1 Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI)	Input
17.3 Mobilize additional financial resources for developing countries from multiple sources	17.3.1 Foreign direct investment (FDI), official development assistance and South-South cooperation as a proportion of total domestic budget	Input
	17.3.2 Volume of remittances (in United States dollars) as a proportion of total GDP	Input
17.4 Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress	17.4.1 Debt service as a proportion of exports of goods and services	Output
17.5 Adopt and implement investment promotion regimes for least developed countries	17.5.1 Number of countries that adopt and implement investment promotion regimes for least developed countries	Process
Technology		
17.6 Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism	17.6.1 Number of science and/or technology cooperation agreements and programmes between countries, by type of cooperation	Process
	17.6.2 Fixed Internet broadband subscriptions per 100 inhabitants, by speed	Output

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed	17.7.1 Total amount of approved funding for developing countries to promote the development, transfer, dissemination and diffusion of environmentally sound technologies	Input
17.8 Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology	17.8.1 Proportion of individuals using the Internet	Output
Capacity-building		
17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the Sustainable Development Goals, including through North-South, South-South and triangular cooperation	17.9.1 Dollar value of financial and technical assistance (including through North-South, South-South and triangular cooperation) committed to developing countries	Input
Trade		
17.10 Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda	17.10.1 Worldwide weighted tariff-average	Process
17.11 Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020	17.11.1 Developing countries' and least developed countries' share of global exports	Output
17.12 Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access	17.12.1 Average tariffs faced by developing countries, least developed countries and small island developing States	Process
Systemic issues		
Policy and institutional coherence		
17.13 Enhance global macroeconomic stability, including through policy coordination and policy coherence	17.13.1 Macroeconomic Dashboard	Output
17.14 Enhance policy coherence for sustainable development	17.14.1 Number of countries with mechanisms in place to enhance policy coherence of sustainable development	Process
17.15 Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	17.15.1 Extent of use of country-owned results frameworks and planning tools by providers of development cooperation	Process
Multi-stakeholder partnerships		

SDG targets	Indicators from the *UN Global SDG Indicator Framework*	Results chain
17.16 Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the Sustainable Development Goals in all countries, in particular developing countries	17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals	Process
17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	17.17.1 Amount of United States dollars committed to (a) public-private partnerships and (b) civil society partnerships	Input
Data, monitoring and accountability		
17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	17.18.1 Proportion of sustainable development indicators produced at the national level with full disaggregation when relevant to the target, in accordance with the Fundamental Principles of Official Statistics	Process
	17.18.2 Number of countries that have national statistical legislation that complies with the Fundamental Principles of Official Statistics	Process
	17.18.3 Number of countries with a national statistical plan that is fully funded and under implementation, by source of funding	Process
17.19 By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement gross domestic product, and support statistical capacity-building in developing countries	17.19.1 Dollar value of all resources made available to strengthen statistical capacity in developing countries	Input
	17.19.2 Proportion of countries that (a) have conducted at least one population and housing census in the last 10 years; and (b) have achieved 100 per cent birth registration and 80 per cent death registration	Process