The Sustainable Development Goals
Extended Report 2023

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Note: This unedited ‘Extended Report’ includes all indicator storyline contents as provided by the SDG indicator custodian agencies as of 30 April 2023. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information for further information. The ‘Extended Report’ aims to provide the public with additional information regarding the SDG indicators and is compiled by the Statistics Division (UNSD) of the United Nations Department of Economic and Social Affairs.
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Target 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.

Indicator 12.1.1 Number of countries developing, adopting or implementing policy instruments aimed at supporting the shift to sustainable consumption and production

Accelerating action to bring us back on track to 2030 through Sustainable Consumption and Production and deliver on global sustainability ambitions, leaving no one behind

Achieving a development model in which people, everywhere, can live well and better, based on an equitable use of resources, in harmony with nature, requires a profound transformation in the way we consume and produce. This objective, which cuts across the entire 2030 Agenda for Sustainable Development, is embedded in the 10-Year Framework of Programmes on Sustainable Consumption and Production (10YFP) and Sustainable Development Goal 12.

Since 2015, multilateral and multi-stakeholder cooperation on sustainable consumption and production has intensified, inspiring the design and implementation of science-based and transformative policies in numerous countries. In 2018, 478 policy instruments supporting the shift to sustainable consumption and production were reported by 59 countries and the European Union under SDG 12.1, including 54 policies reported or updated by countries in 2022, with increasing linkages with global environmental commitments on climate (SDG13), +10 points between the 2019-20 period and the 2021-22 period), biodiversity (SDG 14, +8 points and SDG 15, +11 points), pollution and waste, and as well as a particular attention to high-impact sectors such as consumer goods, agriculture and fisheries (+7 points), buildings and construction (+4 points), energy, transports (+7 points), which are relevant to more than one third of all reported policies, but also waste, including chemicals, (+25 points between 2019-20 and 2021-22), plastics (+17 points), health (+14%), textiles (+12 points) and ICT (+8 points) (see chats 1 and 2).

The international community has demonstrated great ambition in 2022, which translated, amongst others, into the Sharm el-Sheikh Implementation Plan, the adoption of the Kunming-Montreal Global Biodiversity Framework and UNEA resolution 5/14 on ending plastic pollution. All those ambitious outcomes have acknowledged the importance of shifting to sustainable lifestyles and consumption patterns, echoing, for instance, the analysis of the IPCC Sixth Assessment Report on climate mitigation, which highlights the potential of demand-side strategies to reduce between 40% and 70% of GHG emissions by 2050. This implies addressing not only how we produce and consume, which talks to 36% of reported policies under SDG 12.1, but also what and how much we produce and consume, which respectively talks to 28% and 23% of reported policies.

The urgency of adopting sustainable economic models that promote circular approaches of consumption and production remains. Today, more than ever we need to reverse the triple planetary crisis the world is facing – climate change, biodiversity loss and pollution – while addressing both the vulnerability and inequalities revealed by the Covid-19 pandemic. Reporting on SDG 12.1 has been decreasing by at least 30% every year since 2019 and continues to reflect great regional imbalances with more than 50% of policy instruments reported from Europe and Central Asia (see chart 3). This reflects the need to mobilize the international community to do better in sharing progress, but also in sharing knowledge, technology and financial resources to unlock opportunities for change and innovation, leaving no one behind. As the world is looking for pathways to build forward better, sustainable consumption and production policies must also aim at generating economic and social benefits, with concrete impacts, including on decent jobs, poverty, inequalities and women’s economic empowerment, and fill in the gap that remains visible in the SDG 12.1 reporting.

The Global Strategy for Sustainable Consumption and Production (2023-2030) will serve as a unique roadmap to support and encourage Member States in their commitment to accelerate the shift to SCP and reflect progress achieved under SDG 12.1.

Relevance of reported policies to other SDGs for the periods 2019-2020 and 2021-2022 in %

Regional distribution of reported policies (2019-2022)

1 Previous reporting by the 10YFP on indicator 12.1.1 reflected countries who submitted policies in the 2017 Pilot reporting exercise in addition to the official reporting of 2019 and 2020. However, as the 2017 pilot reporting exercise was a methodological exercise to verify and review the indicator, methods and data collection processes have been improved since then. As such, the 10YFP Secretariat has engaged with Member States, through National Focal Points, to confirm and either resubmit or remove policies reported in the pilot exercise (26 countries did not report beyond the 2017 pilot reporting exercise). Therefore, the 2022 reporting on SDG 12.1.1 does not include information collected through the 2017 pilot reporting exercise, and rather focuses on the confirmed national data submitted from 2019-2022. For the purpose of analyzing evolutions in global trends using comparable datasets, reported policies have been aggregated under two periods of 2 years: 2019-2020 and 2021-2022.

2 List of reporting countries in 2022: Australia, Hungary, Norway, Sweden, Turkey, USA, Philippines, Serbia, South Africa.

3 SDG Climate Change 2020: Mitigation of Climate Change, Summary for Policymakers

4 However, the proportion of policies and activities reported by African countries has tripled, representing 4% for the period 2019-2020, and 12% for the period 2021-2022. The proportion of policies and activities reported by Asian countries has more than doubled, from 13% for the period 2019-2020 to 33% for the period 2021-2022. The proportion of Latin American and Caribbean countries has, on the other hand, decreased, from nearly 20% for the period 2019-2020 to 8% for the period 2021-2022.

5 The proportion of policies identified as relevant to SDG 8 (Decent jobs and economic growth) has decreased by 8 between reporting periods 2019-2020 and 2021-22. SDGs 1, 4, 5 and 10 remain the SDGs less often identified as relevant to policy instruments reported under target SDG 12.1.

6 Issued as official document of the General Assembly under symbol A/77/107.
Target 12.2 By 2030, achieve the sustainable management and efficient use of natural resources

Indicator 8.4.1/12.2.1 Material footprint, material footprint per capita, and material footprint per GDP

Indicator 8.4.2/12.2.2 Domestic material consumption, domestic material consumption per capita, and domestic material consumption per GDP

Domestic material consumption assists to analyze the economic pressure on the environment, but when the economy is oriented towards traded goods, the material footprint is a much better indicator.

Domestic material consumption (DMC) is one of the well-known indicators that assist to analyze the economic pressure on the environment by measuring the total amount of materials directly used in an economy, excluding indirect flows. In 2019, the total DMC at the global level was 95.1 billion tons, 66 per cent higher than in 2000 and more than three times higher than in 1970, indicating a trend towards increased use of materials worldwide.

DMC is defined as the amount of raw materials extracted from the domestic territory, considering all physical imports, and subtracting all physical exports. At the same time, when an economy is not oriented towards the domestic extraction of natural resources, but mainly imports goods, the DMC is artificially low, as it does not take into account the raw materials originally needed to produce these imported goods.

To get a more complete picture of the actual material consumption, it is recommended to use a material footprint indicator that covers traded goods in their raw material equivalents, i.e. the amount of raw materials required to produce the respective traded goods. In 2019, the global material footprint was 95.9 billion tons, close to the global DMC for the same year. Although the volumes of both indicators are quite close at the global level, the situation is rather different from region to region (see chart 1).

In Northern America and Europe, the material footprint in 2019 was about 14 per cent higher than the DMC, which indicates that the actual level of material consumption in this region was higher than it seems at first glance. Looking at these two indicators from 2000 to 2019, the difference between them never fell below 11 per cent, and between 2005 and 2008 it was more than 17 per cent (see chart 2).

At the same time, in regions such as Latin America and the Caribbean and Sub-Saharan Africa, the material footprint was lower than the DMC by 17 per cent and 32 per cent, respectively, in 2019 (see chart 1). This suggests that the actual level of material consumption in these regions was much lower than the DMC indicator shows.

Additional resources, press releases, etc. with links:

Storyline authors(s)/contributor(s): Ekaterina Poleshchuk, UNEP; Sophia Leticia Groll, UNEP

Custodian agency(ies): UNEP
The percentage of food lost globally after harvest on farm, transport, storage, wholesale, and processing is estimated at 13.2 percent in 2021, similar to previous estimates of 13.3 percent in 2010 and 13.2 percent in 2016. These changes should be interpreted as oscillations since the regions have experienced only slight variations since 2020, with no clear or strong trends.

At the regional level, sub-Saharan Africa has the highest losses at 19.95 percent, followed by Small Island Developing States (SIDS) and least developed countries (LDCs) with 18.99 percent and 16.1 percent respectively, attributable to structural inadequacies in countries. Latin America and the Caribbean also registered high food loss rates at 14.52 percent, up by 2.3 percent since 2020, which can be attributed to an increase in loss levels in the Caribbean sub-region as a result of increased data availability, and not necessarily a change in losses experienced.

The lowest losses occur in Oceania (excluding Australia and New Zealand) and Northern America and Europe at 12.43 percent and 9.19 percent respectively. While data at country level continue to be scarce, the high loss estimates at global, regional and sub-regional level are indicative of the magnitude of the problem and, therefore, of the need for countries to start formulating policies specifically geared towards reducing food losses.

In 2022, the members of the Regional Working Groups in Africa, Latin America and the Caribbean, Asia-Pacific, and West Asia, launched in 2021, help countries to learn about the calculation of food waste. In 2022, the members of the Regional Working Groups were invited to fill out a pilot questionnaire, which should support global food waste reporting and regular data collection in the future. The work is in progress.

Additional resources, press releases, etc. with links:

Storyline author(s)/contributor(s): Sharon Mavienga, FAO; Carola Fabi, FAO
Custodian agency(ies): FAO, UNEP

Household food waste generation per capita is broadly similar across all income country groups, indicating that action on food waste is equally relevant in high-income, upper-middle income and lower-middle income countries.

The food waste issues are closely connected with all three planetary crises, namely Climate, Nature, and Pollutions. But from the measurement point, the topic is still fresh and requires a lot of investments, financial and human.

In 2021, UNEP estimated food waste data for Member States that had not yet undertaken their own measurement, extrapolating data from the countries for which data were available. The estimated data show that in 2019, 931 million tons of food, or 120 kilograms per capita, were wasted at household, food service and retail. Half of the total food waste, or 483 million tons of food, was wasted in Asian countries. However, if we look at the regional picture in terms of per capita, the situation is rather different (see chart 1).

The results of the distribution of food waste by region are correlated with one of the key findings of the UNEP Food Waste Index Report 2021, which revealed that household food waste generation per capita is broadly similar across all income country groups, indicating that action on food waste is equally relevant in high-income, upper-middle income and lower-middle income countries.

Likewise, the estimates are always approximate. They are envisioned as a short-term support while governments develop capacity for national measurement. To improve the evidence-based measurement of food waste, both globally and nationally, more countries need to measure food waste across the supply chain and in households, using accurate methods on sufficiently large samples.

The UNEP Regional Food Waste Working Groups in Africa, Latin America and the Caribbean, Asia-Pacific, and West Asia, launched in 2021, help countries to learn about the calculation of food waste. In 2022, the members of the Regional Working Groups were invited to fill out a pilot questionnaire, which should support global food waste reporting and regular data collection in the future. The work is in progress.
Target 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

Indicator 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

Montréal Protocol reporting commitments remain unaffected by the global crises

The global crises of recent years have impacted the work under the Montréal Protocol on Substances that Deplete the Ozone Layer in various ways, but the parties’ reporting commitments have remained unaffected.

The coronavirus disease (COVID-19) pandemic did disrupt the normal flow of work under the ozone treaties in 2020, 2021 and the start of 2022. For instance, low and middle-income countries experienced delays in the implementation of projects supported by the Multilateral Fund (MLF) of the Montréal Protocol for the phase-out of ozone-depleting substances and the phase-down of hydrofluorocarbons (HFCs). The situation started to improve during 2022.

Nevertheless, the parties have remained resolute in their annual reporting of statistical data and related information on production and consumption of controlled substances. The reporting provides a mechanism to assess compliance with control measures. Historically, all parties have ultimately achieved 100 per cent compliance with their annual reporting obligations.

Whether the war in Ukraine will have an impact on the parties’ reporting requirements for 2022 remains to be seen. Annual reporting requires data to be submitted by the end of September 2022. As for the effects of climate change affecting some countries in recent years, no impact on the number of parties meeting their reporting obligations has been detected.

The chart shows how parties’ commitments from 2015 to 2021 have remained resolute, despite the global disruptions caused by COVID and the effects of climate change.

Since the adoption of the Kigali Amendment to the Montréal Protocol committing to phasing down HFCs, 148 out of 198 parties have ratified it, out of which 57 have done so since 2020. By controlling HFCs, the Amendment is expected to avoid up to 8.5°C of global warming by 2100, an important contribution in the context of the Paris Agreement, which aims to keep global temperature rise this century to well below 2°C above pre-industrial levels.

Despite the global crises, in 2022 the three Assessment Panels of the Montréal Protocol (the Scientific Assessment Panel, the Environmental Effects Assessment Panel, and the Technology and Economic Assessment Panel) prepared their 2022 Quadrennial Assessment Reports on issues related to ozone depletion and climate change. These key milestone reports will inform the discussions of the parties in 2023 and decisions towards continued ozone layer and environmental protection.

Additional resources, press releases, etc. with links:
- Ozone Secretariat website: https://ozone.unep.org
- Country profiles: https://ozone.unep.org/countries
- Status of Kigali Amendment ratification: https://ozone.unep.org/all-ratifications
- Data centre: https://ozone.unep.org/countries/data-table

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Custodian agency(ies): UNEP

As the world recovers from the COVID-19 pandemic, the importance of addressing pollution caused by chemicals and wastes gathers renewed momentum

Under the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, increased attention has been paid to two particularly challenging waste streams: plastic waste and electronic and electrical waste. The international community’s growing led to the adoption of the Plastic Waste Amendments in 2019 and the E-waste Amendments 2022, bringing many types of plastic waste (both hazardous and non-hazardous) and all types of e-waste under scope of the Basel Convention prior informed consent control procedure. As a result, a more transparent, traceable, and enforceable set of obligations regulate the imports and exports of these wastes, promoting the prevention and minimization of the generation of plastic waste and e-waste, and their environmentally sound management. Once a waste stream falls within the scope of the convention, data on transboundary movements of such wastes is to be reported by Parties. This data will be subsequently taken into account when applying the indicator 12.4.1. Other important developments under the Basel Convention include the initiation of work on the improvement of the prior informed consent procedure and on the digitalization of this procedure. There are two new Parties to the Basel Convention: Grenada and Solomon Islands.

Under the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade, discussions continued on listing pesticides and industrial chemicals in Annex III with the implication that Parties would have the right, through the transmission of an import response, to decide on their future import. In particular, in 2022 two new industrial chemicals, namely decabromodiphenyl ether, and perfluorooctanoic acid (PF0A), its salts and PF0A-related compounds, were listed in the Annex III to the Convention. Import responses for these newly added chemicals, in addition to those transmitted for the already listed chemicals, are taken into account when when applying indicator 12.4.1. Another development is the newly established Compliance Committee which is expected to further improve the implementation of the Rotterdam Convention. There are two new Parties to the Rotterdam Convention: Barbados and Grenada.
From the perspective of the Stockholm Convention on persistent organic pollutants (POPs), perfluorohexane sulfonic acid (PFHxS), its salts, and compounds were listed in 2022 for elimination of their production and use. These chemicals were widely used in firefighting foam, carpets, and non-stick cookware. They have been found to influence the human nervous system, brain development, and thyroid hormone. Parties are also accelerating efforts towards elimination of two of the initial POPs listed under the Convention: PCB and DDT. Regarding PCB, Parties are to step up their efforts by immediately implementing actions to eliminate their use in equipment by 2025, and to achieve the environmentally sound management of relevant PCB wastes by 2028. Almost 600,000 tons of PCB waste has been reported as eliminated which shows good progress towards meeting the Stockholm Convention’s goals. Regarding DDT, while there is a continued need for DDT for indoor residual spraying in specific settings for malaria vector control, as all countries currently using DDT for disease vector control have a target date of 2030 for malaria elimination, experts assume that DDT use may not be needed after 2030. Parties still using DDT for disease vector control are to review their needs, while a consultative process was initiated under the Convention towards the development of possible DDT phase-out plans. There are two new Parties to the Stockholm Convention: Grenada and Italy.

Information transmitted by Parties to meet their commitments as required by multilateral environmental agreements in the chemicals and waste clusters continues to play an important role, together with other factors in the extent to which the SDG target 12.4 is being met. For information on the evolution of the amount of information transmitted under the Basel, Rotterdam and Stockholm conventions in 2015 and 2020, see, respectively, graphs 1, 2 and 3.

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**Information transmitted to the Rotterdam Secretariat in 2015 and 2020 by region (%)**

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>African States</td>
<td>56.13</td>
<td>68.26</td>
</tr>
<tr>
<td>Asian-Pacific States</td>
<td>62.90</td>
<td>69.16</td>
</tr>
<tr>
<td>Eastern European States</td>
<td>75.78</td>
<td>79.07</td>
</tr>
<tr>
<td>Latin American and Caribbean States</td>
<td>63.19</td>
<td>76.67</td>
</tr>
<tr>
<td>Western European and Other States</td>
<td>92.31</td>
<td>92.02</td>
</tr>
</tbody>
</table>

**Information transmitted to the Stockholm Convention Secretariat in 2015 and 2020 by region (%)**

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>African States</td>
<td>68.04</td>
<td>61.93</td>
</tr>
<tr>
<td>Asian-Pacific States</td>
<td>54.17</td>
<td>51.75</td>
</tr>
<tr>
<td>Eastern European States</td>
<td>61.03</td>
<td>63.30</td>
</tr>
<tr>
<td>Latin American and Caribbean States</td>
<td>33.20</td>
<td>25.06</td>
</tr>
<tr>
<td>Western European and Other States</td>
<td>75.64</td>
<td>75.06</td>
</tr>
</tbody>
</table>

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**Custodian agency**: UNEP

An overwhelming majority of Parties to the Minamata Convention have complied with their obligations to nominate national focal points and submit full national reports

An overwhelming majority of Parties to the Minamata Convention have complied with their obligation to nominate national focal points as required by Article 17.4 of the Convention. Since the entry into force of the Convention in 2017, 135 out of 139 Parties (97%) have nominated their national focal points. This is a 34% jump from 2017, with only 101 out of 114 Parties (88%) nominating their national focal points. The Minamata parties are close to achieving gender parity among the designated national focal points with 51% (men) and 49% (women) during the reporting cycle.

On the designation of national focal points by region, the Eastern European states have completed their designation of focal points, 100%, followed by Latin America and the Caribbean and the Western European and Other States with 96% each, closely followed by Africa with 95%, and Asia-Pacific with 88% of parties in the region.

With respect to their obligation under Article 21 of the Convention (Reporting), of the 123 parties to the Convention that were party in the first full reporting period, from 16 August 2017 to 31 December 2020, 113 Parties have submitted their reports to the Secretariat. This represents an impressive 92 per cent reporting rate for the reporting period.

While some parties raised the COVID-19 pandemic as an impediment to their efforts to implement the Convention during the reporting period, the results show the effort taken by the Minamata parties to prepare and meet their Article 21 reporting obligation by achieving a 92% reporting rate. This also shows a sustained effort by parties to continue the equally impressive 91% reporting rate achieved for their first short national reports, which covered the period from 16 August 2017 to 31 December 2019.

The full national reports differ considerably from the short national reports. While the short national reports cover four recurrent questions every two years, the full national report (every four years) has 43 multi-tiered questions that cover control and enabling measures under the Convention that require inter-agency coordination for the responses. The added layer of complexity brought upon by the full national report questions, and the intervening COVID-19 pandemic, only confirms the commitment and hard work exerted by parties in meeting their Article 21 reporting obligation under the Minamata Convention.

On the reporting rates by region: 22 of 22 parties from Western Europe and Others (100%) have submitted their reports, followed by Africa with 31 of 32 parties (97%), Eastern European states with 14 of 15 parties (93%), Latin America and the Caribbean with 23 of 24 parties (96%), and with 23 of 30 parties from the Asia Pacific region (77%).

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Additional resources, press releases, etc. with links:

- A list of national focal points is available at https://www.mercuryconvention.org/en/parties/focal-points
- More information on national reporting is available at https://www.mercuryconvention.org/en/parties/reporting
- Resources for national reporting is available at: https://www.mercuryconvention.org/en/resources
- Website http://www.mercuryconvention.org

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Custodian agency(ies): UNEP

Indicator 12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment

Custodian agency(ies): UNSD, UNEP

Target 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

Indicator 12.5.1 National recycling rate, tons of material recycled

Custodian agency(ies): UNSD, UNEP
Target 12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

Indicator 12.6.1 Number of companies publishing sustainability reports

Sustainability reporting grows incrementally with the ongoing global standardization trend and increasing investors’ attention to the ESG disclosures, but at unequal rates across regions

The International Financial Reporting Standards (IFRS) Foundation officially inaugurated its International Sustainability Standards Board (ISSB), aiming to create a new global baseline for corporate sustainability reporting (SR). Governments in both developed and developing economies have been stepping up their efforts to support sustainable finance. Several economies already passed regulations requiring issuers to disclose sustainability information8.

In the period of 2020-2021 68% of companies analyzed publish sustainability reports, marking the highest increase that tripled their number since 20169. The most often used anchors for sustainability reporting are GRI, TCFD, and SDGs10. Large and listed companies are advancing fast driven by the new rules released by stock exchanges, national regulators etc. MSMEs, though still require guidance and capacity building, demonstrated growth in sustainability reporting, but in lower volumes11.

The data identified significant differences between the regions. While South Eastern Asia and Central America have experienced the highest increase in SR in 2020-2021, the highest volume of reports is registered in Eastern Asia, North America and Europe. Western Asia, Northern Africa and Central America are among the regions with the lowest volumes of reports12.

In 2021 96% of top 250 companies worldwide in 52 countries report on sustainability, against 90% in 2020, and around 70% of top 100 companies identify material ESG topics. The manufacturing, finance and insurance industries feature the highest numbers of companies publishing sustainability reports, growing by over 20% in 2020-2021, while the utilities sector maintains the largest share of companies (89%) consistently publishing sustainability reports.

Climate and environmental risks are more commonly addressed than social and governance dimensions13. The most disclosed environmental indicators are policies on water and energy efficiency and CO2 emissions (scope 1), while less attention is paid to water recycled and ozone-depleting substances. In the social dimension, almost 90% of the reports include policies on diversity and opportunities, health and safety, and human rights, and fewer include employees training hours. On corporate governance, all reports cover board diversity, while gender pay gap is often neglected. Most companies report on the SDGs, however, only 10% of companies report on all 17 SDGs14. The most commonly addressed are 8: Decent Work and Economic Growth; 12: Responsible Consumption and Production; and 13: Climate Action.

### Share of companies in the sample publishing a sustainability report, by sector (2021)

#### Percentage change of companies publishing sustainability reports between 2021 and 2020, by region (M49)

### Additional resources, press releases, etc. with links:

- KPMG, Big shifts, small steps. Survey of Sustainability Reporting 2022, October 2022. The survey refers to two research samples: The largest 100 companies in each of 58 countries, territories, and jurisdictions: 5,800 companies in total, and the largest 250 companies in the world. Available at: https://kpmg.com/rs/en/home/insights/2022/09/survey-of-sustainability-reporting-2022.html
- Storyline authors/contributor(s): Elena Botvina, UNCTAD; Giacomo Melloni, UNCTAD; Dany Ghafary, UNEP; Ekaterina Poleshchuk, UNEP
- Custodian agency(ies): UNEP, UNCTAD

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9 The co-authors of ESG indicator 12.6.1 used the Refinitiv database, which will continue to be explored for more comprehensive reporting on the indicator. The dataset includes data from IREF mostly large public companies from 179 countries in all regions. The ESG indicators analysed have a 47% compliance with the SDG’s 12.6.1 minimum and advanced criteria.
10 KPMG, Big shifts, small steps. Survey of Sustainability Reporting 2022, October 2022. The survey refers to two research samples: The largest 100 companies in each of 58 countries, territories, and jurisdictions: 5,800 companies in total, and the largest 250 companies in the world. Available at: https://kpmg.com/rs/en/home/insights/2022/09/survey-of-sustainability-reporting-2022.html
11 Ibid.
12 Ibid.
13 Ibid.
14 Ibid.
Target 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities

Indicator 12.7.1 Number of countries implementing sustainable public procurement policies and action plans

Countries’ focus on reporting sustainable public procurement policies and action plans is growing, but further supportive action is needed

Public procurement is a key factor in the economy of all countries, representing on average 13-20% of GDP. Leveraging the purchasing power of governments in support of sustainable development has the potential to drive markets towards greener and more innovative products and services and influence supplier behavior in favor of improved social and labor standards. This strategic approach to public spending is known as “Sustainable Public Procurement” or “SPP.” Recognizing the potential of SPP, the international community included SPP in Target 12.7 (“Promote public procurement practices that are sustainable, in accordance with national policies and priorities”) under SDG Goal 12 “Responsible Consumption and Production.”

SDG Indicator 12.7.1 measures “the number of countries implementing Sustainable Public Procurement policies and action plans.” “SPP policies and action plans” are broadly defined as any type of document (law, act, executive order, strategy, policy, action plan, etc.) dedicated to the promotion and implementation of sustainable public procurement in any of its environmental and/or socio-economic dimensions. To date, two data collection exercises on SDG Indicator 12.7.1 have been carried out – the first in 2020 (with 40 participating countries) and the second in 2022 (with 67 countries). Data collection for SDG Indicator 12.7.1 in 2022 commenced in May with the identification of national government focal points and alternates. Over 170 countries were contacted for focal point identification, with 103 national governments appointing such contacts (compared to 55 in 2020). Of these, 67 submitted completed reports – a more than 50% increase over the number of countries (40) reported on this indicator in 2020. Almost all of the national governments (38 out of 40) that reported on this indicator in 2020 participated in the data drive in 2022; 29 countries were reporting for the first time.

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Custodian agency(ies): UNEP

Target 12.8 By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Indicator 4.7.1/12.8.1/13.3.1 Extent to which (i) global citizenship education and (ii) education for sustainable development are mainstreamed in (a) national education policies; (b) curricula; (c) teacher education; and (d) student assessment

Custodian agency(ies): UNESCO-UIS
Target 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

Indicator 7.b.1/12.a.1 Installed renewable energy-generating capacity in developing countries (in Watts per capita)

In 2021, there was a record-breaking installation of 268 Watts per capita of renewable capacity in developing countries

SDG indicator 7.B.1 tracks the installation of renewable energy generating capacity in developing countries. In 2021, there was a record-breaking installation of 268 watts per capita of renewable capacity, representing a year-on-year growth rate of 9.8%. However, even with this positive and accelerating growth, developing countries are not on track to meet SDG7 by 2030. Moreover, the positive global and regional trends hide the fact that the countries that are most in need of support are being left behind, even among developing countries. There are still only four developing countries with more than 1,000 Watts per capita and they are the same as last year (Bhutan, The Lao People’s Democratic Republic and Uruguay). While the growth rate in renewables capacity per capita was high for the developing world, at a compound annual growth rate of 9.6% over 2016-21, growth was significantly lower for small island developing states (8.5%), the least developed countries (5.5%), and landlocked developing countries (3.8%). This trend is concerning, as it underscores the urgent need for greater support and investment to ensure that developing countries can meet their renewable energy and development goals and contribute to global efforts to combat climate change.

Renewable capacity additions have been growing at a steady pace over the past two decades and have consistently outpaced population growth. In the first decade of the 21st century, the CAGR of renewable capacity per capita was 4.6%. This figure was surpassed by an 8.6% CAGR during 2010-15, and more recently, the CAGR increased to 9.6% in the 2015-20 period. In 2021, the growth rate continued to accelerate, reaching 9.8%. Meanwhile, the addition of non-renewable capacity decreased by 2% between 2020 and 2021, dropping from 77.1 GW to 75.7 GW. This trend of decreasing non-renewable additions started in 2016 after reaching an all-time high of 137.7 GW in 2015.

Over the past decade, the growth in renewable energy generating capacity varied across regions. The Eastern and South-Eastern Asia region witnessed an impressive growth in capacity, increasing from 135 to 525 Watts per capita from 2010 to 2021, primarily due to additions of wind and solar power. Lao PDR, China, and The Republic of Korea showed the most growth in the region. In Latin America and the Caribbean, capacity increased by 57%, from 285 to 446 watts per capita, with the chief components being wind energy (35%), solar energy (29%), and hydropower (27%). Uruguay, Chile, and Panama showed the most growth in renewables-fueled capacity in the region. In Western Asia and North Africa and Central and Southern Asia, per capita capacity doubled during 2010–21, with a CAGR of 7.4% and 7.5% respectively, driven by solar and wind power. Bhutan, Türkiye, and The United Arab Emirates led this region. However, countries in Oceania and Sub-Saharan Africa are lagging, with per capita capacity growing by 20% and 59%, respectively, over the period. Tokelau, Niue, and The Cook Islands showed the most growth in renewables in these regions. Moreover, the growth rates across country groups reveal worrying disparities, with Small Island Developing States (SIDS), The Least Developed Countries (LDCs), and Landlocked developing countries (LLDCs) lagging even behind other developing countries. At current annual growth rates, LDCs would need almost 40 years, LDCs 25 years, and SIDS 13 years to reach a level of deployment similar to the average 2021 level of developing countries.

Closing the geographic gap in the deployment of renewables-based capacity will require tailored policies and investment measures to ensure a just and climate-safe energy transition in the long term. The ambitious deployment of renewable capacity across regions is crucial to avoid locking in unsustainable and polluting energy choices and to prevent the creation of stranded assets.

Installed renewable energy-generating capacity in developing countries (in Watts per capita), by technology between 2000 and 2021

Storyline authors/contributor(s): Gerardo Escamilla, IRENA; Arvydas Lebedys, IRENA
Custodian agency(ies): IRENA
Target 12.b: Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products.

Indicator 12.b.1: Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability.

Reengagement of monitoring efforts critical to accelerate sustainable development impacts through tourism

Globally, data shows a marked decline in the number of countries having implemented tools to monitor the sustainable development impacts of tourism called for in Target 12.b. While the Covid-19 pandemic might have affected relevant statistical operations in 2020 and 2021, it is important for countries to reengage these efforts to understand whether tourism’s contribution—notably in the form of job creation and the promotion of local culture and products— is on the right track.

Reliable tourism data based on internationally agreed standards is fundamental to benchmark performance, communicate progress, and ensure that action on the ground is aligned with national and international policy ambitions. The level of a country’s implementation of the Tourism Satellite Account (TSA) and the System of Environmental Economic Account (SEEA) provide a good indication of its capacity to measure the economic and environmental sustainability of tourism. This has been acknowledged in the global effort on Measuring the Sustainability of Tourism (MST) led by the World Tourism Organization in partnership with leading countries, the International Labour Organization and the United Nations Statistics Division.

Between 2008 and 2016 the number of countries having at least one table for evaluating key elements of tourism’s sustainability—derived from the Tourism Satellite Accounts (TSA) and the System of Environmental Economic Accounts (SEEA)—steadily increased, reaching a record of 94 countries. In 2017-2019 the figure declines slightly but remains more or less stable. In 2020 the number of countries having implemented these monitoring tools declines to 85 (-26%), and then to 25 for 2021 (-62%).

Although it is normal to observe a time lag in the availability of these monitoring tools in countries, the 2020-2021 decrease is significant and may indicate shifts in prioritization towards other statistical operations and/or in changes in resourcing away from data production more broadly. While this is understandable in light of the circumstances of the Covid-19 pandemic, it is important that countries revive these monitoring efforts as part of the recovery.

Measuring and monitoring will be the only way to ensure that every sector, including tourism, is accountable and doing everything possible towards the implementation of the SDGs. As countries step up efforts to build back better, reengagement and investment in monitoring tools become critical to not only achieve Target 12.b but also guide the broader course of action towards more sustainable consumption and production.

Global implementation of TSA and SEEA

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Additional resources, press releases, etc. with links:
- Tourism data: [https://www.unwto.org/tourism-statistics-data](https://www.unwto.org/tourism-statistics-data)

Storyline authors(s)/contributor(s): Clara van der Pol, UNWTO; Leandry Moreno, UNWTO; Eric Hernandez, UNWTO

Custodian agency(ies): UNWTO
Target 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.

Indicator 12.c.1 Amount of fossil-fuel subsidies (production and consumption) per unit of GDP

Calls for phasing-out of fossil fuel subsidies continue, but global data shows a resumption of fossil fuel subsidies in 2021 after a brief drop in 2020.

With fossil fuels recognized as the single largest contributor to greenhouse gas emissions, it is urgent to remove inefficient subsidies which encourage their production and consumption. As expected, global data showed a recrudescence of fossil fuel subsidies in 2021, after a brief fall in 2020 which was largely caused by a drop in energy prices: in 2021, Governments spent an estimated 732 billion USD on subsidies to coal, oil, and gas, against 375 billion in 2020. This brings us back to the level of 2014. This highlights that phasing out subsidies to fossil fuel still work in progress despite increasing awareness and acknowledgement by the international community of their negative impacts on the transition to a low-carbon economy. Fossil fuel subsidies reduce the competitiveness of alternative, cleaner energy sources. They also represent a huge burden for the public finances of countries still recovering from the impact of the pandemic, diverting precious resources from much needed green and social investments. This price comes both in the form of direct expense and in lost revenue caused by tax cuts. The cost for national budgets is also likely to be aggravated by the spike in energy prices that was observed in 2022.

Data reporting by countries on fossil fuel subsidies as a share of GDP is part of the effort to track global progress on the reform of inefficient fossil fuel subsidies. It is also key to ensure national ownership and credible data to inform the design of fair, effective reforms. Following the publication of a global methodology on the measure of subsidies in the context of the SDGs in 2019, countries were invited to report for the first time at the end of 2022. The country data are still coming in. Technical assistance will continue to be provided to countries to support the building of a global database based on national data, which will be made available on the SDG 12 Hub portal.

Additional resources, press releases, etc. with links:

- Global methodology on the measure of subsidies: Measuring Fossil Fuel Subsidies in the Context of the Sustainable Development Goals
- SDG 12 Hub

Storyline author(s)/contributor(s): Claire Potdevin, UNEP

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