The Sustainable Development Goals Extended Report 2025

Inputs and information provided as of 30 April 2025

Note: This unedited 'Extended Report' includes all indicator storyline contents as provided by the SDG indicator custodian agencies as of 30 April 2025. 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. Storylines presented in this document may slightly differ from figures cited in the SDG Report 2025 text due to the timing of the submission and the subsequent updates received upon finalizing the Report.

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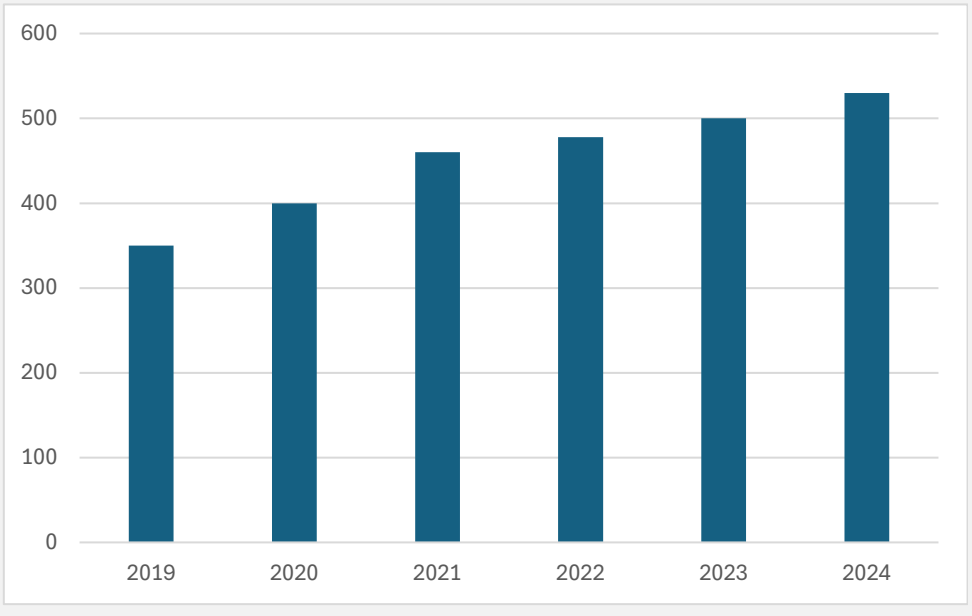
Target 12.1 Implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries

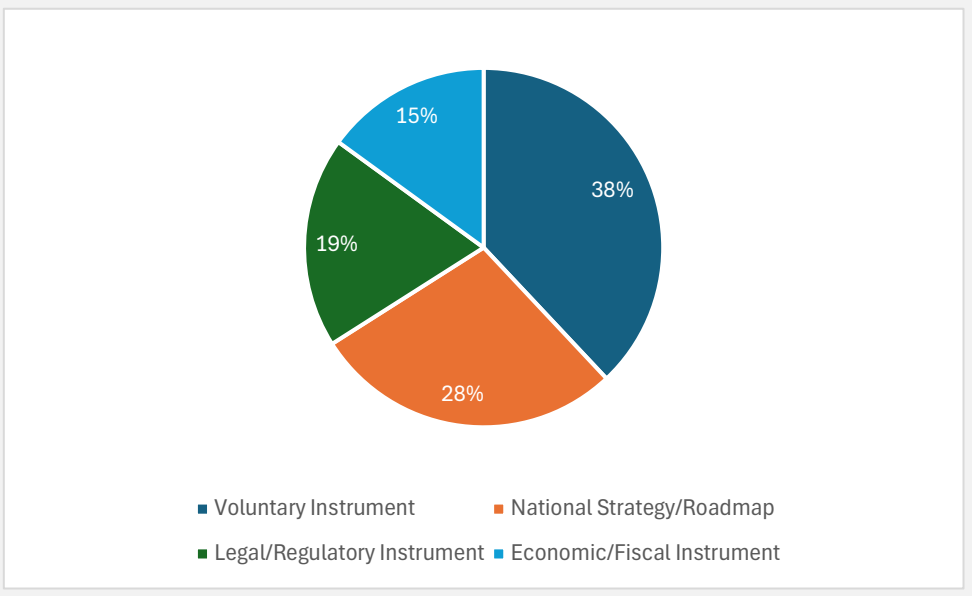
Indicator 12.1.1 Number of countries developing, adopting or implementing policy instruments aimed at supporting the shift to sustainable consumption and production

Growing Global Progress in Advancing Sustainable Consumption and Production: Reporting on SDG12.1.1

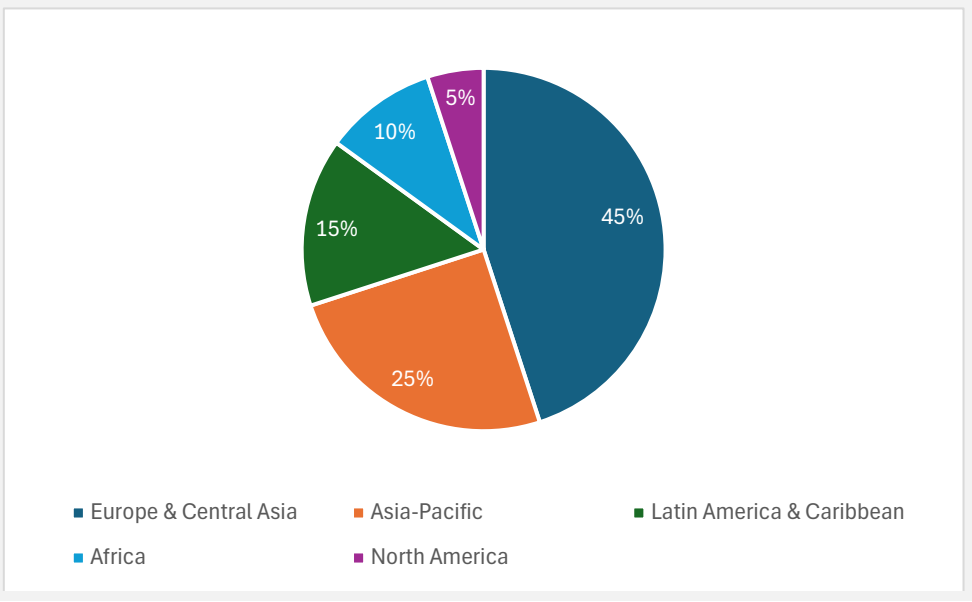
Graph 1: Number of Reported Policies (2019-2024)



Graph 2: Global distribution of Policy by type (2024; %)



Graph 3: Regional Share of Policies Reported (2024)



Since the adoption of the 2030 Agenda, global commitments to Sustainable Consumption and Production (SCP) have grown steadily, reflected in the increasing number of policy instruments reported under SDG 12.1.1. The 2024 reporting cycle saw a total of 530 policies submitted across 71 countries, a 6% increase from 2023, demonstrating continued engagement in SCP policymaking (see graph 1). While European and Central Asian nations continue to lead in policy volume, new submissions from Bangladesh, Cook Islands, Kenya, and Madagascar mark significant progress in expanding SCP engagement across diverse regions.

Among the most active reporting countries, the Philippines (87 policies, 16% of total), Hungary (51 policies, 10%), and Sweden (41 policies, 8%) stand out as leaders in SCP policy development. Sweden, in particular, contributed additional policy instruments across multiple categories, reinforcing its role as a key advocate for SCP implementation.

A breakdown of policy types reveals that voluntary instruments (38%) remain the most commonly reported approach, followed by national strategies and roadmaps (28%) (see graph 2). There is also a growing emphasis on economic and fiscal instruments (15%), as more countries introduce SCP incentives for businesses and consumers. Countries such as Costa Rica added new fiscal policies, reflecting a shift towards financial mechanisms to drive SCP adoption. Similarly, legal and regulatory frameworks (19%) are becoming more prominent, with at least 14 countries implementing binding laws to advance SCP principles.

From a regional perspective, while Europe and Central Asia maintain a strong presence in SCP policy reporting (45% of all reported policies; see graph 3), there is a notable increase in participation from Africa (10%) and Small Island Developing States (SIDS). The entry of Madagascar and Cook Islands into the SDG 12.1.1 reporting framework signals a broader global alignment with SCP objectives. Additionally, Latin American engagement is strengthening (15%), with Costa Rica expanding its policy efforts.

Despite the progress, challenges remain. Key barriers for member states include lack of integrated SDG reporting and limited human resources to consolidate inputs for submission. Moving forward, capacity-building and awareness raising workshop in SDG 12.1.1 reporting with international support will be pivotal for increasing submissions.

As SDG 12.1.1 continues to evolve, the focus must remain on scaling up impactful policies, enhancing policy effectiveness, and ensuring that SCP commitments translate into tangible environmental and economic benefits.

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Custodian agency(ies): UNEP

Target 12.2 By 2030, achieve the sustainable management and efficient use of natural resources

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

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

Global Material Consumption rises by over 20% (2015–2022), driven by domestic demand for non-metallic minerals

Domestic Material Consumption (DMC) measures the total amount of materials directly utilized within an economy, excluding the raw material equivalents of traded products. It accounts for domestic material extraction and the physical balance of material imports and exports.

Between 2015 and 2022, global DMC increased by 23.3%, rising from 92.1 to 113.6 billion tonnes, while DMC per capita grew by 14.8%, from 12.4 to 14.2 tonnes per capita. This suggests that increasing consumption patterns were the primary driver of DMC trends during the analyzed period, outweighing the impact of population growth.

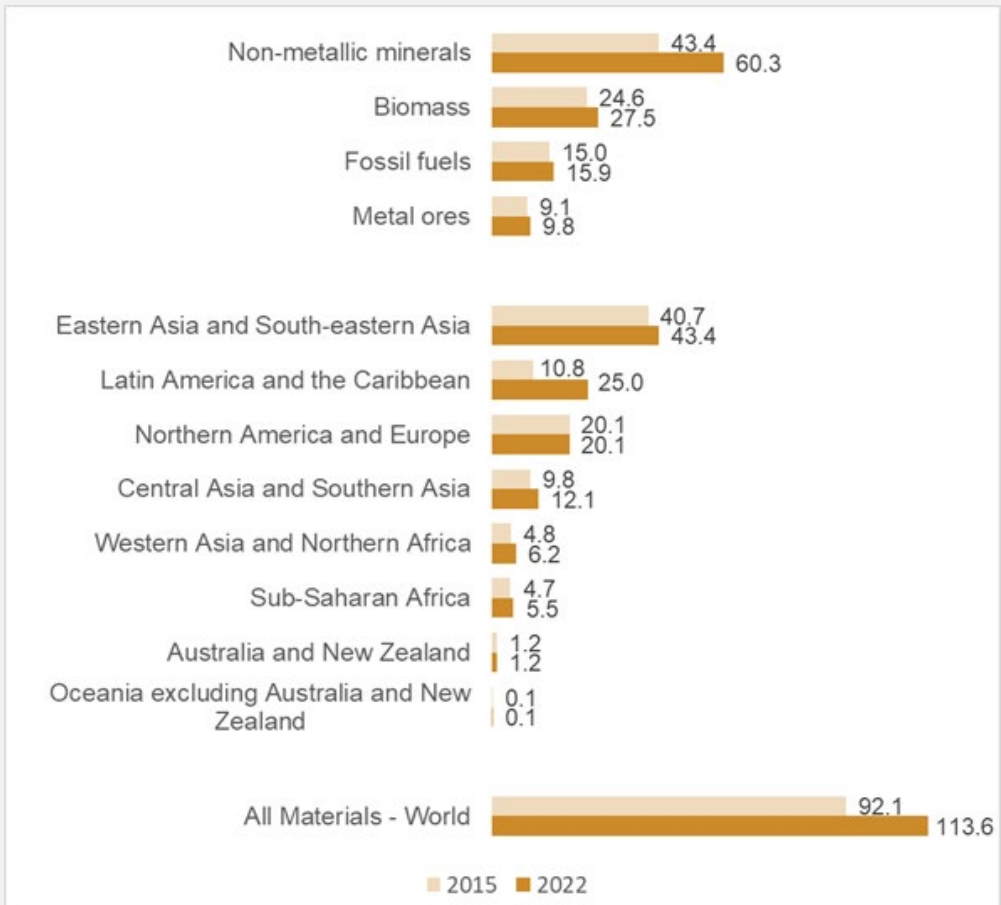
Non-metallic minerals drove the overall increase, growing 39.0%, from 43.4 billion tonnes in 2015 to 60.3 billion tonnes in 2022. Other material groups changed as follows: biomass increased by 11.8%, metal ores by 7.4%, and fossil fuels by 6.2%.

Regionally, Latin America and the Caribbean recorded the most significant increase, with DMC rising by 132%, from 10.8 to 25.0 billion tonnes. Other regions also saw growth: Western Asia and Northern Africa increased by 29.7%, Central and Southern Asia by 23.1%, Oceania (excluding Australia and New Zealand) by 17.6%, and Sub-Saharan Africa by 17.3%. Eastern and South-Eastern Asia experienced a more modest increase of 6.7%, while Australia and New Zealand, as well as North America and Europe, showed minimal changes—1.3% and -0.2%, respectively.

DMC for non-metallic minerals in Latin America and the Caribbean experienced the highest growth among all material groups and regions, increasing from 3.4 to 17.1 billion tonnes between 2015 and 2022. These figures align with Material Footprint trends for the same material group in the region, indicating that DMC for non-metallic minerals is primarily driven by local demand.

Material Footprint (MF), an indicator representing raw materials extracted to meet final consumption demands, exhibited similar overall dynamics globally increasing by 21.3%[1] between 2015 and 2022. Comparison of DMC and MF by region shows that DMC is higher than MF in regions such as Australia and New Zealand, Central and Southern Asia, Sub-Saharan Africa, while Eastern and South-Eastern Asia and North America and Europe demonstrate the opposite trend, indicating regional inequalities in material distribution and consumption.

Domestic material consumption, by material and region in 2015 and 2022 (billion tonnes)



Additional resources, press releases, etc. with links:

- United Nations Environment Programme International Resource Panel (UNEP IRP) (2025) Global Material Flows Database. Available at: https://www.resourcepanel.org/global-material-flows-database (Accessed: 20 February 2025).
- United Nations Environment Programme (UNEP) (2023) The Use of Natural Resources in the Economy: A Global Manual on Economy-Wide Material Flow Accounting. Available at: https://wedocs.unep.org/handle/20.500.11822/36253 (Accessed: 20 February 2025).

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Custodian agency(ies): UNEP

[1] The difference between global DMC and MF is explained by the different nature of the data to calculate these indicators. In particular, MF is based on estimates, whereas DMC presents a combination of estimates and country data.

Target 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

Indicator 12.3.1 (a) Food loss index and (b) food waste index

Despite Doubling in Food Waste Data Points, 2024 Food Waste Index Reveals Significant Need for Suitable Food Waste Measurement to Track SDG 12.3

The 2024 Food Waste Index Report is the most comprehensive assessment of available global food waste data and provides the best estimations of country and global progress towards SDG target 12.3, to halve per capita food waste globally and reduce food losses. The report finds that in 2022, 1.05 billion tonnes of food were wasted in retail, food service, and household sectors; representing one-fifth of all food available to consumers, this food wasted occurs in addition to the 13% of food lost along the supply chain from the farm up to the point of retail.

Food loss and waste (FLW) combined are estimated to account for 8-10% of global greenhouse gas emissions and is a particularly large source of methane, a short-lived climate pollutant that has a warming potential 80-times greater than CO2 in the first two decades of its lifespan. Furthermore, significant swaths of land and resources are used in vain to grow this food that will never be eaten, contributing to biodiversity loss, habitat destruction, and pressure on natural resources. The cost of FLW to the global economy is estimated to be upwards of USD 1 trillion annually. Socially, the more than one billion tonnes of food wasted each year marks a devastating missed opportunity to provide sustenance to the 733 million people facing hunger worldwide and the 2.8 billion who cannot afford a healthy diet.

The 2024 Food Waste Index report finds that most food waste, 60 percent, comes from households; enough food is thrown away by households around the world each day to provide over a billion meals of edible food—this is a conservative estimate. The 2024 report reaffirms that food waste is not just a 'rich country' problem. Following a near doubling of data coverage since the 2021 Food Waste Index Report was published, there has been increased convergence in the average per capita household food waste. High-income, upper-middle income, and lower-middle income countries differ in observed average levels of household food waste by just 7 kg/capita/year.

Despite the increased availability of household food waste data, only a few are suitable for tracking progress to SDG 12.3 at national level, and food waste data coverage in the retail and food service sectors remains poor. Very few countries have collected robust food waste data, which is essential in understanding the scale of the problem, in targeting hotspots, and in assessing the efficacy of interventions. Of the G20—some of the largest economies with significant influence over global food systems and consumption behaviour—only four G20 countries (Australia, Japan, UK, and USA) and the European Union have food waste estimates suitable for tracking progress to 2030. Additionally, as of 2022, only 21 countries have included food loss and/or waste reduction in their national climate plans (NDCs).

However, as recognition of the environmental, financial, and social costs of food loss and waste grows, ambition to tackle this issue is raised and progress continues to be made. Countries such as the UK and Japan show that change at scale is possible, with reductions of 18 per cent and 31 per cent respectively. A growing number of governments, regional and industry groups are embracing solutions such as Public Private Partnerships to prevent and reduce food waste and its subsequent impacts on the planet.

Additional resources, press releases, etc. with links:

- Link to 2024 Food Waste Index: https://www.unep.org/resources/publication/food-waste-index-report-2024

Storyline authors(s)/contributor(s): UN Environment Programme (UNEP)

Custodian agency(ies): FAO, UNEP

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

Enhancing Global Environmentally Sound Management of Chemicals and Waste: Progress in Information Sharing and Compliance

Over the past year, Parties to the Basel, Rotterdam, and Stockholm Conventions have made significant progress in fulfilling their obligations to transmit information, strengthening the environmentally sound management of chemicals and waste, and contributing to the Sustainable Development Goals (SDGs).

A key achievement has been the widespread designation of national contact points, as required under Articles 5, 4, and 9 of the Basel, Rotterdam, and Stockholm Conventions, respectively. Notably, all Parties to each convention have now designated at least one contact person. These contact points serve as the backbone of information-sharing mechanisms, ensuring the effective exchange of critical data on hazardous chemicals and waste management.

Parties have also made notable strides in national reporting. For instance, under the Basel Convention, for the first time, a national reporting target was met, with 70% of Parties submitting reports for 2020. In the latest reporting cycle, 107 Parties have already submitted their reports for 2023, due in December 2024. These reports play a crucial role in tracking progress and ensuring accountability in implementing the conventions. Additionally, the Implementation and Compliance Committee (ICC) of the Basel Convention has been instrumental in supporting about 26 Parties, under its specific submissions mandate, facing challenges with reporting, thus contibuting to improved compliance. The work of the Committee over the years to monitor and classify compliance performance with national reporting illustrates that the reporting rates between 2009 and 2021 have ranged from 40 percent (for 2010) to 65 percent (for 2020). The work of the Committee also illustrates a steady rise in submission of complete reports, with 0.60 percent complete reports transmitted for the year 2010, growing to 37 percent for the year 2019.

A cornerstone of information exchange under the Basel and Rotterdam Conventions is the Prior Informed Consent (PIC) procedure. Strengthening implementation of PIC is particularly relevant to SDG 8 (Decent Work and Economic Growth) and SDG 17 (Partnerships for the Goals), as it fosters responsible trade and international cooperation in managing hazardous chemicals and waste. Efforts to improve the functioning of the PIC procedure under the Basel Convention have led to the development of a range of recommendations for consideration by the Conference of the Parties, while exploratory work on electronic approaches to support its implementation remains ongoing. Similarly, the Rotterdam Convention's Compliance Committee is assisting Parties in overcoming challenges related to information sharing under the PIC procedure, ensuring better regulation of hazardous chemicals.

The development of technical guidelines and best practices under the three conventions further supports Parties in meeting their obligations while advancing SDGs 3 (Good Health and Well-being), 5 (Gender Equality), 8, 14 (Life Below Water), and 17. During the reporting period, Parties to the Basel Convention have developed draft technical guidelines for the management of persistent organic pollutants (POPs) waste, waste lead-acid batteries and other batteries, and waste tyres—providing essential tools for environmentally sound waste management. Under the Rotterdam Convention, the Chemical Review Committee has prepared draft guidance to assist Parties in decision-making regarding ten chemicals proposed for inclusion under the PIC procedure. Likewise, the Stockholm Convention has developed guidance on best available techniques and environmental practices for managing POPs, including polybrominated diphenyl ethers, Dechlorane Plus, short-chain chlorinated paraffins, and UV-328. These efforts contribute to minimizing harmful environmental and health impacts, particularly in vulnerable communities.

By enhancing information sharing, strengthening compliance, and developing technical guidance, Parties to the Basel, Rotterdam, and Stockholm Conventions are reinforcing global efforts to manage hazardous chemicals and waste in an environmentally sound manner. These actions support the achievement of multiple SDGs, paving the way for a safer, healthier, and more sustainable future for all.

Additional resources, press releases, etc. with links:

- Joint website of the Basel, Rotterdam and Stockholm conventions: https://www.brsmeas.org/Home/tabid/10038/language/en-US/Default.aspx
- Joint contacts database for designated contacts under the Basel, Rotterdam and Stockholm conventions: https://www.brsmeas.org/Decisionmaking/PartiestotheConventions/CountryContacts/tabid/5380/language/en-US/Default.aspx
- Reporting Dashboard and for the Basel Convention: https://www.basel.int/Countries/NationalReporting/ReportingDashboard/tabid/8105/Default.aspx
- Reporting Dashboard for the Stockholm Convention: https://www.pops.int/Countries/Reporting/ReportingDashboard/tabid/7477/Default.aspx

Storyline authors(s)/contributor(s): Jackline Wanjiru, Secretariat to the Basel, Rotterdam and Stockholm Conventions

Custodian agency(ies): UNEP

Parties to the Minamata Convention on Mercury continue their strong performance in complying with their obligations to nominate national focal points and submit their national reports

Parties to the Minamata Convention continue their strong performance in complying with their obligation to nominate National Focal Points as required by Article 17.4 of the Convention. As of 31 December 2024, 140 out of 149 Parties (94%) have nominated their National Focal Points. The compliance rate is on par with the 2023 result of 138 of 147 Parties (94%), and a strong improvement over the 2017 result, with 101 of 114 Parties (88%) nominating their National Focal Points.

The 2024 results per region are as follows: Africa, Eastern European States and Western European and Other States have completed their designation of focal points, each region reaching 100%, followed by Latin America and the Caribbean with 96% and the Asia-Pacific region with 91% percent.

The Minamata Convention Parties continue their efforts to achieve gender parity among National Focal Points with 53% female and 47% male being designated during the latest reporting cycle.

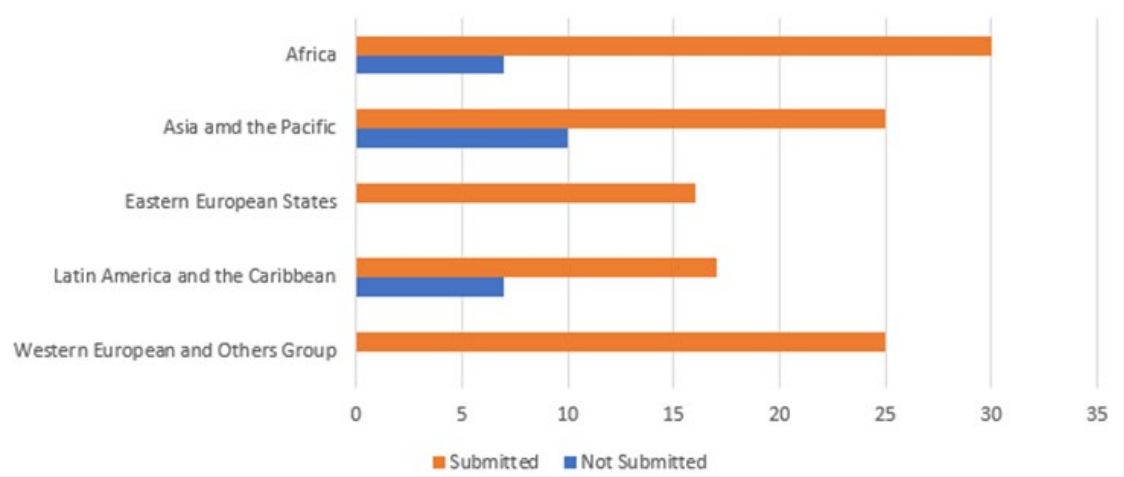
With respect to the reporting obligation under Article 21 of the Convention, 113 of 137 (82%) of Parties submitted their reports for the second short reporting period (1 January 2021 to 31 December 2022). While the latest reporting performance is lower than the results of the first two reporting cycles, 94% (first short report) and 95% (first full report), a closer look into the completeness of reports submitted by the deadline shows a marked improvement in the 2024 results compared to the first reporting cycle.

For the first reporting cycle, 56 of 98 (57%) Parties submitted complete reports by the submission deadline. For the third reporting cycle, 91 of 137 (66%) submitted complete reports by the deadline. Noting the substantial increase in the number of Parties required to report from 98 to 137 between the reporting periods, adds further confidence to the reporting capacity Parties have gained in the latest reporting cycle.

While a handful of Parties raised the COVID-19 pandemic as an impediment to implementing the Convention during the reporting period, the quality of the reports and strong reporting performance reflects the effort taken by the Minamata Parties to prepare and meet their Article 21 reporting obligation. The continued high reporting performance provides the Convention depth of information that is available and is accessble to the public through the reporting dashboard, which is available in the Convention website.

The reporting rates by region are as follows: Africa with 97% (30 of 37 Parties), Asia Pacific with 83% (25 of 35 Parties); Eastern European States with 100% (16 of 16 Parties; Latin America and the Caribbean with 100% (17 of 24 Parties) and Western European and Other Groups with 100% (25 of 25 Parties).

Minamata Convention on Mercury second short national reports by region (31/12/2024)



Additional resources, press releases, etc. with links:

- A list of national focal points is available at National Focal Points | Minamata Convention on Mercury or https://www.mercuryconvention.org/en/parties/focal-points
- More information on national reporting is available at National reporting pursuant to Article 21 | Minamata Convention on Mercury or https://www.mercuryconvention.org/en/parties/reporting
- Resources for national reporting is available at: National reporting pursuant to Article 21 | Minamata Convention on Mercury or https://minamataconvention.org/en/parties/reporting/forms-and-guidance
- Website http://www.mercuryconvention.org

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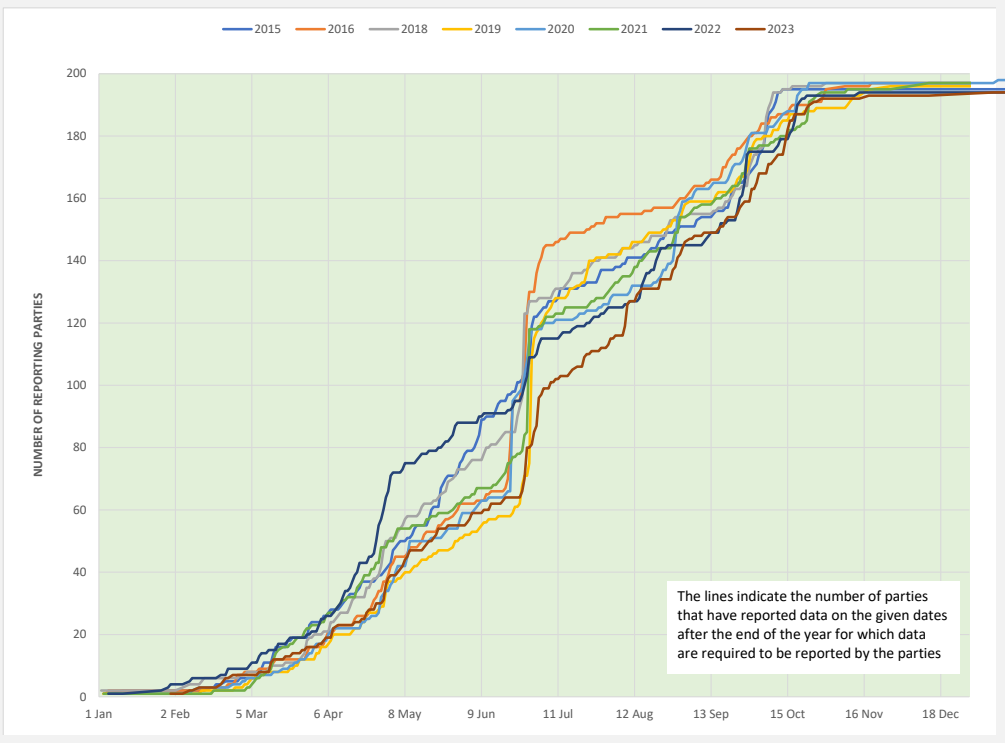
Custodian agency(ies): UNEP

Atmospheric monitoring driving climate action under the Montreal Protocol

Under the universally ratified Montreal Protocol on Substances that Deplete the Ozone layer, the annual reporting by the parties of statistical data and related information on production and consumption of controlled substances has been unaffected by global political, economic or environmental events. The reporting provides a mechanism to monitor and assess compliance with control measures. Figure 1 depicts the annual patterns of reporting by the parties to the Montreal Protocol to meet their commitments from 2016 to 2023. Historically, all parties have ultimately achieved 100 per cent compliance with their annual reporting obligations.

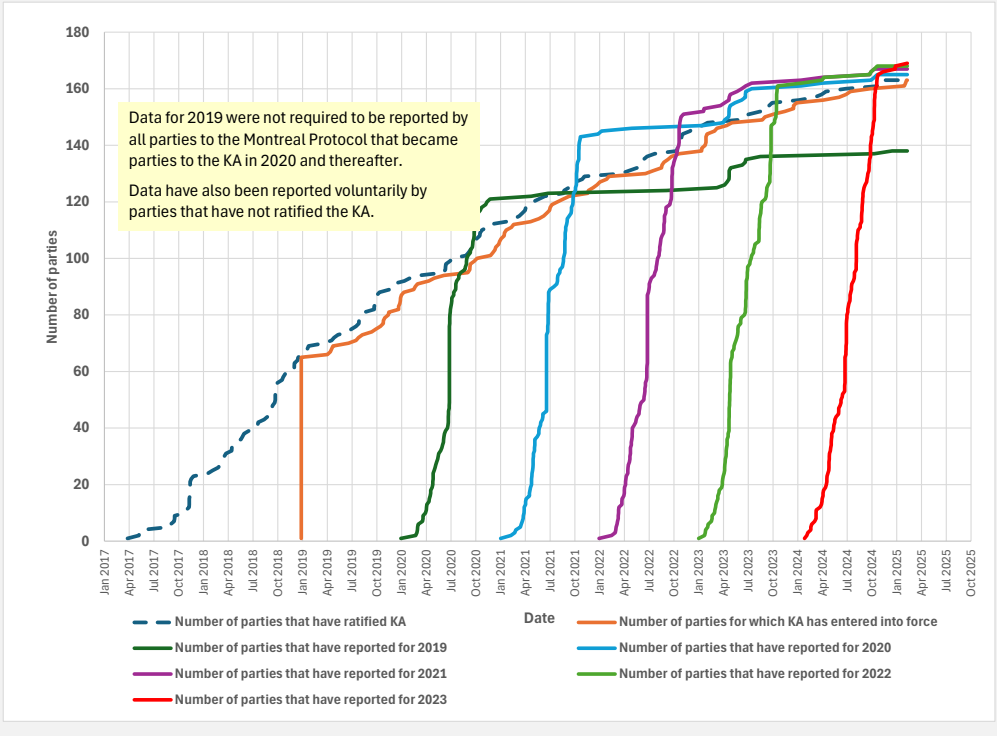
Figure 1: Timeliness in the reporting of annual data by the parties to the Montreal Protocol



Since the 2016 adoption of the Kigali Amendment to the Montreal Protocol committing to phasing down hydrofluorocarbons (HFCs), 163 out of 198 parties have ratified it. By controlling HFCs, powerful greenhouse gases, the full implementation of the Amendment is expected to avoid up to 0.5°C of global warming by 2100, which could be doubled during the same time if combined with the adoption of energy efficient technology. This is an important contribution in the context of the Paris Agreement, which aims to keep global temperature rise this century to well below 2oC above pre-industrial levels.

Parties that ratify the Kigali Amendment are required to report annually their respective HFC data starting from the year of entry into force of the Amendment for them (Figure 2). Some parties have reported data voluntarily even though they have not ratified the Amendment and therefore do not have reporting obligations. Developed countries, particularly the 43 that ratified the Kigali Amendment, started their phase-down of HFCs in 2019. Starting from 2024, Group 1 of the developing countries that have ratified the Amendment, 115 countries so far, are now required to commence with their phase down of their HFC production and consumption, starting with a freeze at the baseline level, and will be reporting their 2024 data in 2025. Group 2 developing countries that ratify will be required to start the freeze in 2028 and report their 2028 data in 2029.

Figure 2: Ratification of the Kigali Amendment and HFC data reporting under the Amendment



Reporting remains a key requirement to ensure parties adhere to their phaseout and phasedown obligations under the Montreal Protocol and the projected ozone layer recovery continues. Nevertheless, unexpected emissions of substances controlled under the Protocol due to either illegal activity or incorrect reporting, intentionally or unintentionally, can occur.

In 2018, unexpected emissions of CFC-11, an ozone-depleting substance banned under the Protocol, were detected in the stratosphere. Subsequent atmospheric analyses and modelling made it possible to attribute much of the emission sources to regions, and appropriate action was taken by the parties. More recently, the Scientific Assessment Panel and the Technology and Economic Assessment Panel noted a discrepancy between reported data and atmospheric observations of another

controlled substance, HFC-23 (a powerful greenhouse gas and a by-product in the manufacturing of ozone-depleting HCFC-22). Such findings have prompted the parties to adopt decisions on exploring options to improve the coverage of global and regional atmospheric monitoring of controlled substances as well as on strengthening Montreal Protocol institutions.

The adherence of the parties to the Montreal Protocol to their commitments supports the wider SDG12 goal of responsible consumption and production, and the obligation to report that information by those parties allows monitoring and confirmation of that adherence. Parties are currently also exploring options to implement effective life-cycle refrigerant management (LRM). LRM under the Protocol seeks to minimise the emission of high-GWP refrigerants, including HCFCs and HFCs, in cooling equipment into the atmosphere during any part of the equipment's lifespan. By tackling these emissions at every stage from production to final disposal of equipment, scientists estimate a potential 39 gigatons of CO2-equivalent emissions can be avoided by 2050.

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
- Scientific Assessment of Ozone Depletion 2022 (full report) and
- Scientific Assessment of ozone Depletion: 2022 (Executive Summary)
- Twenty Questions and Answers About the Ozone Layer: 2022 Update
- Environmental Effects of Stratospheric Ozone Depletion, UV Radiation, and Interactions Climate Change: 2022 Assessment Report
- Questions and Answers about the Effects of Ozone Depletion, UV Radiation, and Climate on Humans and the Environment (Supplement to the 2022 Assessment Report)
- Technology and Economic Assessment Panel (TEAP): 2022 Assessment Report
- Decision XXXVI/1: Enhancing regional atmospheric monitoring of substances controlled by the Montreal Protocol on Substances that Deplete the Ozone Layer
- Decision XXXVI/9: Further strengthening Montreal Protocol institutions – next steps
- Decision XXXVI/2: Life-cycle refrigerant management

Storyline authors(s)/contributor(s): Sophia Mylona, UNEP/Montreal Protocol Ozone Secretariat; Gerald Mutisya, UNEP/Montreal Protocol Ozone Secretariat; Stephanie Egger Haysmith, UNEP/Montreal Protocol Ozone Secretariat

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

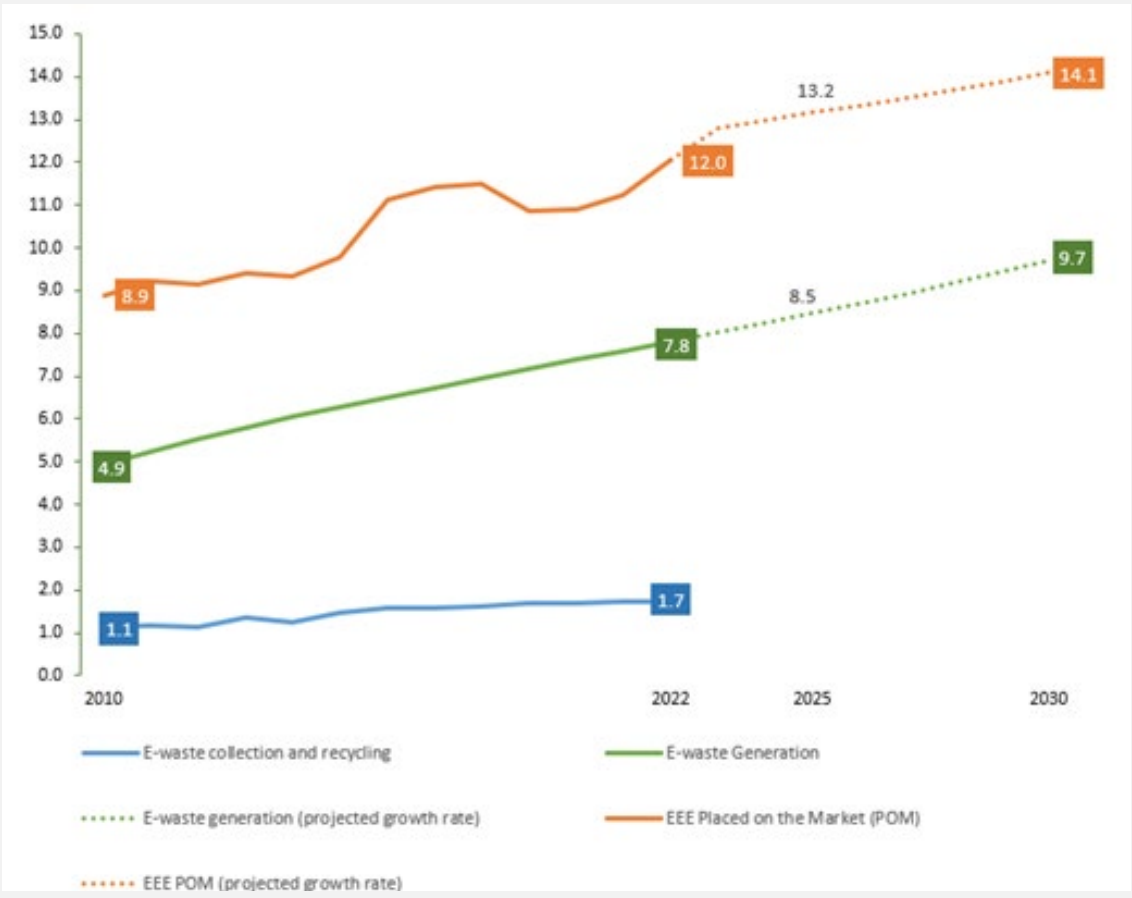
Target 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

Indicator 12.5.1 National recycling rate, tons of material recycled

The generation of e-waste is at a record high globally, with only 22.3 per cent documented as formally collected and recycled in an environmentally sound manner

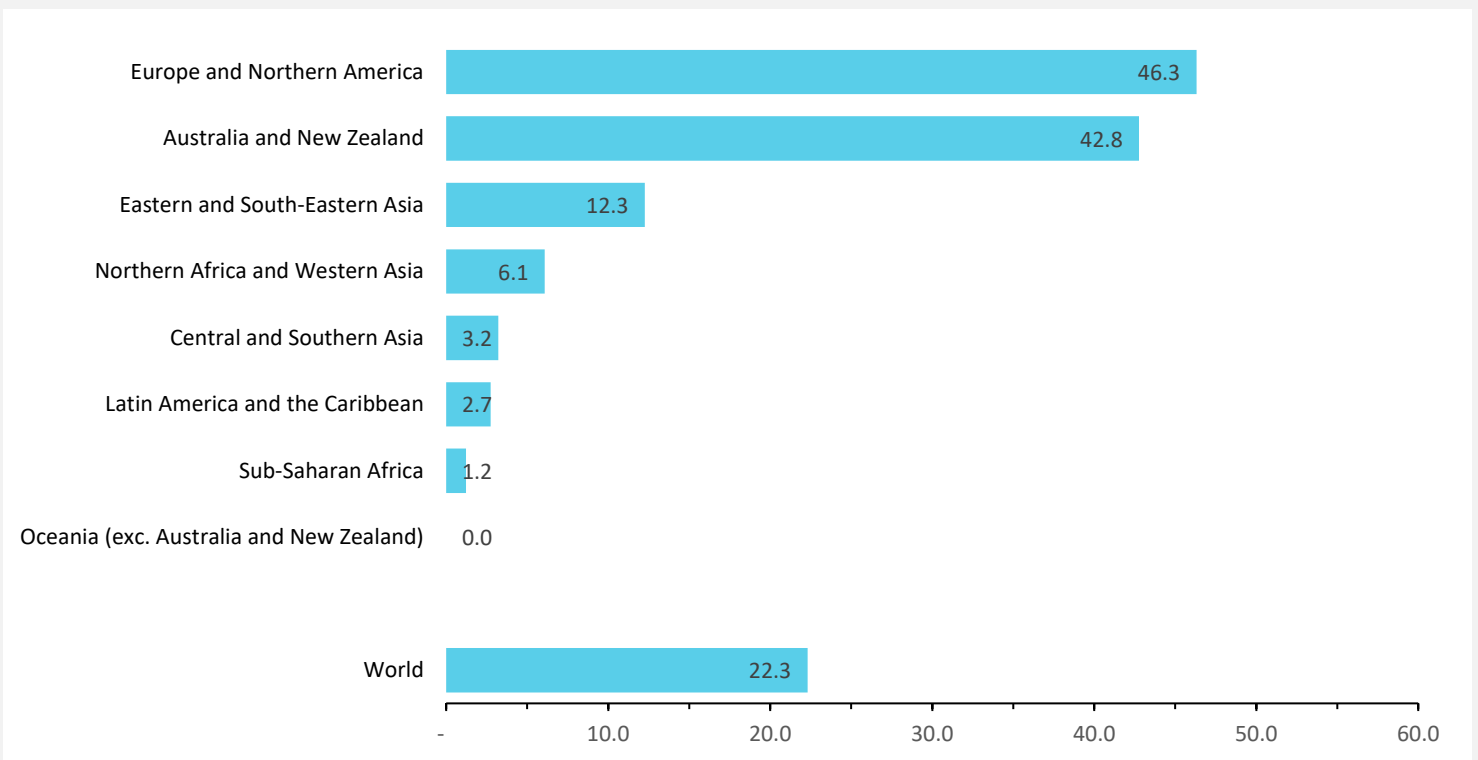
The use of electrical and electronic equipment (EEE) continues to grow swiftly worldwide. In 2022, an estimated 96 billion kg of EEE were placed on the market globally, up more than 50 per cent from the equivalent figure in 2010. A consequence of the growing use of EEE has been heightening amounts of electronic waste (e-waste) generated. A record 62 billion kg of e-waste were produced globally in 2022, equating to 7.8kg per capita (see Chart 1). This global average nevertheless cloaks large disparities in e-waste generation across regions, with e-waste generation around 10 times higher on a per capita basis in Europe and North America, Australia and New Zealand, than Oceania (exc. Australia and New Zealand) or Sub-Saharan Africa. On current trends, e-waste generation globally is anticipated to reach 82 billion kg per year by 2030.

Chart 1. EEE placed on the market and e-waste generated (historic: 2010-2022 and projected 2023-2030), e-waste collection and recycling (2010-2022), World (kg/capita)



The 'environmentally sound' management of e-waste involves hazardous substances being treated adequately and recyclable materials, reclaimed. Only 22.3 per cent, or 1.7 kg per capita, of e-waste generated was documented as having been formally collected and treated in an environmentally sound manner in 2022 (See Chart 2). This figure has followed a downward trend since at least 2010. Documented e-waste collection rates also vary across the world. In higher income countries, rates of documented e-waste collection stood at 46.3 per cent in 2022 for Europe and North Americas and 42.8 per cent for Australia and New Zealand. Though relatively high, the majority of e-waste even in these regions continues to remain inadequately managed, being often mixed with other recycling streams without proper treatment of hazardous substances, or managed at the lowest rungs of the waste hierarchy and either landfilled or incinerated.

Chart 2: E-waste collection rate, by region, 2022 (%)

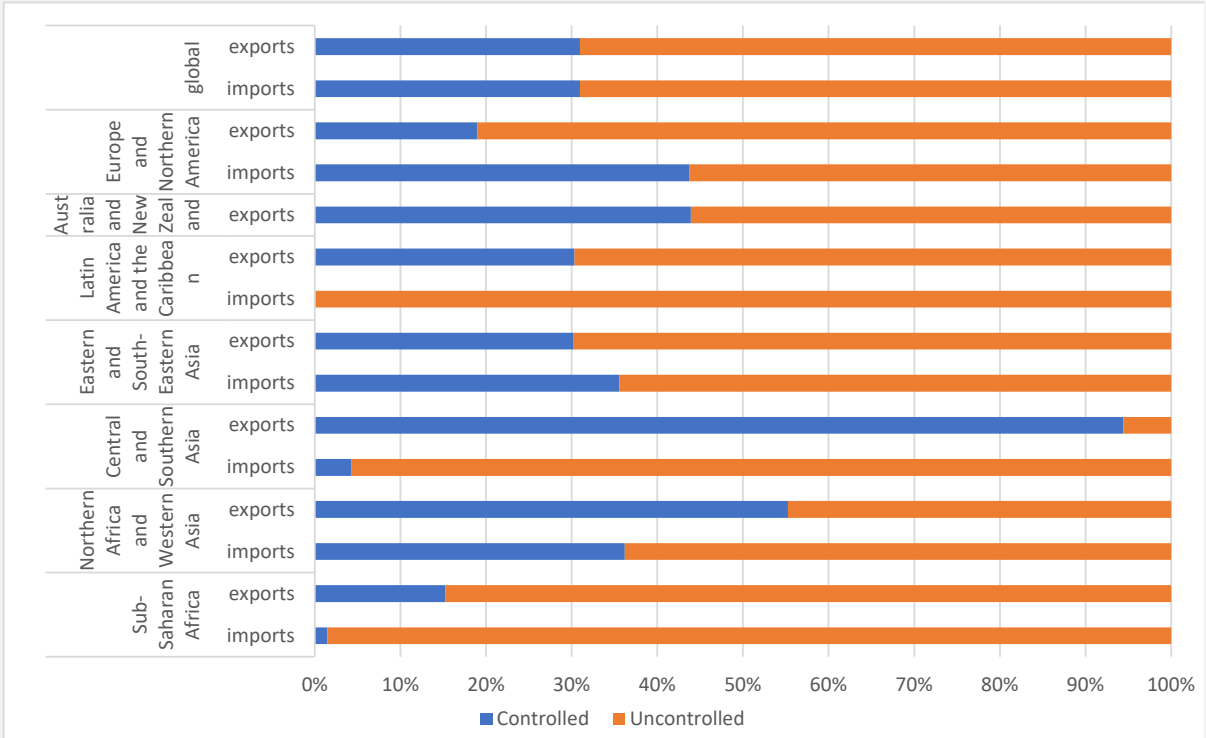


Significant transboundary movement of e-waste has been documented globally, with around 5.1 billion kg of used EEE/e-waste thought to be shipped between countries each year. 'Controlled' transboundary flows (i.e. those reported as movements of hazardous waste with prior informed consent under the Basel Convention) are thought to make up only 35 per cent of transboundary trade in used-EEE/e-waste at present, with the majority of transboundary trade being 'uncontrolled' movements, meaning its treatment is unknown and is unlikely to be managed in an environmentally sound manner (see Chart 3). The vast majority of used-EEE/e-waste imports to Latin America and the Caribbean, Central and Southern Asia, and Sub-Saharan Africa are considered uncontrolled movements at present. Although transboundary movements of used EEE/e-waste can be an important way to retain the value of electronics and the materials making them up within the global economy (e.g., via the transportation of waste printed circuit boards to specialized regional recycling hubs), these can also have an adverse impact on the environment and human health when handled in countries which lack adequate infrastructure and capacity for managing e-waste in an environmentally sound manner.

In many low- and middle-income countries, e-waste management infrastructure is often insufficiently developed to manage e-waste generated within the country or imported in an environmentally sound way. In many low and middle-income countries, the informal sector can be responsible for a large share of e-waste collection and management activities, with documented e-waste collection rates below 5 per cent across Central and Southern Asia, Latin America and the Caribbean, and sub-Saharan Africa. Informal actors often lack access to advanced technologies and can resort to treatment methods that are harmful to the environment and human health, such as open burning or acid baths.

Data collected on the composition of e-waste and its implied material value highlights the potential opportunity of increased recovery of metals from e-waste. E-waste worldwide contained an estimated 31 billion kg of metals in 2022, with 4 billion kg considered as 'critical raw materials'. UNITAR calculations show 19 billion kg of metal were viably recovered and brought back into circulation through recycling activities in 2022, associated with a material value of around USD 28 billion while implying a loss of 12 billion kg of metals. Although e-waste contains particularly high concentrations of critical raw materials, these remain economically challenging to recycle, at present. Technological developments and regulation on e-waste, play an essential role in improving recycling rates and the overall efficiency of e-waste management, particularly when it comes to the recycling of critical raw materials.

Chart 3: Transboundary movement of used EEE/e-waste split by trade flow direction and controlled/uncontrolled, by region, 2019 (%) (Note: Australia and New Zealand imports are hidden due to a lack of data)



Additional resources, press releases, etc. with links:

- Cornelis P. Baldé, Ruediger Kuehr, Tales Yamamoto, Rosie McDonald, Elena D'Angelo, Shana Althaf, Garam Bel, Otmar Deubzer, Elena Fernandez-Cubillo, Vanessa Forti, Vanessa Gray, Sunil Herath, Shunichi Honda, Giulia Iattoni, Deepali S. Khetriwal, Vittoria Luda di Cortemiglia, Yuliya Lobuntsova, Innocent Nnorom, Noemie Pralat, Michelle Wagner (2024). Global E-waste Monitor 2024. United Nations Institute for Training and Research (UNITAR), International Telecommunication Union (ITU), Fondation Carmingac, Bonn/Geneva/Paris.

Storyline authors(s)/contributor(s): Kees Baldé, UNITAR-SCYCLE Programme; Oliver Lysaght, UNITAR-SCYCLE Programme

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

Adoption of the international standards facilitate significant progress in sustainability reporting across the world, including in developing countries

Sustainability reporting has become part of business as usual for almost all of the world's largest companies in each country with 96% of G250[2] companies and 79% of N100[3] companies reporting on sustainability[4]. The shift towards mandatory reporting requirements, the emergence of international standards, facilitated significant progress in sustainability reporting across the world, including in developing countries.

As of September 2024, 30 jurisdictions have committed to use ISSB Standards in their legal or regulatory frameworks[5]. European companies are already preparing sustainability reports in accordance with the ESRS[6]. In December 2024, EFRAG released its technical advice on the Voluntary Sustainability Reporting Standard for non-listed SMEs. In addition, in September 2024 IAASB issued the International Standard on Sustainability Assurance[7]. In February 2025, IESBA released standards for ethical considerations in sustainability reporting, while IPSASB is currently developing a climate-related disclosure standard for the public sector[8]. Although interoperability remains the main challenge for harmonization of international standards, considerable progress has been made in this regard. For example, in May 2024 the IFRS Foundation and EFRAG published the ESRS–ISSB Standards—Interoperability Guidance etc.[9]

In 2016-2023, the number of companies publishing sustainability reports increased almost 4 times with the Average Annual Growth Rate of 20%. While this growth was observed in all regions, Asia, Europe and North America maintained the largest share of companies reporting on sustainability[10]. The number of companies using ESG standards or guidelines published by stock exchanges more than doubled between 2017 and 2024.[11]

Finance and insurance along with manufacturing sectors have maintained the largest share of companies publishing sustainability reports since 2016. Environmental and governance dimensions are more commonly addressed than social. In the environmental area, emissions and energy efficiency policy as well as CO2 equivalent emissions are most often reported. Climate change is one of the pressing global challenges that lead to the growing emphasis on climate-related disclosures. The last two years the number of companies publishing carbon reduction targets and disclosing biodiversity have increased[12]. In governance dimension, the companies prioritize reporting on the number of board meetings, audit committee independence and board gender diversity. Human rights, health & safety policy as well as diversity policy are mostly reported within the social dimension[13]. Setting targets based on SDGs has been a relatively popular approach but now appears to be slightly declining.[14]

Chart 1: Number of companies publishing sustainability reports (2016-2023)

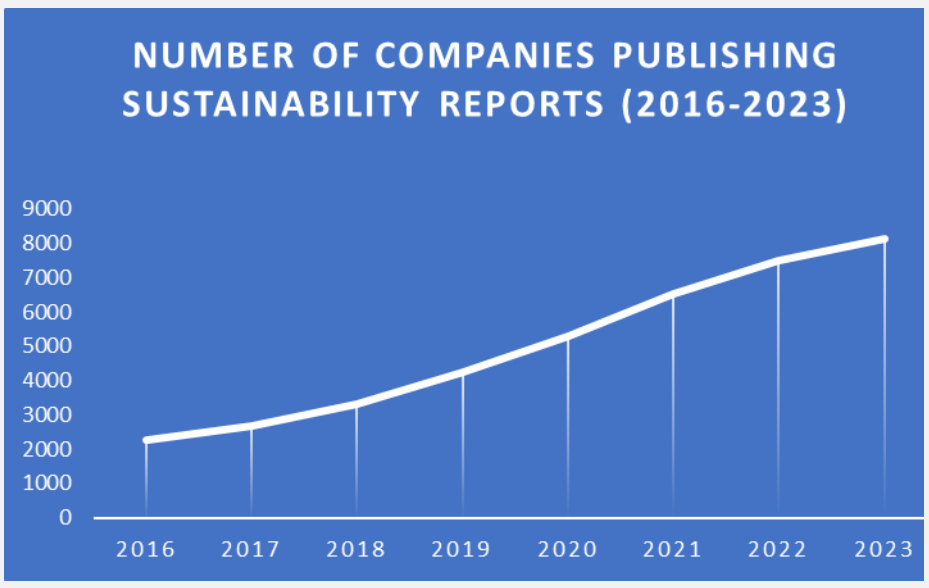


Chart 2: Percentage of companies publishing sustainability reports over the size of the sample (2016-2023)*

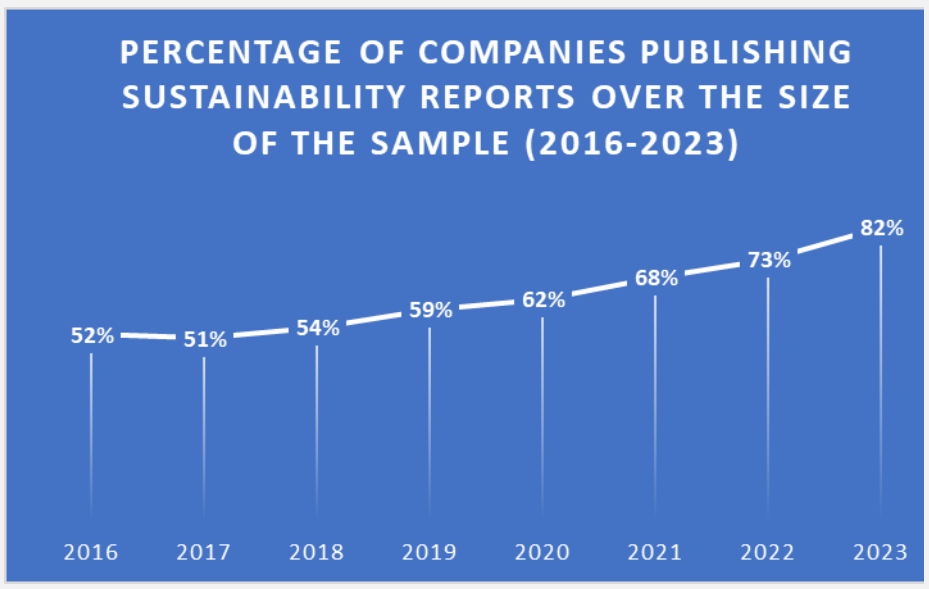
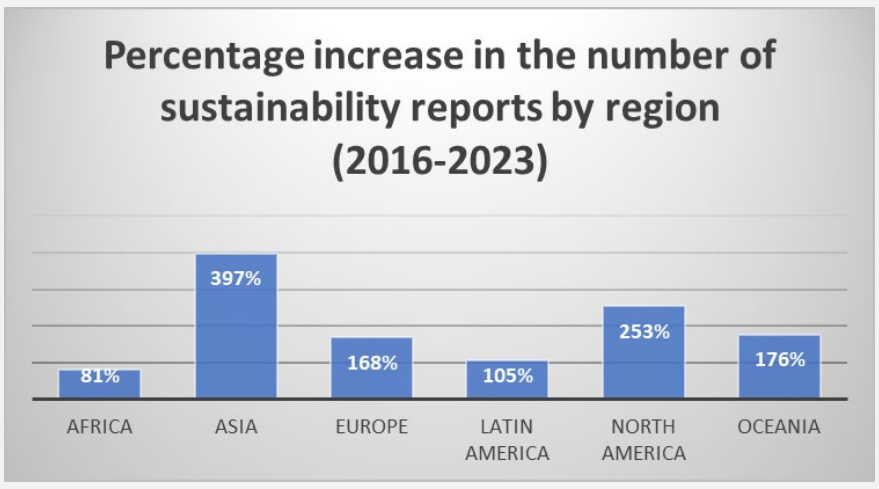


Chart 3: Percentage increase in the number of sustainability reports by region (2016-2023)*



Storyline authors(s)/contributor(s): UNCTAD

Custodian agency(ies): UNEP, UNCTAD

[2] The largest 250 companies in the world (KPMG Survey of Sustainability Reporting 2024

[3] The top 100 companies in a recognized national source or by market capitalization or a similar measure (KPMG Survey of Sustainability Reporting 2024)

[4] https://assets.kpmg.com/content/dam/kpmgsites/xx/pdf/2024/11/the-move-to-mandatory-reporting-web-copy.pdf.coredownload.inline.pdf

[5] IFRS Report on Progress on Corporate Climate-related Disclosures 2024

[6] https://assets.kpmg.com/content/dam/kpmgsites/xx/pdf/2024/11/the-move-to-mandatory-reporting-web-copy.pdf.coredownload.inline.pdf

[7] https://www.iaasb.org/focus-areas/understanding-international-standard-sustainability-assurance-5000

[8] https://www.ethicsboard.org/focus-areas/global-ethics-sustainability-standards

[9] https://www.ifrs.org/content/dam/ifrs/supporting-implementation/issb-standards/progress-climate-related-disclosures-2024.pdf

[10] LSEG database

[11] https://sseinitiative.org/all-news/over-12000-trained-launch-un-sse-ifrs-foundation-ifc-capacity-building-program

[12] https://assets.kpmg.com/content/dam/kpmgsites/xx/pdf/2024/11/the-move-to-mandatory-reporting-web-copy.pdf.coredownload.inline.pdf

[13] The co-custodians of SDG indicator 12.6.1 used the LSEG database, complemented by other data sources which will continue to be explored for more comprehensive reporting on the indicator.The dataset includes data from over 10,000 mostly large public companies from all regions. Due to the break in time series, the data of 2023 includes reports aggregated since the last reporting period (March 2024).

[14] https://assets.kpmg.com/content/dam/kpmgsites/xx/pdf/2024/11/the-move-to-mandatory-reporting-web-copy.pdf.coredownload.inline.pdf

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

Sustainable Public Procurement continues to advance around the world

The implementation of Sustainable Public Procurement (SPP) has remained a priority through various national mechanisms and policies, alongside innovative and circular approaches. When public procurement policies and processes embrace sustainability and circularity, the same administrative function transforms into a strategic one, supporting a more efficient delivery of public goods and services and maximizing the value for taxpayer money while addressing societal needs and diminishing environmental impacts. Two examples are highlighted below to demonstrate this progress.

In 2024, Indonesia introduced new legislations to advance SPP, including Decree No. 157 of 2024, issued by the Head of the National Public Procurement Agency, concerning the guidelines for SPP at across levels of the government. Local governments were also committed to this effort. The Governor Regulation No. 57 of 2023 of the Special Region of Yogyakarta Province was published to provide a roadmap for the implementation of SPP. Among others, the need for capacity building of procurers was featured in this roadmap.

Meanwhile, Iceland has committed to ensuring that all public procurement procedures reference environmentally friendly criteria by 2028. In 2017, only 20% of procedures included such criteria, but following the adoption of a sustainable public procurement policy in 2021, this figure rose from 55% in 2021 to 82% in 2023. The Sustainable Procurement Action Plan (2021–2024), which supports this policy, is set to be updated soon.

The UNEP 10YFP Secretariat will lead the next data collection exercise in 2025 as part of the official review of countries implementing Sustainable Public Procurement (SPP) policies and action plans. 10YFP will leverage partnerships across the 10YFP One Planet Network, in particular its Sustainable Public Procurement Programme, to revamp the data collection process, implementing a strategic approach, based on the existing SDG 12.7.1 data methodology. Through refining this process, the 10YFP seeks to better demonstrate the added value of SPP for member states, particularly its role in advancing sustainable consumption and production.

In the 2020 and 2022 data collection exercises for SDG indicator 12.7.1, 40 and 67 national governments participated, respectively. 38 out of 40 participating countries in the 2020 data drive also participated in the 2022 data drive, with an additional 29 countries participating for the first time in 2022. Following this trend and the high level of engagement with member states on sustainable public procurement in 2024, including the launch of the 'Global Framework for Action: Harnessing sustainable and circular public procurement to drive demand for near-zero emissions and resilient buildings' at the 29th Conference of the Parties - 2024 United Nations Climate Change Conference, the number of countries participating is anticipated to further increase in the forthcoming 2025 data drive.

Additional resources, press releases, etc. with links:

- Indonesia report link: https://www.iisd.org/publications/report/green-public-procurement-indonesia
- Iceland report/data citation: OECD (2024), Harnessing Public Procurement for the Green Transition: Good Practices in OECD Countries, OECD Public Governance Reviews, OECD Publishing, Paris, https://doi.org/10.1787/e551f448-en
- Iceland other link: https://www.stjornarradid.is/verkefni/rekstur-og-eignir-rikisins/opinber-innkaup/
- Link to the Global Framework for Action: https://www.oneplanetnetwork.org/sites/default/files/2024-12/FOA%20Common%20Principles.pdf

Storyline authors(s)/contributor(s): UNEP

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 12.8.1 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

A green curriculum matters, yet efforts to mainstream key concepts vary a lot between countries

Mainstreaming content on sustainable development in the curriculum is part of national SDG and Paris Agreement commitments and has been linked with improved student knowledge. National curriculum frameworks and syllabi for up to eight science and social science subjects in each of grades 3, 6 and 9 have been reviewed in 110 countries for the frequency with which selected keywords are used in three themes: environment/sustainability; climate change; and biodiversity. The information has been compiled in an index with a scale from 0 to 100, with an average score of 40 and a range from 9 to 66. The average score is considerably higher for the environment/sustainability theme (55) than for the biodiversity (31) and climate change (21) themes.

Other relevant policy messages can be extracted. Despite commitments to cover greening issues in a balanced way, it is more common to find such references: in syllabi than in the national curriculum framework; in science than in social science subjects; and in higher than in lower grades. For instance, 34% of countries did not include green concepts in their grade 3 social science syllabi, compared to 21% in grade 6 and 16% in grade 9. Curricula in richer countries are not consistently greener than those in poorer countries. Countries which are deemed the most vulnerable to the effects of climate change do not necessarily include more green content in their syllabi. Countries willing to mainstream content on environment, sustainability, climate change and biodiversity in the curriculum can analyse the components of the indicator to identify where they can improve by domain, theme, grade and document type.

Storyline authors(s)/contributor(s): Antoninis, Manos (Main author); Castle, Christopher , Montoya, Silvia , and Olivier Labe (contributors)

Custodian agency(ies): UNESCO

Target 12.a Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production

Indicator 12.a.1 Installed renewable energy-generating capacity in developing and developed countries (in watts per capita)

Installed renewable energy-generating capacity is on a continuous rise, yet significant disparities persist

In 2023, global installed renewable energy-generating capacity per capita reached an all-time high, mainly driven by growth in populous developing countries including China, Brazil and India. Global installed renewable energy-generating capacity per capita grew 13.0 percent from 423 watts per person in 2022 to 478 in 2023, a record-high compound annual growth rate (CAGR) of 9.4 percent over five-year periods. Developed countries saw smaller growth of 8.1 percent, increasing from 1,074 watts per person in 2022 to 1,162 in 2023. Continuing on a similar trend as in 2022, global growth of renewable installed capacity per capita in 2023 was driven by a 17.0 percent increase in developing countries which stood at 341 watts per person. Yet, greater efforts are needed to expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries.

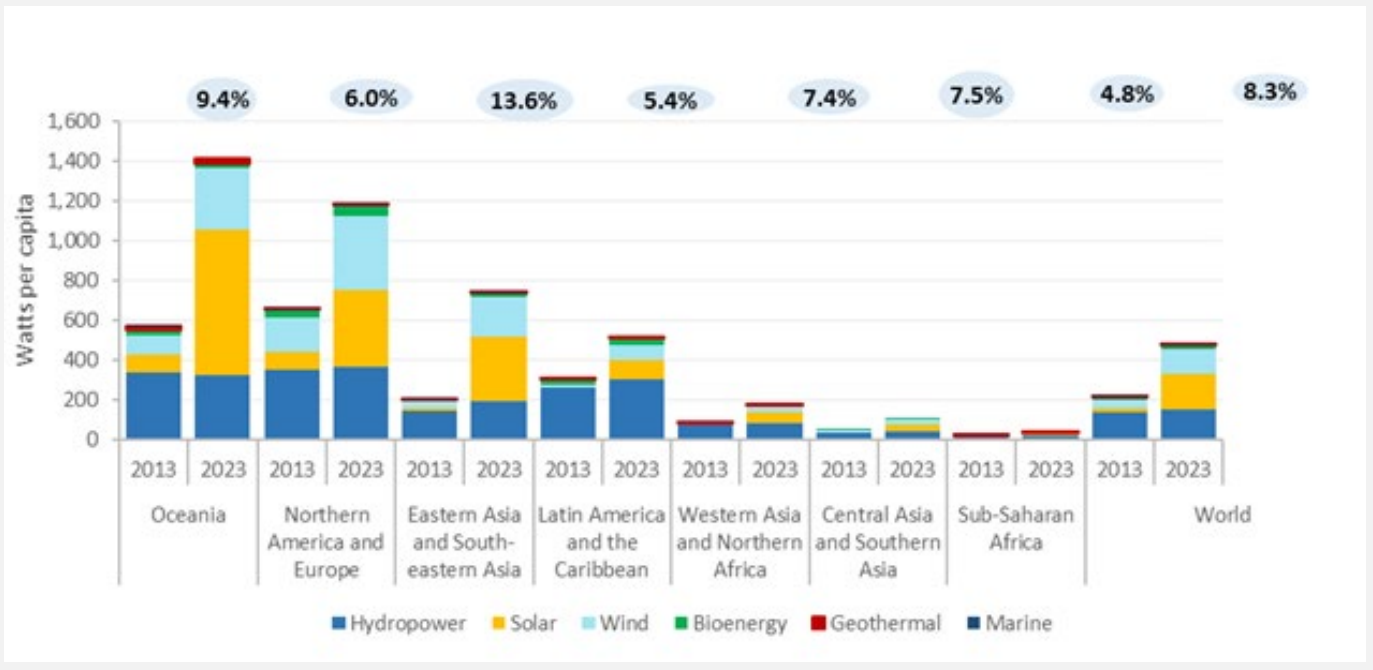
Driven by increased installations in solar and wind, the share of installed renewable energy generating capacity in developing countries continues to rise in 2023, reaching 43.5 percent, surpassing that of developed countries (42.3 percent). While the share of renewables is relatively similar across these groups, the difference in renewable wattage per capita is significant.

With an average of 1,162 watts per person in 2023, developed countries had almost three times more renewable energy capacity per capita than developing countries, highlighting significant variations in the extent to which renewable electricity covers the needs of populations in developing countries. While this disparity has contracted since 2015, when developed countries had 4.5 times more renewable energy capacity per capita than developing countries, greater efforts are needed to close this gap and align with the SDG7 targets by 2030.

The greatest growth over the last decade occurred in Eastern Asia and Southeastern Asia with a CAGR of 13.6 percent, increasing over threefold from 207 to 741 watts per person between 2013 and 2023. Meanwhile, Oceania, Central Asia and Southern Asia, and Western Asia and Northern Africa have each more than doubled their installed renewables per capita in the same period. Across regions, Sub-Saharan Africa is particularly at risk of being left furthest behind in the global energy transition, with the region seeing the lowest growth rate over the same period, with a 4.8 percent CAGR and 40 watts installed per person as of 2023. Accelerating the deployment of cost-effective renewable energy solutions can help close the energy access gap and fostering sustainable development.

Similarly, the varying growth rates across different groups of countries point to notable inequalities, with small island developing states (SIDS), least-developed countries (LDCs), and landlocked developing countries (LLDCs) lagging even behind other developing countries. In 2023, SIDS reached 110 watts per person, LLDCS at 105 watts per person while LDCs stood at 40 watts per person of renewable electricity. These regions are seeing an increasing divide compared to the rest of the world. At current rates, LDCs would need almost 46 years, LLDCs would need 36 years, and SIDS would need 11 years to achieve a level of deployment similar to that currently achieved in developing countries on average in 2023.

Renewable capacity per capita growth across regions (2013-2023)



Additional resources, press releases, etc. with links:

- More analysis will be published in the annual Tracking SDG 7 report

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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

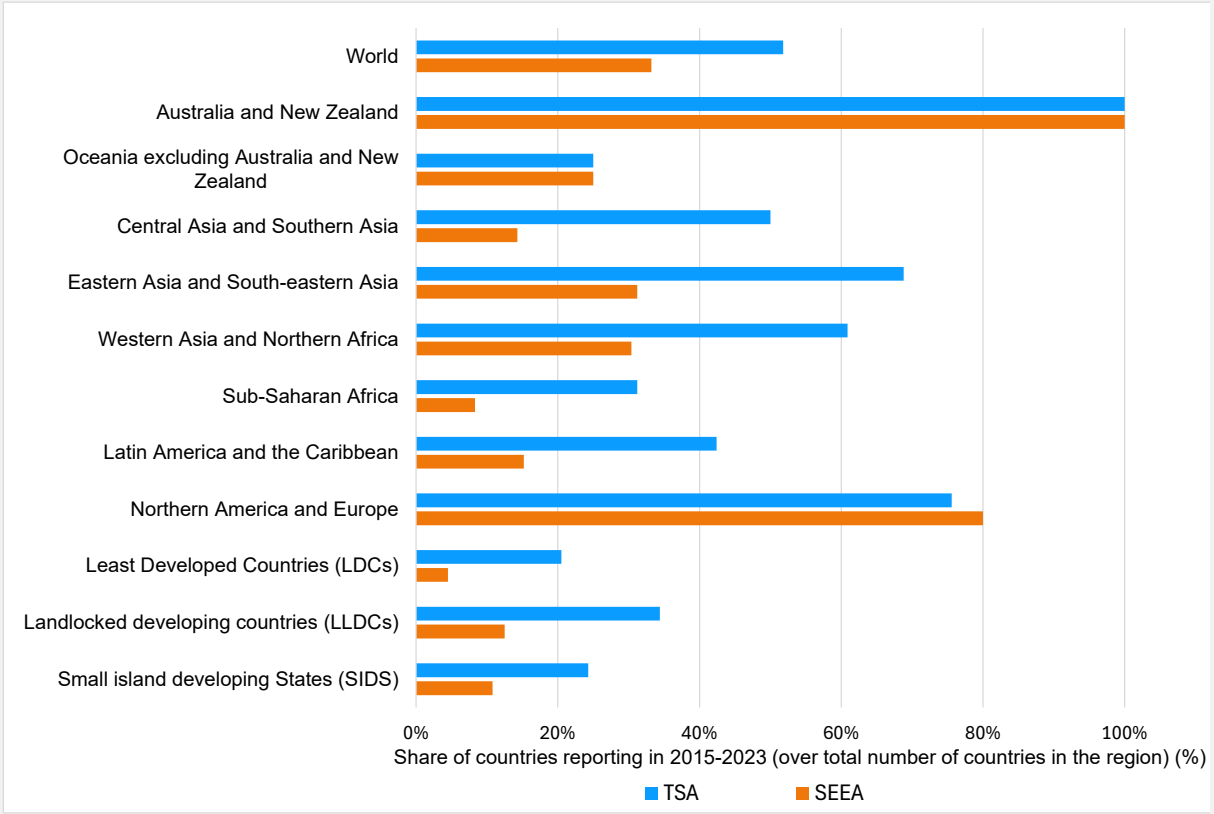
Countries increasingly implement key tools to measure tourism's sustainability

Data reveals an increasing number of countries applying standard tools to assess tourism's impact on the economy and environment. What's more, countries implementing these tools are also expanding the richness of the statistical information generated. A particularly higher uptake took place in the 'Western Asia and North Africa' region. These advancements show the successful implementation of tools to monitor the sustainable development impacts of tourism and demonstrate a gradual enhancement of tourism statistical systems.

Indicator 12.b.1 looks at the implementation of two key accounting tools for measuring tourism's sustainability: the Tourism Satellite Account (TSA) and the System of Environmental and Economic Accounts (SEEA). Its scope comprises the 7 most relevant tables from TSA and the 4 more relevant tables from SEEA for tourism's sustainability, therefore considering 11 tables in total. Data show widespread adoption of these TSA and SEEA accounts.

In the period 2015-2023, 56% of countries reported at least one of these tables (52% reported TSA tables and 33% reported SEEA tables). These shares were particularly high in the regions of 'Eastern Asia and South-eastern Asia' (75%), 'Northern America and Europe' (82%) and 'Australia and New Zealand' (100%), Regions lagging in the implementation of these instruments were 'Latin America and the Caribbean' (45%) and 'Sub-Saharan Africa' and 'Oceania excluding Australia and New Zealand' (both 33%) (Chart 1).

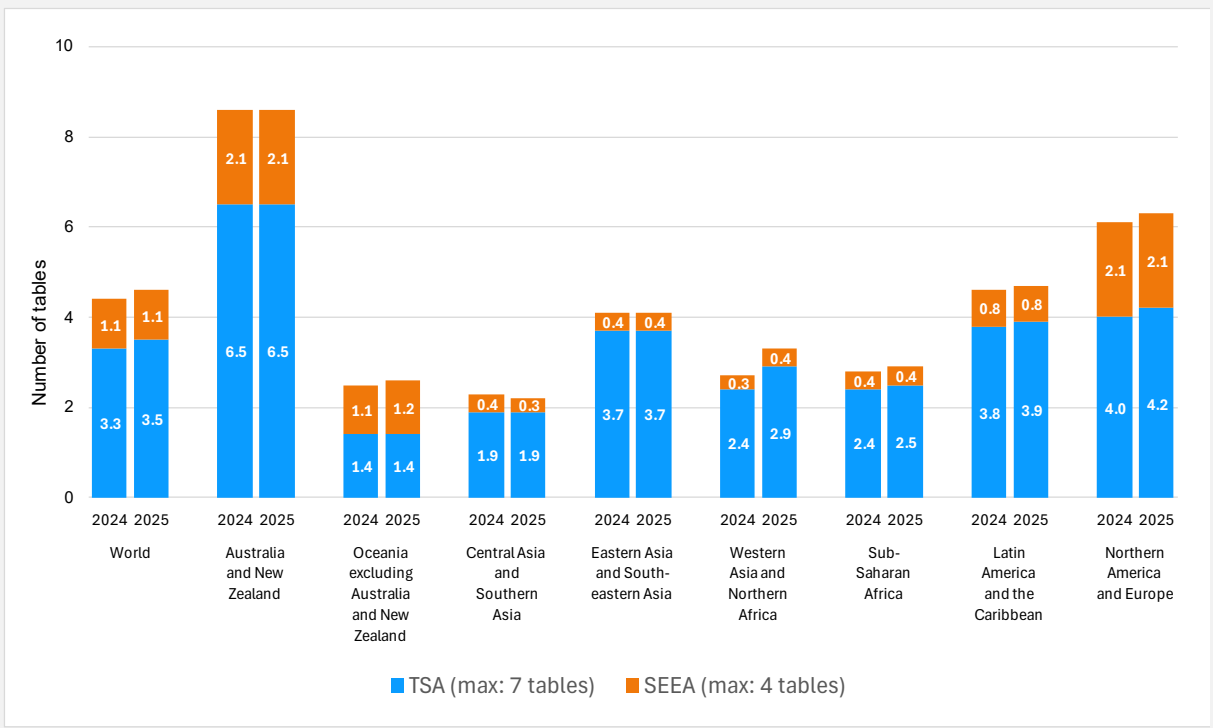
Chart 1. Share of countries reporting Tourism Satellite Account (TSA) and System of Environmental and Economic Accounts (SEEA) tables (average 2015-2023, by region)



Note: Countries reporting at least one of the 7 key tables from the Tourism Satellite Account (TSA) and/or at least one of the 4 key tables from the System of Environmental Economic Accounting (SEEA)

On average, for the period 2015-2021, the countries that reported tables generated 3.5 out of 7 TSA tables and 1.1 out of 4 SEEA tables per year. This is up from the previous reporting cycle, when these averages were 3.3 and 1.1 respectively. The change was particularly high in 'Western Asia and North Africa', where reporting countries produced on average 2.9 TSA and 0.4 SEEA tables per year, compared to 2.4 and 0.3 tables (Chart 2).

Chart 2. Number of tables reported by country (as average for the period 2015-2021 for the countries that reported), comparing the current SDG cycle (2025) with the previous one (2024). The full set of tables considered was 7 tables in TSA and 4 tables in SEEA.



The impact of the Covid crisis is still visible in this indicator, with more tables available for pre-pandemic years, and there is also a lag in the generation of the tables, which prevents comparing the latest year of the reporting cycles, but the rising numbers observed from one cycle to another show the effort that countries are doing in developing their systems of tourism statistics and their monitoring of the SDGs.

The TSA and SEEA are stepping stones towards an integrated monitoring of the economic, environmental and social dimensions of tourism. Still, there is a need to intensify efforts, to raise awareness in additional countries, and broaden the evidence base to monitor progress towards the sustainability of tourism. This requires both financial resources and capacity-building, particularly in developing countries and SIDS, to ensure that no one is left behind.

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Custodian agency(ies): UN Tourism

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

Fossil fuel subsidies decline to 1.10 trillion USD in 2023, signaling a 34.47% drop from the record high provided in the previous year

Reported fossil fuel subsidies fell from a record high of 1.68 trillion USD in 2022 to approximately 1.10 trillion USD in 2023, representing a global decline of 34.47 percent (see Chart 1). Outside of Oceania, which experienced an increase of 29.04 percent, there were noticeable decreases ranging from 17.41 to 66.72 percent in all other sub-regions. Northern America and Europe achieved cut-downs of 17.41 percent, while Eastern and South-Eastern Asia implemented a reduction of 39.62 percent. Central and Southern Asia, as well as Western Asia and Northern Africa, lowered their fossil fuel subsidies by 40.63 and 46.02 percent, respectively. Latin America and the Caribbean cut their fossil fuel subsidies by 42.53 percent, with Sub-Saharan Africa having achieved a decrease of 66.72 percent (see Chart 2).

Provided in the form of direct budget expense (e.g. transfer to energy state-owned enterprises), revenue loss (e.g. tax cuts), and price support (e.g. through price stabilization mechanisms), this decrease in fossil fuel subsidies can largely be attributed to two reasons (OECD, 2024; IEA, 2024). The first is reduced energy prices, which reached record highs in recent years due to various overlapping crises, including the conflict between Russia and Ukraine. The second is the expiry of the unprecedented amount of 'temporary' support measures issued in response to the COVID-19 pandemic, many of which still remain in place.

Such progress does not build on the strong downward momentum achieved from 2012 to 2020. Fossil fuel subsidies were nearly halved during the pre-COVID period, reaching a record low of 424 billion USD in 2020. As the current amount represents almost a three-fold increase, this decrease does not indicate a sustained reversal in the upward trend observed during the pre-COVID period.

Such high fossil fuel subsidy levels are concerning due to their inefficient nature. By artificially reducing fossil fuel prices, they not only hinder sustainable consumption and production but also aggravate tightening fiscal conditions by diverting public finance away from sustainable development.

Efforts to reduce fossil fuel subsidies need to be informed by science- and evidence-based national data collected and reported based on the internationally agreed methodology. Yet, reporting on national fossil fuel subsidies data remains limited, with disparities existing when compared to global data. For instance, although a few countries reported zero subsidies, the global data shows otherwise. Further efforts and coordination at the country level therefore are required in order to collect and report more accurate and consistent national data on fossil fuel subsidies.

Chart 1: Global estimate of fossil fuel subsidies from 2010 to 2023 (USD billions)

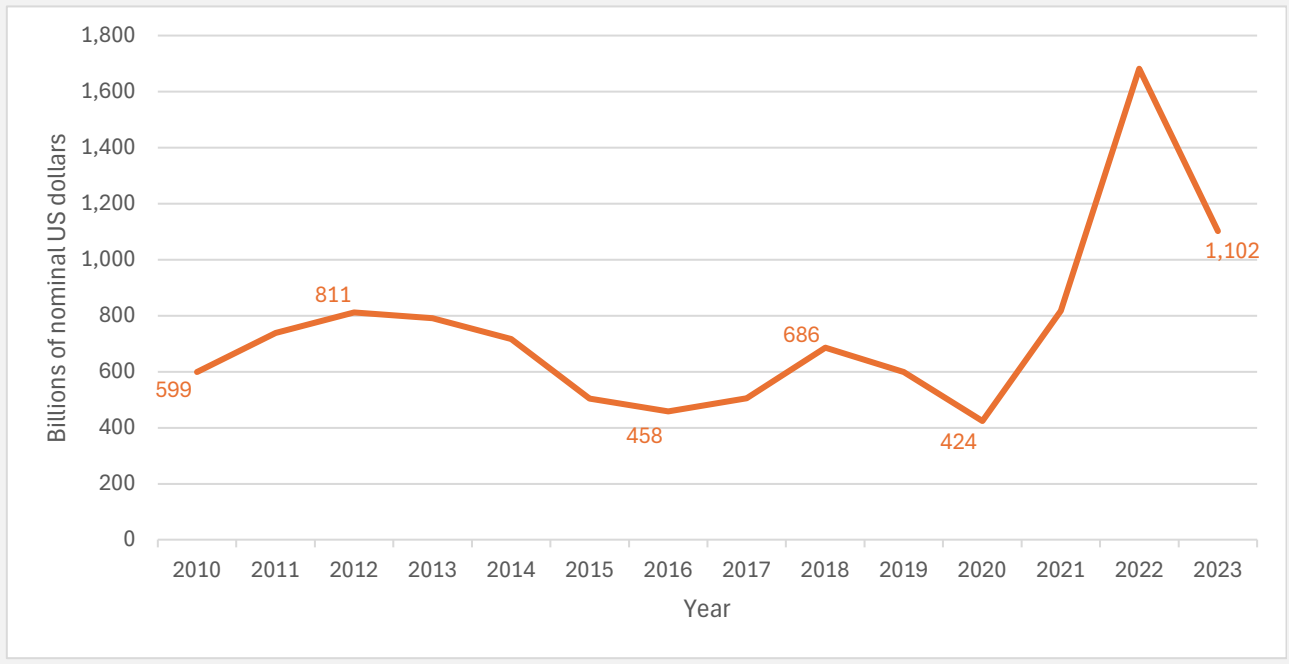
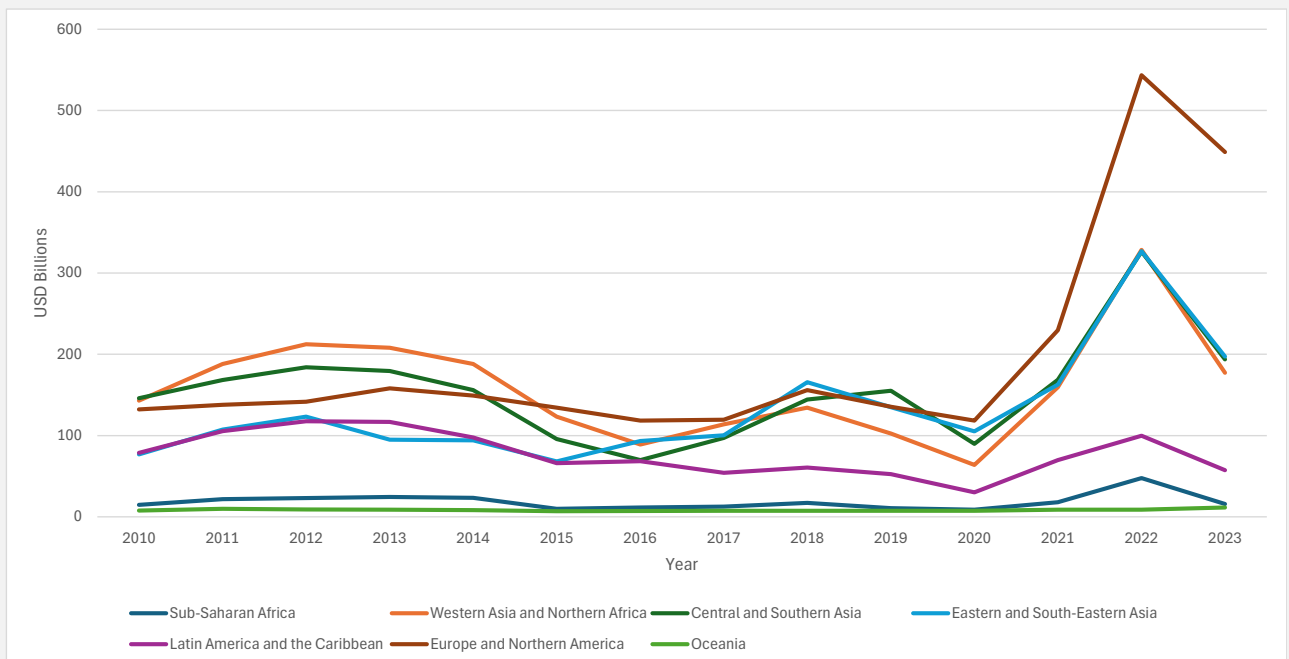


Chart 2: Fossil fuel subsidy estimates by region in 2023 (USD billions)



Additional resources, press releases, etc. with links:

- IEA. (2024). Fossil fuel subsidies – topics. https://www.iea.org/topics/fossil-fuel-subsidies
- OECD. (2024, November 21). Cost of support measures for fossil fuels decreased sharply in 2023 but remains elevated relative to its historical average | OECD. https://www.oecd.org/en/about/news/press-releases/2024/11/cost-of-support-measures-for-fossil-fuels-decreased-sharply-in-2023-but-remains-elevated-relative-to-its-historical-average.html

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