



The Sustainable Development Goals Report 2021

Extended Report

-Goal 12-



Ensure sustainable consumption and production patterns

Note: The UN Statistics Division (UNSD) prepares the annual *The Sustainable Development Goals Report*, also known as the glossy report, based on storyline inputs submitted by UN international agencies in their capacity as mandated custodian agencies for the SDG indicators. However, due to space constraints, not all information received from custodian agencies is able to be included in the final glossy report. Therefore, in order to provide the general public with all information regarding the indicators, this 'Extended Report' has been prepared by UNSD. It includes all storyline contents for each indicator as provided by the custodian agencies and is unedited. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information linked for further information.

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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

Key message: shifting to sustainable consumption and production patterns through strategic policies and actions along high-impact value chains is a prerequisite to addressing major global crisis, including climate change, biodiversity loss and pollution

Unsustainable consumption and production patterns are broadly recognized as one of the major underlying causes of the global crisis the world is currently facing: climate change, biodiversity loss and pollution. The number of reported national instruments and strategies aimed at supporting the shift towards sustainable patterns of consumption and production is increasing, showing a positive dynamic in policy development and decision-making. National governments are taking the lead, with 90% of the instruments and activities reported under SDG 12.1.1 led by public authorities and 85% supported by public funds. Sustainable public procurement remains an important share of instruments reported under SDG 12.1.1, the role of public authorities in steering markets towards sustainable practices. This adds to countries reporting on target 12.7.1, piloted for the first time this year. Including reporting on sustainable public procurement policies, a key element of the SCP policy mix, 92 countries and the European Union have reported on their action to support the shift towards sustainable patterns of consumption and production so far (51 in 2020, including SDG 12.1.1 and SDG 12.7.1).

The relevance of sustainable consumption and production (SCP) as a means to achieve objectives set in multilateral sustainable development agreements is clear. The proportion of reported instruments contributing to achieving not only SDG 12 but also SDG 13 on climate change remains high (more than 50%), several instruments focusing specifically on energy and GHG emissions reduction. Sustainable consumption and production models are indeed a prerequisite to a low carbon economic development, a development that operates in harmony with nature. The number of SCP policy instruments reported as relevant to SDG 15 on biodiversity and ecosystems (more than 30%) and to SDG 14 on oceans, seas and marine resources (23%) is a positive signal, as efforts to integrate those closely intertwined agendas and mainstreaming SCP practices at the national level are essential. Circular economy and waste reduction approaches, especially in the context of plastic pollution which talks to 30% of reported policies and activities, are also high on the agenda of countries and translate in numerous policy instruments, most of them sectoral (67%).

Countries' reporting shows a significant uptake of the scientific knowledge available regarding high-impact value chains and sectors: a high number of policy instruments and activities are reported as focused or relevant to the agriculture and food (62%) as well as to the buildings and construction (38%) sectors, which represent a large share of the world's total material footprint. All sectors considered, decisions and actions are being observed at various stages of the value chain, yet the focus on creating the enabling environment for sustainable practices through policies and regulation (48% of reported instruments), as well as on few of the stages where resource use and environmental impacts occur, namely production (43%), use/consumption (48%), disposal/end of life (39%), processing (26%) and extraction (25%) is significant. Other stages of the value chains, despite playing a decisive role and influencing overall patterns of consumption and production, are less often addressed by reported policies and activities, namely: finance (15%), marketing (9%), packaging (19%), transport (15%) and distribution (19%). This underlines the importance of the value chain approach in identifying key points of intervention within economic systems to reduce natural-resource use and environmental impacts caused by production and consumption, and informing strategic decisions and actions on SCP.

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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

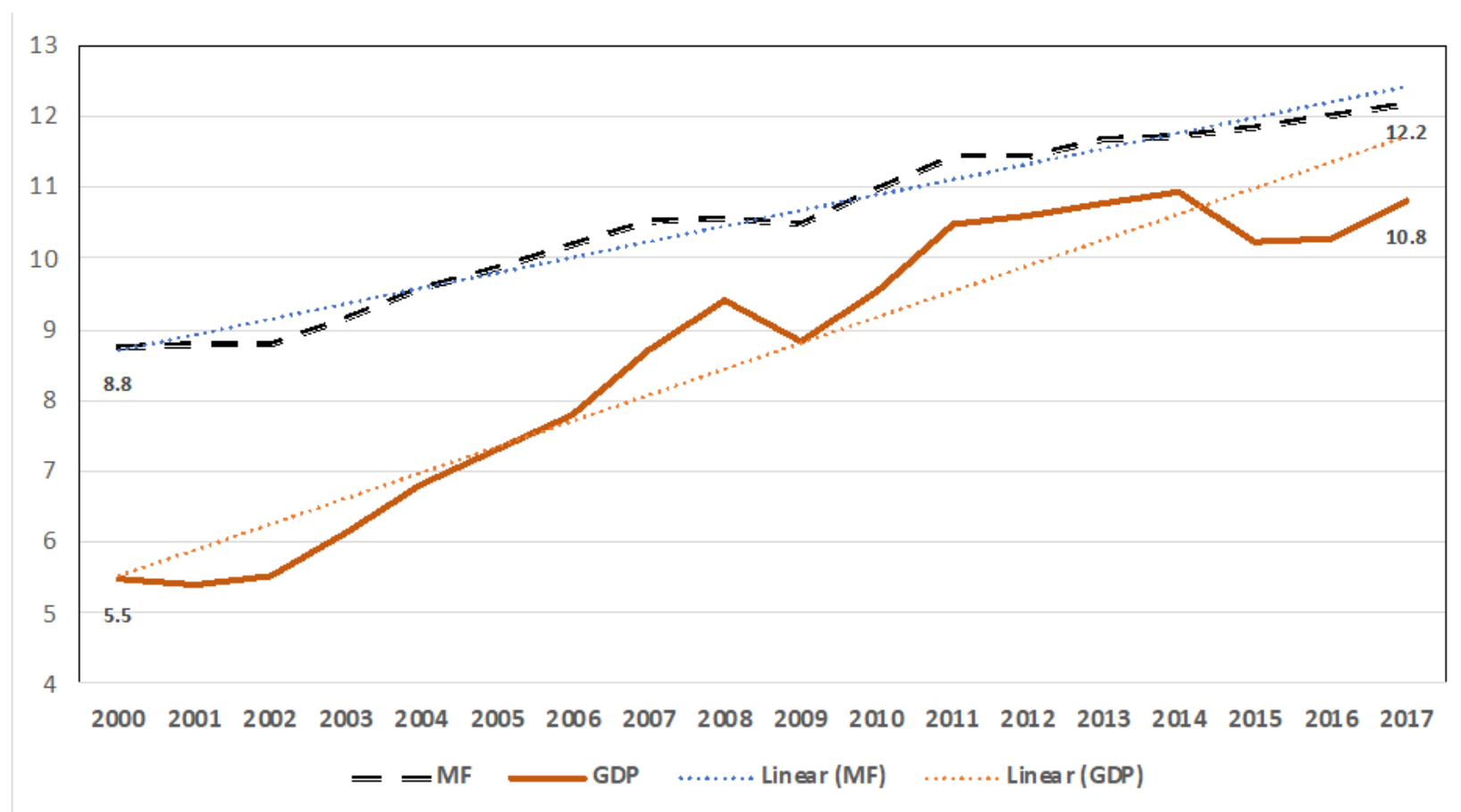
Economic growth is still strongly dependent on natural resource usage

The “material footprint” of an economy quantifies the amount of raw materials extracted globally – across the entire supply chain – to meet its domestic consumption needs. It reflects the amount of primary materials required, including biomass, fossil fuels, metal ores and non-metallic minerals, to meet basic needs.

The global material footprint rose from 8.8 metric tons per capita in 2000 to 12.2 metric tons in 2017 – an increase of almost 40 per cent. Concurrently, GDP per capita increased by more than 50 per cent, from 5.5 thousand US dollars per capita in 2000 to 10.8 thousand US dollars per capita in 2017. Similar trends for MF and GDP reveal the world’s continuous reliance on natural resources for economic growth. However, on a global level, MF per capita increased at a slower rate than GDP per capita – indicating relative decoupling. Across much of the developing world, an increase in material footprint is required to enhance the living standards of growing populations. However, at the same time, it is essential to decrease reliance on raw materials and increase recycling, and circular economy approaches to reduce environmental pressures and impact.

Global averages mask realities on a regional level. High-income countries tend to outsource their material- and energy-intensive production stages to less resource-efficient countries. This reduces countries’ MF but shifts the production and environmental burdens to less resource-efficient countries that further increases the overall MF.

Material footprint (metric tons per capita) and GDP (thousand US\$ per capita), 2000-2017



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

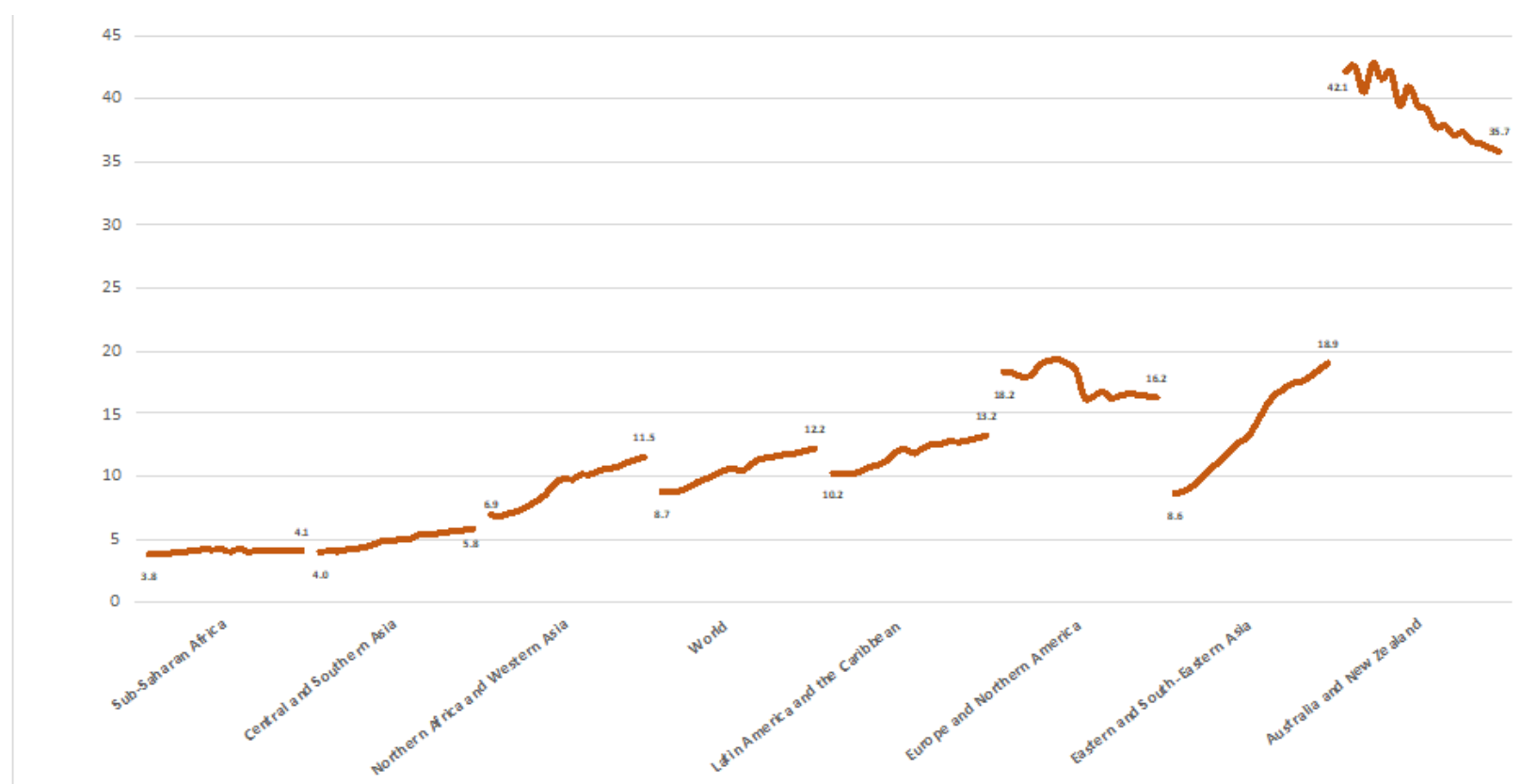
The world's reliance on natural resources continued to increase in the last two decades

“Domestic material consumption (DMC)” is another measure for material flow. It measures the total amount of materials directly used by an economy to meet its consumption needs and is an important assessment of the absolute level of resource usage. Globally, domestic material consumption per capita rose by more than 40 per cent from 8.7 metric tons per capita in 2000 to 12.2 metric tons per capita in 2017. All regions, except Europe and Northern America, and Australia and New Zealand experienced significant increases in the past two decades. Despite the promising decreasing trends in the last two decades, DMC per capita in Europe and Northern America; Australia and New Zealand, and East and South-Eastern Asia still outweighs the global average by far.

Total Domestic Material consumption in Eastern and South-Eastern Asia more than doubled from 2000 to 2017, mainly due to rapid industrialization. An increase of domestic material consumption is natural to parallel population growth and people's basic needs and ensure economic growth; however, DMCs current global average is not sustainable for all regions. Circular economy approaches help to ease the path for sustainable consumption and production and can further decrease DMC per capita in the future.

Large numbers of domestic material consumption put ecosystems and the environment at risk of further depletion and deterioration. Urgent action and holistic approaches are needed to decrease the world's reliance on natural resources and strengthen nature's resilience from anthropogenic stressors.

Domestic material consumption, 2000 to 2017 (metric tons per capita)



Progress analysis: [See progress chart](#)

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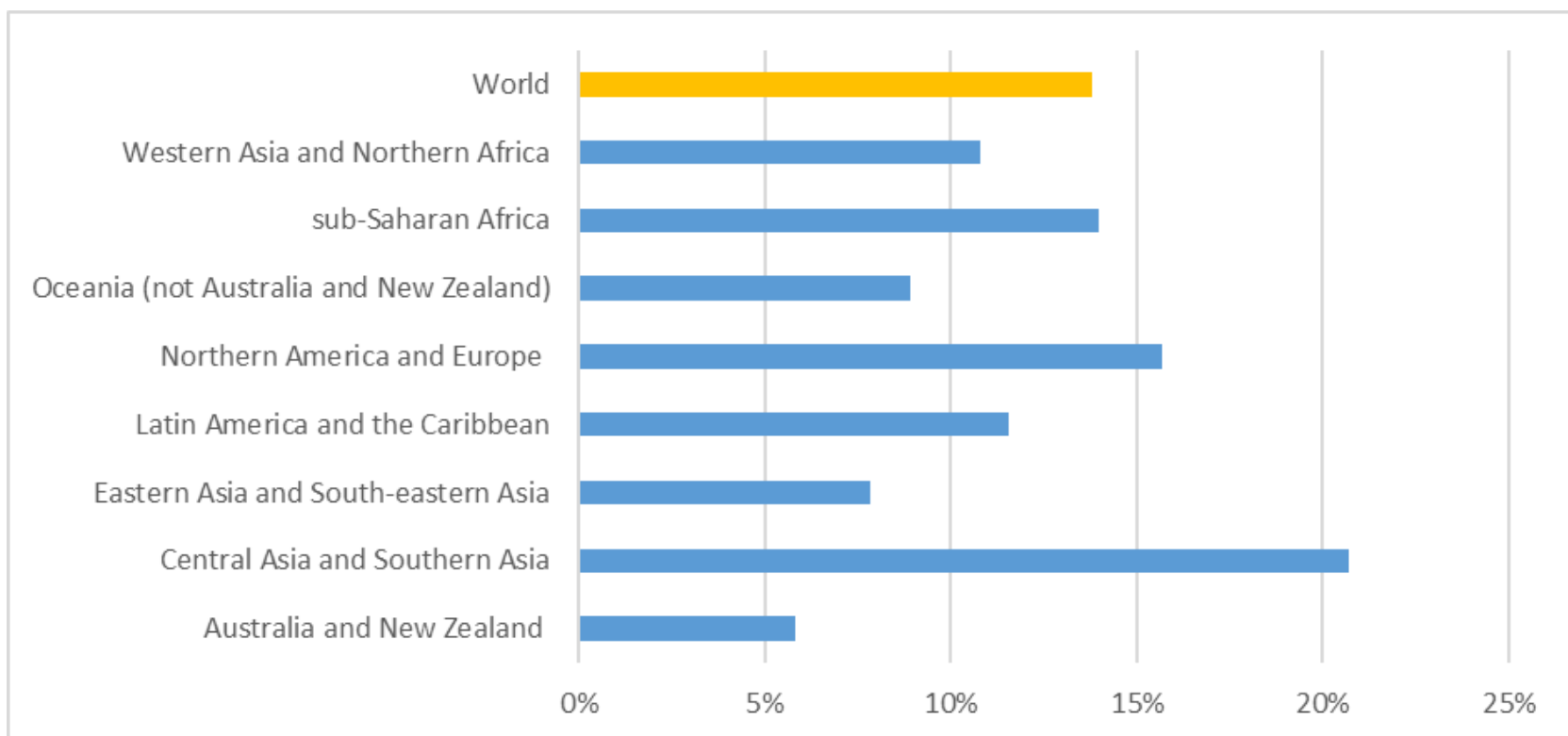
Target 12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses

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

A 14 per cent of the world’s food is lost along the supply chain before it even reaches the consumer

Reducing food loss and waste is critical to improving the food security situation of vulnerable groups and decreasing the environmental footprint of food production activities. Achieving this target has the potential to contribute to several dimensions of the 2030 Agenda, such as eradicating food insecurity and hunger, improving sustainable water management, addressing climate change, and improving sustainability of both marine and terrestrial ecosystems.

Although limited data is available, it suggests that globally around 14 per cent of the world’s food is lost from production before reaching the retail level. These estimates vary across regions, going from 20.7 per cent in Central Asia and Southern Asia at 20.7 to 9.8 and 5.8 per cent respectively in Oceania* and Australia and New Zealand. Estimates also vary across commodity groups, although food loss can occur at all stages of the food supply chain to different degrees. The vast variations in the losses for certain commodities and stages in the supply chain both within and across countries, suggests that considerable reduction of food loss is possible through the identification critical loss points and taking appropriate countermeasures. To this end, data collection efforts are urgently needed for countries to develop evidence-based, targeted interventions.



* excl. Australia & New Zealand

Additional resources, press releases, etc. with links:

- Source: FAO, SOFA 2019
- <http://www.fao.org/publications/sofa/2019/en/>
- <http://www.fao.org/food-loss-reduction/news/detail/en/c/1237611/>

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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

Information transmitted by Parties to meet their commitments as required by multilateral environmental agreements in the chemicals and waste cluster¹ continues to play an important role, together with other factors in assessing the level of implementation of these agreements and the extent to which the SDG target 12.4 is being met.

The COVID-19 pandemic has affected every country in the world with significant implications for chemicals and waste management and the implementation of the Basel, Rotterdam and Stockholm conventions. There were rapid changes in the amounts and types of waste being generated, and waste authorities have faced challenges ensuring their environmentally sound management. There were direct impacts – in particular, a big increase in the amount of clinical waste being generated – and indirect impacts such as disruption to the arrangements for handling waste, including transboundary movements. These impacts varied in different countries, according to local circumstances, the severity of the pandemic, the way it was managed, and the capacity and flexibility of local waste management systems.

The implications of the COVID-19 pandemic will be available through annual national reports as required by the Basel Convention and subsequently under the indicator 12.4.1.

Furthermore, the scope of data collection from Parties has recently been broadened with the adoption of the Plastic Waste Amendments² by the Parties to the Basel Convention in May 2019. These amendments to annexes II, VIII and IX to the Convention expand and clarify entries relating to plastic waste, bringing many types of plastic waste (both hazardous and non-hazardous) under the Basel Convention control procedure, thereby ensuring a more transparent, traceable, and enforceable set of measures concerning imports/exports of plastic waste between countries. Such trade control measures aim at ensuring, ultimately, that the wastes in question, which may cause a threat to human health and the environment, are managed in an environmentally sound manner. As of 2021, data collection on generation, imports and exports of plastic waste under the scope of the Basel Convention falls with the scope of Parties' annual national reports and subsequently under the indicator 12.4.1. Such data will be valuable in measuring target 14.1, that aims by 2025, to prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution.

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¹ The Montreal Protocol on Substances that Deplete the Ozone Layer (1987), the Basel Convention on the Control of Transboundary Movement of hazardous Wastes and their Disposal (1989), the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (1998), the Stockholm Convention on Persistent Organic Pollutants (2001) and the Minamata Convention on Mercury (2013).

² The Plastic Waste Amendments became effective on 1 January 2021.

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

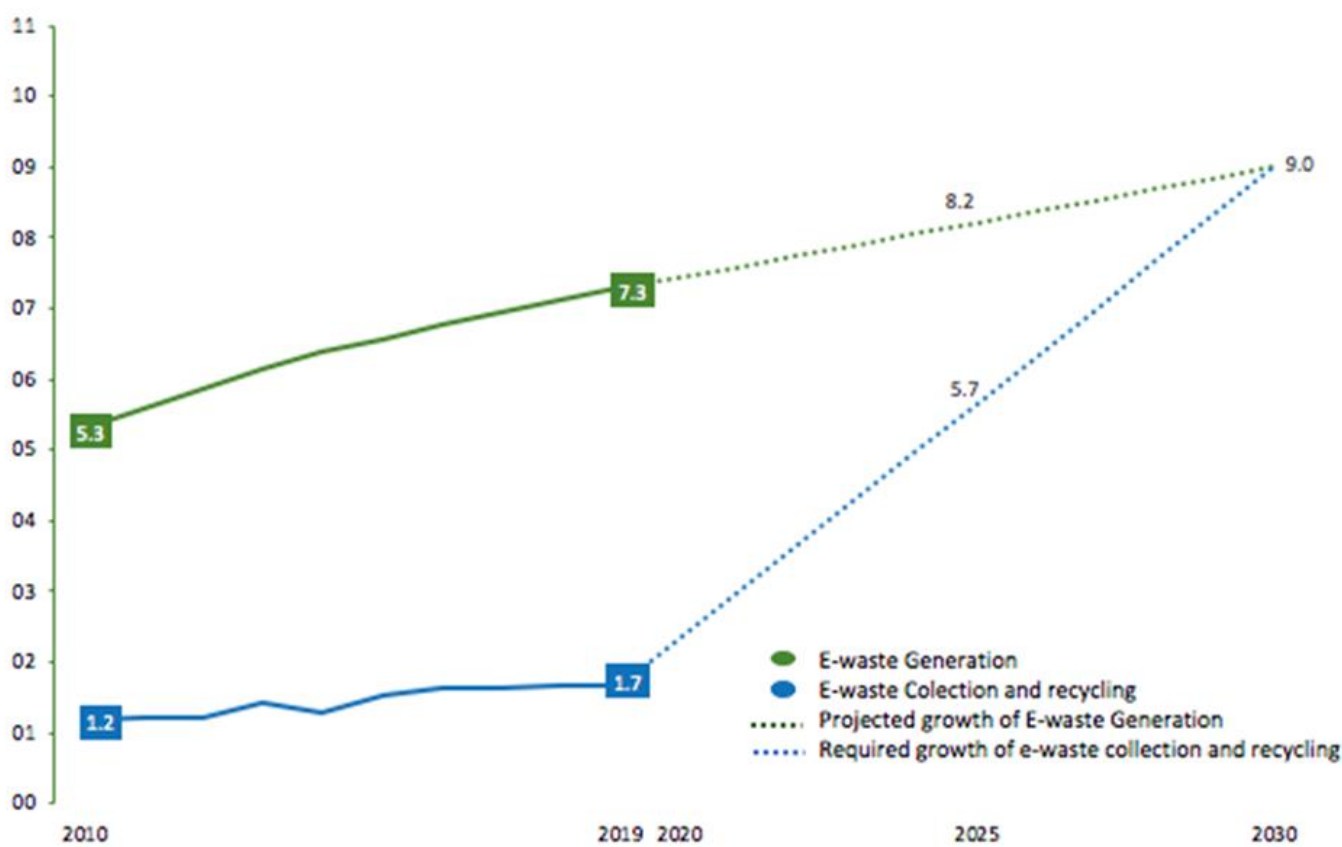
Indicator 12.5.1: National recycling rate, tons of material recycled

Improved policies addressing the environmentally sound management and monitoring of e-waste in high income countries are needed, but even more urgently so in low- and middle-income countries.

The use and subsequent disposal of electronic and electrical equipment significantly contributes to large stockpiles of waste. The waste of electronic and electrical equipment (e-waste) becomes part of a fast-growing waste stream that contains both valuable and hazardous materials. The rapid growth of global e-waste is driven by growing consumption, short product life cycles, and little repair, and since growth is so rapid, methodologies, capacity and data to measure these phenomena by countries are evolving to meet demand.

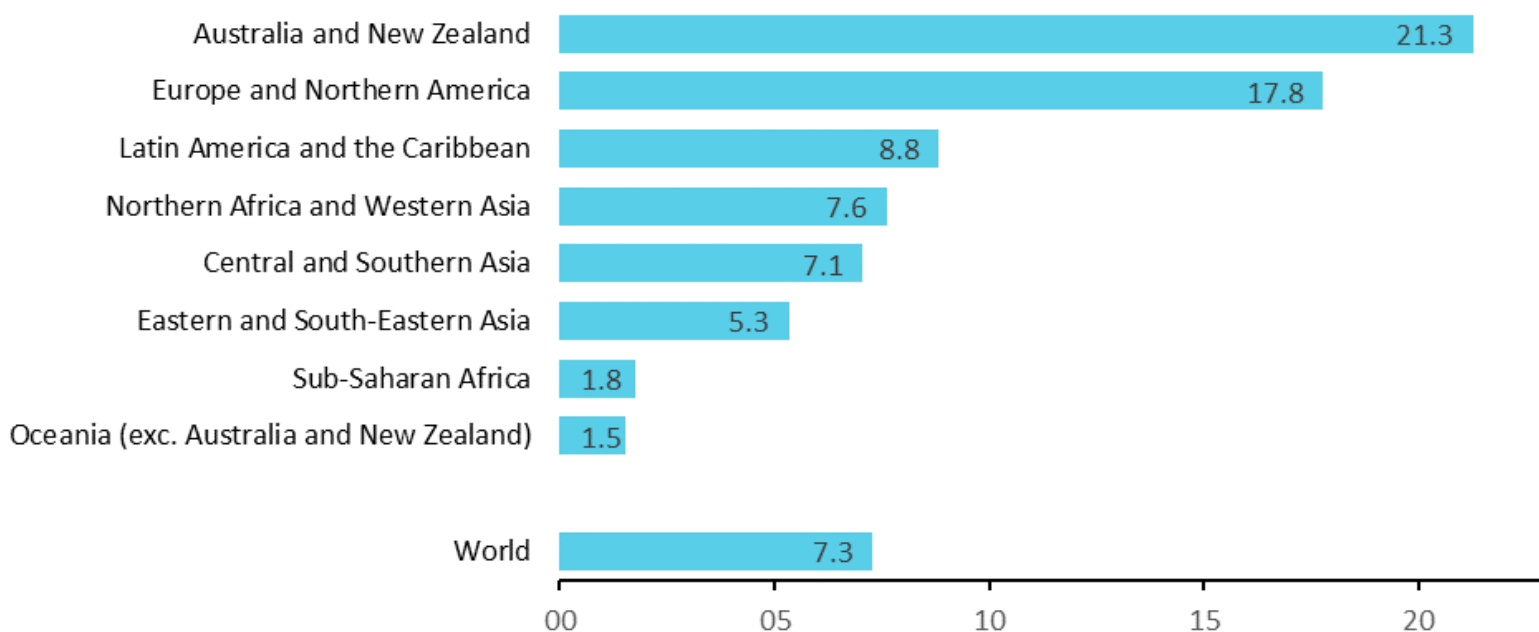
In 2019, the amount of e-waste generated was 7.0 kg per capita, and only 1.7 kg per capita is documented to be managed in an environmentally sound manner. The amount of e-waste generated is expected to grow by 0.16 kg per capita per annum to 9.0 kg per capita in 2030. The growth is particularly driven by a growing consumption of electronics and disposal of e-waste of in low- and middle-income countries where environmentally sound policy management is urgently needed. The required growth rate of e-waste recycling to ensure sound environmental management of all generated e-waste in 2030 needs to be 0.7 kg per capita per annum, more than 10 times higher than what was realized in the past decade.

Chart 1: E-waste generation (2010-2019), and projected e-waste generation (2020-2030) e-waste recycling (2010-2019) and required growth (2020-2030) to ensure environmentally sound management of all generated e-waste



High income countries generate most e-waste per annum, being 21.3 kg per capita and 17.8 kg per capita in Australia and New Zealand, and Europe and Northern America, respectively. Sub-Saharan Africa and Oceania generates less than 2 kg per capita of e-waste.

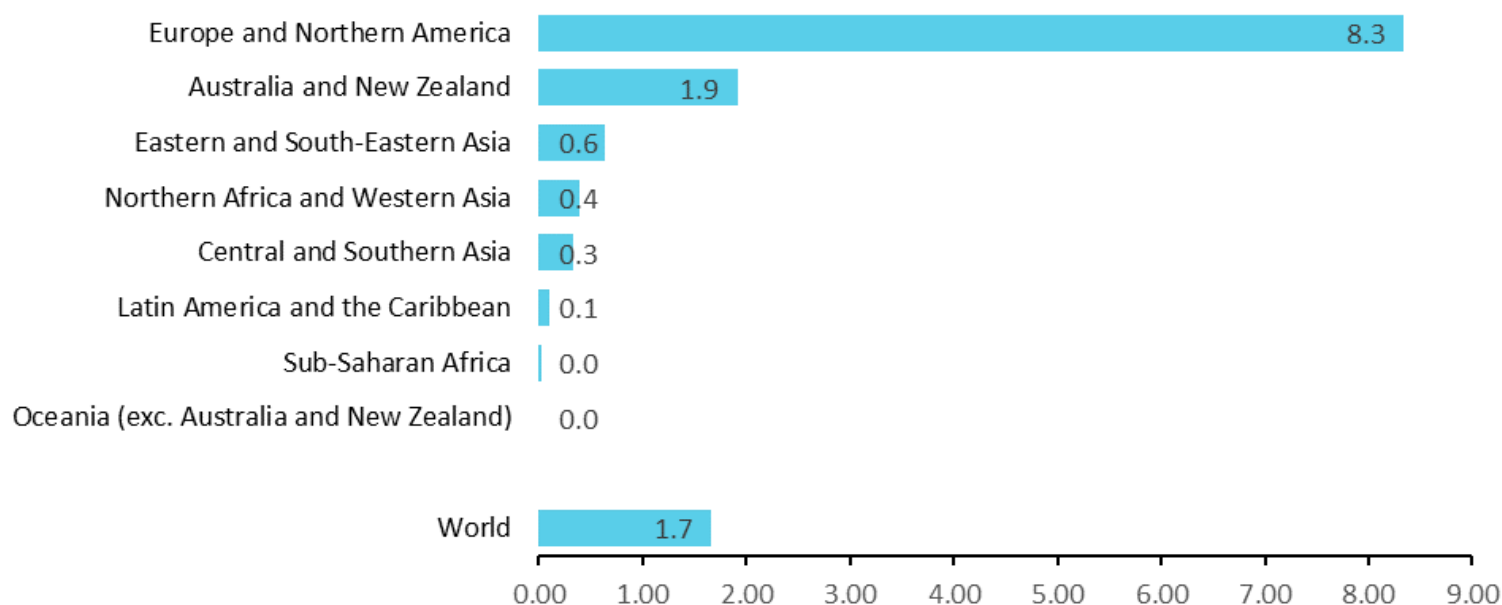
Chart 2: E-waste Generated per annum (kg/capita)



Europe and Northern America show the highest collection and recycling rates of e-waste, being 8.3 kg per capita per annum. Most other regions collect and recycle less than 1 kg per capita per annum. In high income countries, e-waste that is not recycled is often mixed with other recyclable waste streams, without removal of hazardous substances, and valuable materials such as gold and

palladium. E-waste, often regarded as a re-usable good, is also exported to other lower income countries. In middle- and low-income countries, e-waste management infrastructure is not yet developed, or is totally absent and inadequate to manage the e-waste that is locally generated and illegally imported. Thus, it is mostly managed inappropriately by the informal sector by open burning and acid baths which are polluting the environment and cause a loss of valuable resources. Moreover, this causes severe health effects to workers, but also to children who often also live, work and play on the sites.

Chart 3: E-waste collection and recycling per annum (kg/capita)



In Q1 and Q2 of 2020, less electronics and electrical goods were consumed compared to previous years, whereas Q3 shows more consumption one year earlier in high income countries. Low- and middle-income countries continue to show decreasing trends in in Q3 as well. For 2020, This is estimated to lead to decrease of 0.9 kg per capita consumption compared to 2019. The decrease has been largest in low- and middle-income countries. The reduction of consumption leads to less e-waste generated in the future.

Additional resources, press releases, etc. with links:

- Forti V., Baldé C.P., Kuehr R., Bel G. The Global E-waste Monitor 2020: Quantities, flows and the circular economy potential. United Nations University (UNU)/United Nations Institute for Training and Research (UNITAR) – co-hosted SCYCLE Programme, International Telecommunication Union (ITU) & International Solid Waste Association (ISWA), Bonn/Geneva/Rotterdam.
- Baldé C.P., Kuehr R., Impact of the COVID-19 Pandemic on E-waste in the First Three Quarters of 2020. United Nations University (UNU)/United Nations Institute for Training and Research (UNITAR) – co-hosting the SCYCLE Programme, Bonn (Germany), 2021.

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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

Further advancement and harmonization of sustainability reporting by companies are required to demonstrate progress on advancing sustainability and addressing challenges caused by the COVID-19 pandemic

Recent global trends, not the least of which is the COVID-19 pandemic, emphasize the role of sustainability reporting in transitioning to a more sustainable economy. It becomes critical for investors, credit providers and consumers to facilitate more transparency from the private sector and encourage sustainable production. This ongoing transition significantly changes information needs: more than ever, capital markets require global standardized sustainability disclosure to price capital based on financial and non-financial performance, and to redirect financial flows towards the SDGs. Recent years have seen a surge in genuine commitment to sustainability and sustainable investing among companies and investors. In this regard, for example, in order to improve MSMEs access to finance which is of paramount importance for their survival in the post COVID times, strong practice in reporting on environmental and social issues becomes crucial for efficiency of financial aid stimulus and the SDG implementation. In parallel, environmental and social sustainability has become a central concern and policy focus of many governments and regulators.

Using a Big Data, Advanced Natural Language Processing (NLP) and Artificial Intelligence (AI) analytics company sustainability reports were scanned to determine compliance with the metadata guidance on 12.6.1, Minimum and Advanced Reporting Requirements. UNCTAD examined an amalgamation of unrepresentative samples of company reports on the sustainability issues mainly based on the UN Global Compact Database and GRI Sustainability Disclosure Database. The preliminary results show that 85 percent of companies reporting on the Minimum Requirements and 40 percent of the companies reporting on the Advanced Requirements established in the metadata guidance on 12.6.1.

In terms of reporting dimensions, i.e. economic, environmental, institutional and social areas, over 95 percent of companies cover 3 out of the 4 reporting dimensions in the Minimum Reporting Requirements, with the least covered Institutional dimension reported by 86 percent of companies. In the Advanced Reporting Requirements, Environmental Dimension has been the most under-reported area with only 64 percent of companies addressing its disclosure topics (Chart 1).

Analysis shows gaps across specific disclosure topics within the Minimum Reporting Requirements topics. The largest gaps have been identified in enterprise reporting on employee by contract type and gender; stakeholder engagement surrounding sustainability performance; materiality assessment, sustainability strategy and or principles related to sustainability; and employee training (Chart 2).

Significant divergence has also been identified in the Advanced Reporting Requirements. The largest gaps include GHG and Waste intensity; material consumption, sourcing of materials and reclaimed or recycled materials used; biodiversity impacts; supplier and consumer engagement on sustainability issues; other local community impacts; supplier social assessment; details of remuneration; and supplier environmental assessment (Chart 3).

Companies from the regions such as Northern America and Europe, Latin America as well the Caribbean and South-eastern Asia demonstrated a higher level of reporting on the SDG indicator 12.6.1. At the same time significant gaps were identified in companies reporting in other regions, especially in Central Asia and Southern Asia; Western Asia and Northern Africa, as well as Oceania excluding Australia and New Zealand (Chart 4).

Chart 1: Screening on the Minimum and Advanced Requirements of Metadata Guidance SDG 12.6.1 (Percentage) by Dimension

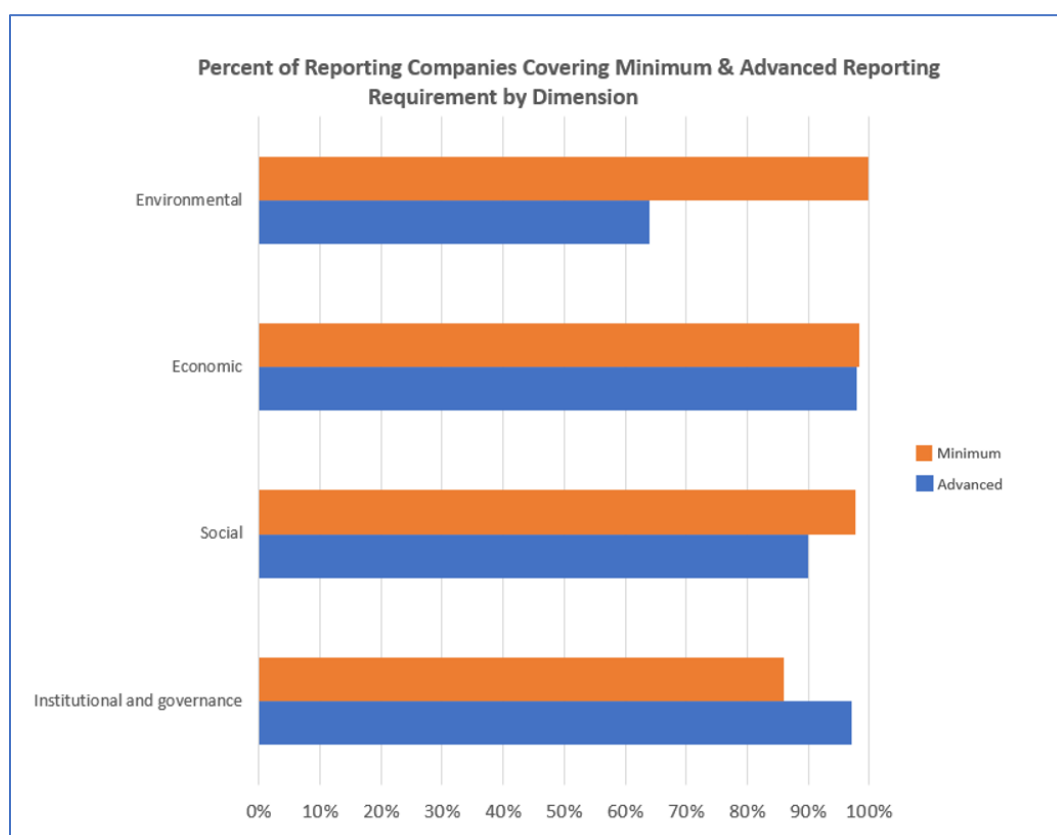


Chart 2: Percent of Reporting Companies Covering Minimum Reporting Requirements of Metadata Guidance SDG 12.6.1 (Percentage) by Topic

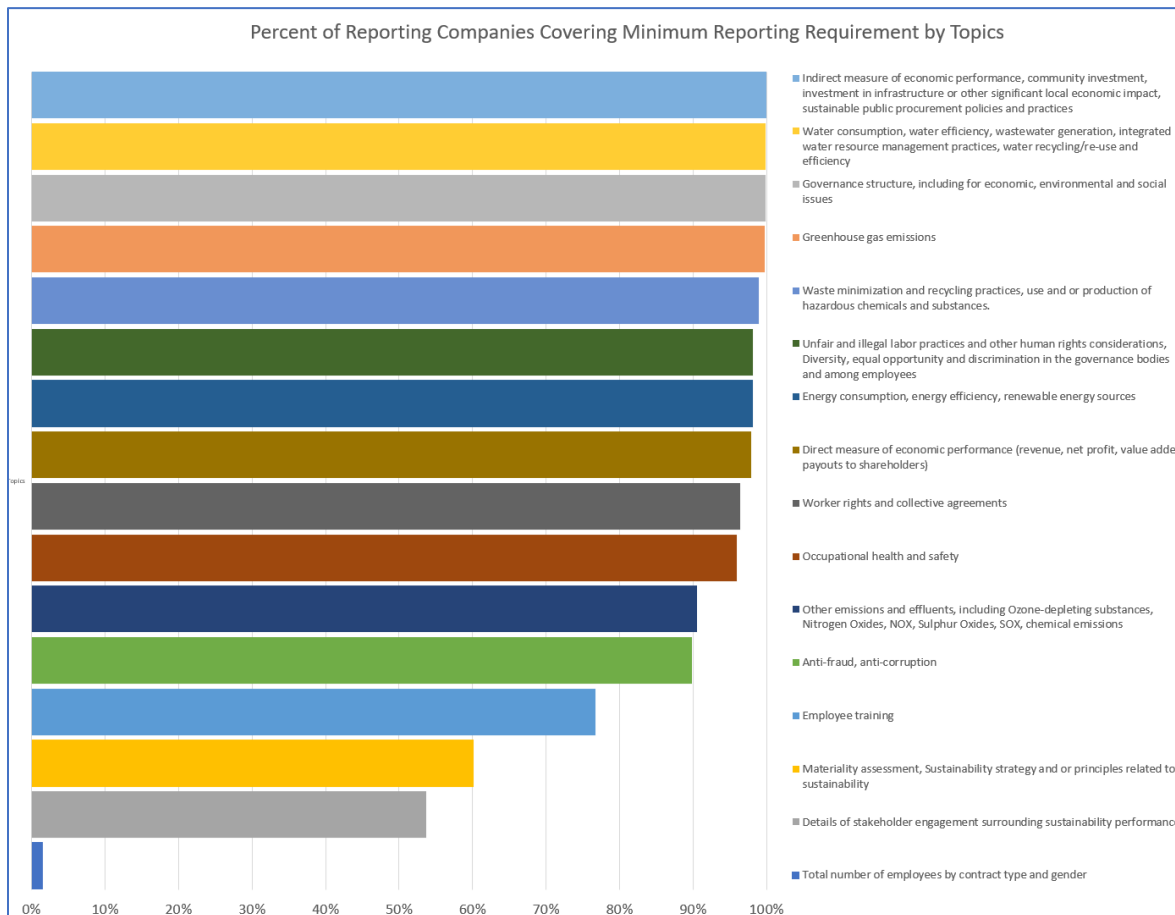


Chart 3: Percent of Reporting Companies Covering Advanced Reporting Requirements of Metadata Guidance SDG 12.6.1 (Percentage) by Topic

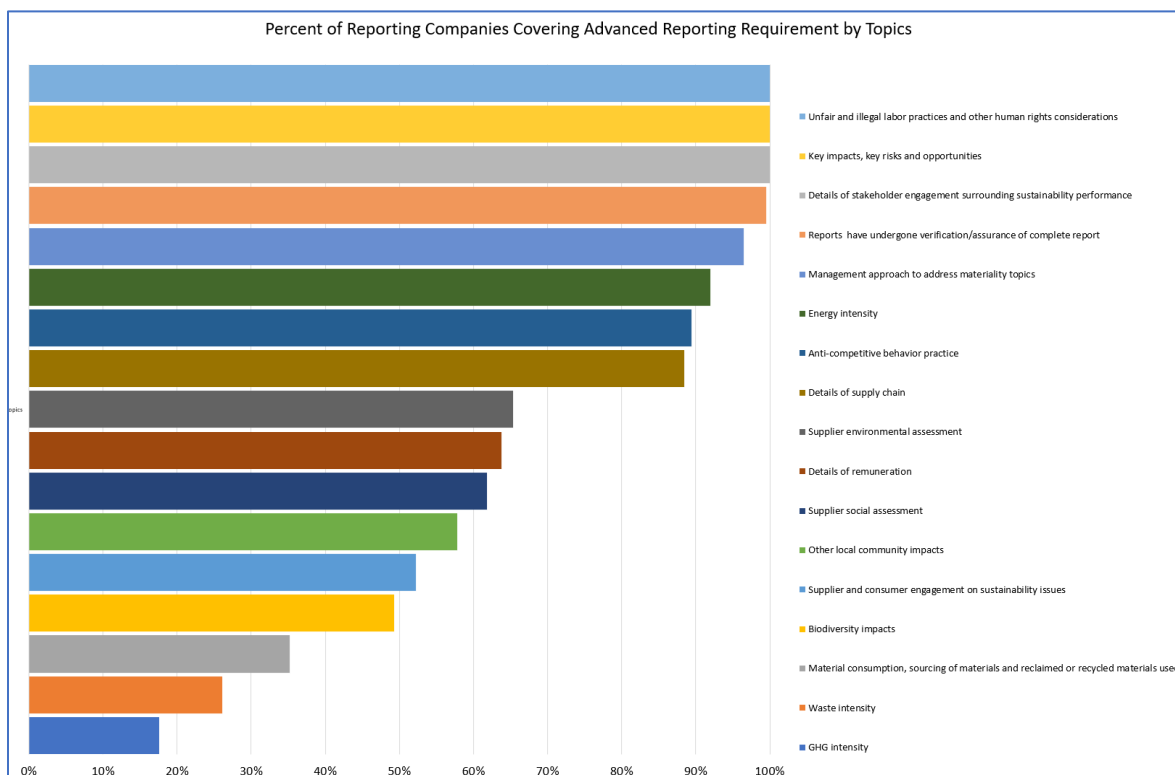
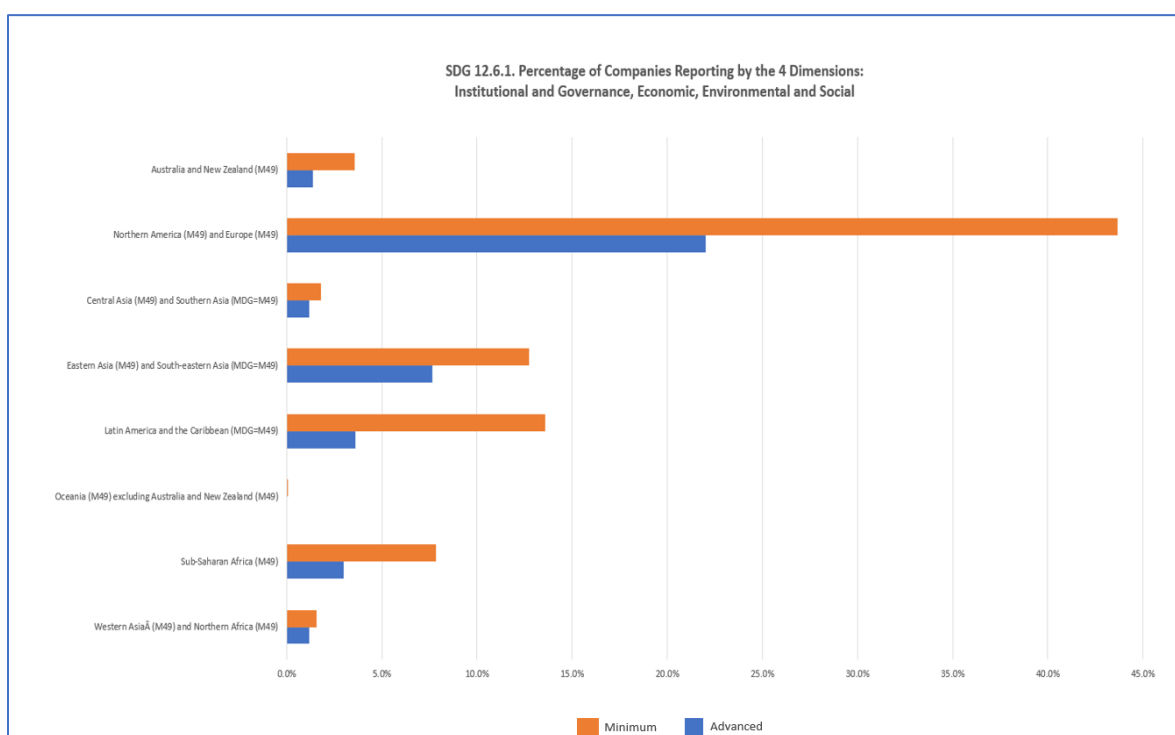


Chart 4: Screening on the Minimum and Advanced Requirements of Metadata Guidance SDG 12.6.1 (Percentage) by Region



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Target 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities

Indicator 12.7.1: Degree of sustainable public procurement policies and action plan implementation

Sustainable public procurement as a means to address the COVID-19-induced crisis

At a time when governments need to conduct expansionary fiscal policies to limit or avoid economic recessions, public procurement, which represents an average of 12% of GDP in OECD countries and 14.5% in low-income countries, offers a valuable opportunity to gear public expenditures towards green growth and contribute to the achievement of sustainability goals.

While it may be tempting for governments to give up on environmental commitments to address short-term social and economic priorities, the global health crisis should be seen as an opportunity to build more sustainable and inclusive economies and societies, including through Sustainable Public Procurement (SPP).

As of December 2020, 40 countries had reported on Sustainable Public Procurement policies and action plans (or equivalent legal dispositions), to encourage the procurement of environmentally-sound, energy-efficient products, and to promote more socially-responsible purchasing practices and sustainable supply chains.

Despite current difficulties, governments have maintained their efforts in supporting SMEs' participation in public tenders and promoting the respect of human rights and decent work in supply chains. They have also strengthened their efforts in transparency of public procurement, by progressively switching to online procurement platforms, and are adapting their capacity-building efforts by replacing face-to-face seminars with webinars and online courses.

However, further efforts could be made to address both the negative impact of purchasing practices and the COVID-19-induced crisis, by strengthening sustainability requirements in construction and transportation services, or by enhancing energy-efficiency in public buildings and addressing the environmental impact of the surge in use of medical protective equipment such as surgical masks, face shields, hand sanitizer and surgical gloves.

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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)

Developing countries had 219 Watts per capita of renewable energy capacity in 2019. This figure increased by 7 percent over the year, but this growth was slightly less than the 8.8 percent increase in 2018

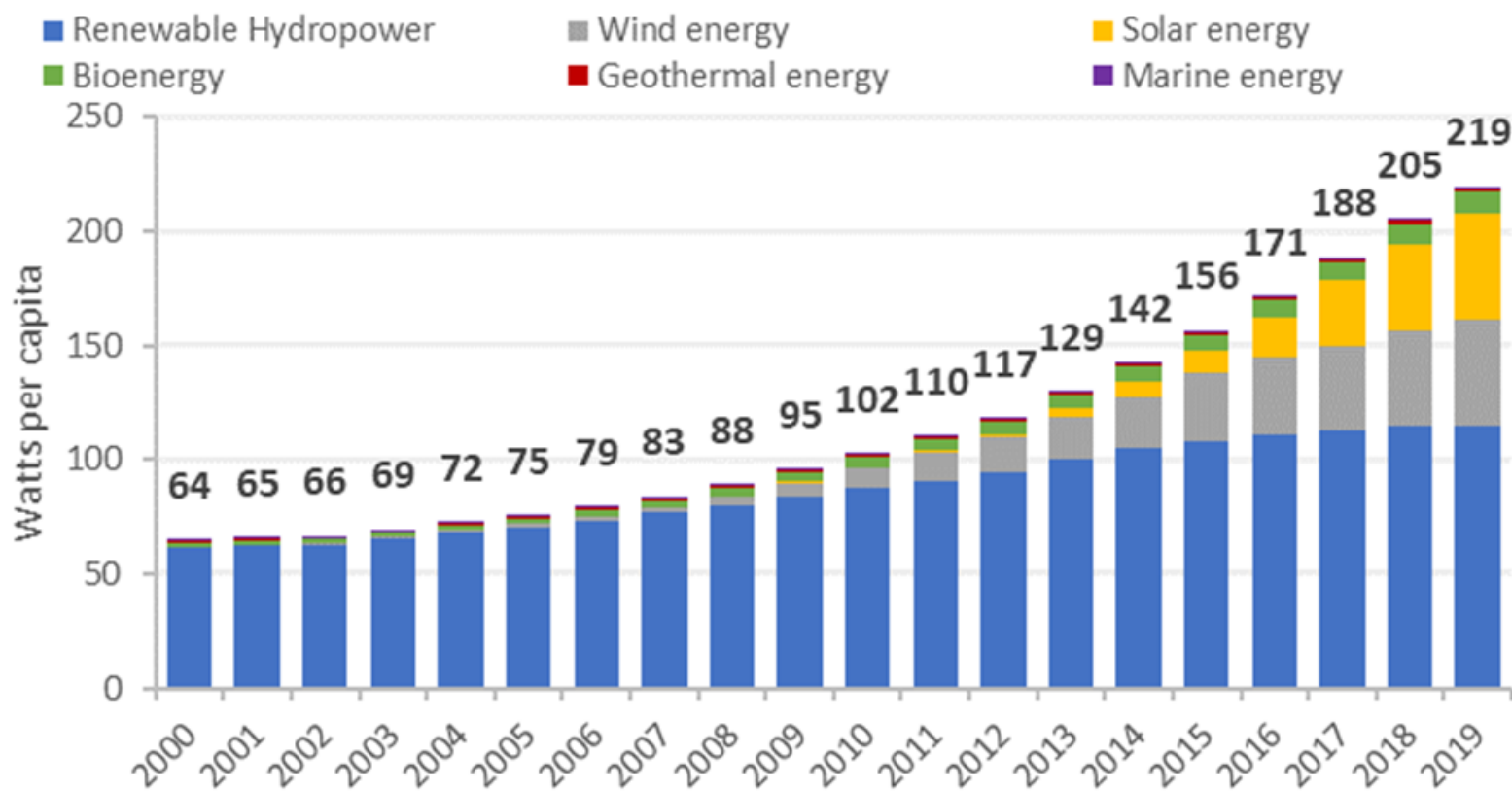
At the global level, there has been a remarkable increase in renewable energy capacity in the last decade, with expansion of renewable electricity generation capacity outpacing growth in non-renewable capacity every year since 2014. In 2019, renewable capacity increased by 7.5 percent and accounted for 72 percent of the total expansion in generating capacity. Furthermore, since 2017, most new renewable energy capacity has been installed in developing countries. In these countries, the rapid rise of renewables over the last decade is mostly due to the large-scale expansion of solar and wind capacity, which have increased at average annual growth rates of 72 percent and 22 percent respectively (from 2010 to 2019).

Developing countries had 219 Watts per capita of renewable energy capacity in 2019 (1.4 TW across 6.4 billion people). The 7 percent increase in this figure in 2019 was lower than the 8.8 percent growth in 2018 and the long-term trend of 8.9 percent annual growth from 2010 to 2019. This slight slowdown in improvement was due to a fall in the expansion of per capita solar power capacity, which increased by 22.2 percent in 2019, compared to 35.5 percent in 2018. Per capita capacity of wind power increased by 11.3 percent in both 2018 and 2019, while per capita hydropower capacity remained the same. These differences by technology reflect the overall trend in recent years, where total hydropower capacity in developing countries is expanding at about the same rate as population growth while wind and, in particular, solar power, have been expanding at several times the rate of population growth.

On a per capita basis, renewable energy capacity in 2019 was highly concentrated in Latin America and the Caribbean with 405 Watts per capita, closely followed by Eastern & South-eastern Asia at 391 watts per capita. Per capita renewable energy capacity is mostly from hydropower in Latin America and the Caribbean and it has been relatively high for many years but is growing only slowly. In contrast, the largest regional increase in per capita capacity in 2019 occurred in Eastern & South-eastern Asia, where it grew by 191 percent, driven primarily by solar and wind energy deployment. Sub-Saharan Africa is far behind these other regions, with only 34 Watts per capita of renewable generating capacity at the end of 2019.

While the last decade has seen a positive development, there remains significant untapped potential for developing countries to expand their renewable electricity capacity. For example, although most new renewable capacity has appeared in developing countries in the last two years, renewable capacity in developed countries was 880 watts per capita in 2019 (about four times higher than in developing countries), suggesting that there is still considerable room for further growth.

Installed renewable energy-generating capacity in developing countries (in watts per capita), by technology between 2000 and 2019



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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

Implementation of tools to monitor sustainable tourism has increased notably since 2009, but there is still room for improvement

The availability of data on the sustainability of tourism, in its three dimensions: economic, social and environmental, is limited. With the support of the United Nations Statistics Division (UNSD), UNWTO and leading countries initiated the development of a tool for filling this gap: the Statistical Framework for Measuring the Sustainability of Tourism (SF-MST). This framework aims at measuring the sustainability of tourism from all three dimensions.

The environmental dimension of SF-MST relies heavily on the link between Tourism Satellite Accounts (TSA) and the System of Environmental-Economic Accounting (SEEA). The national statistical capacity to measure the sustainability of tourism is therefore approached through the availability of the 7 core TSA tables and the 4 SEEA accounts most relevant to tourism. Some examples of the implementation of the framework can be found in this UNWTO publication.

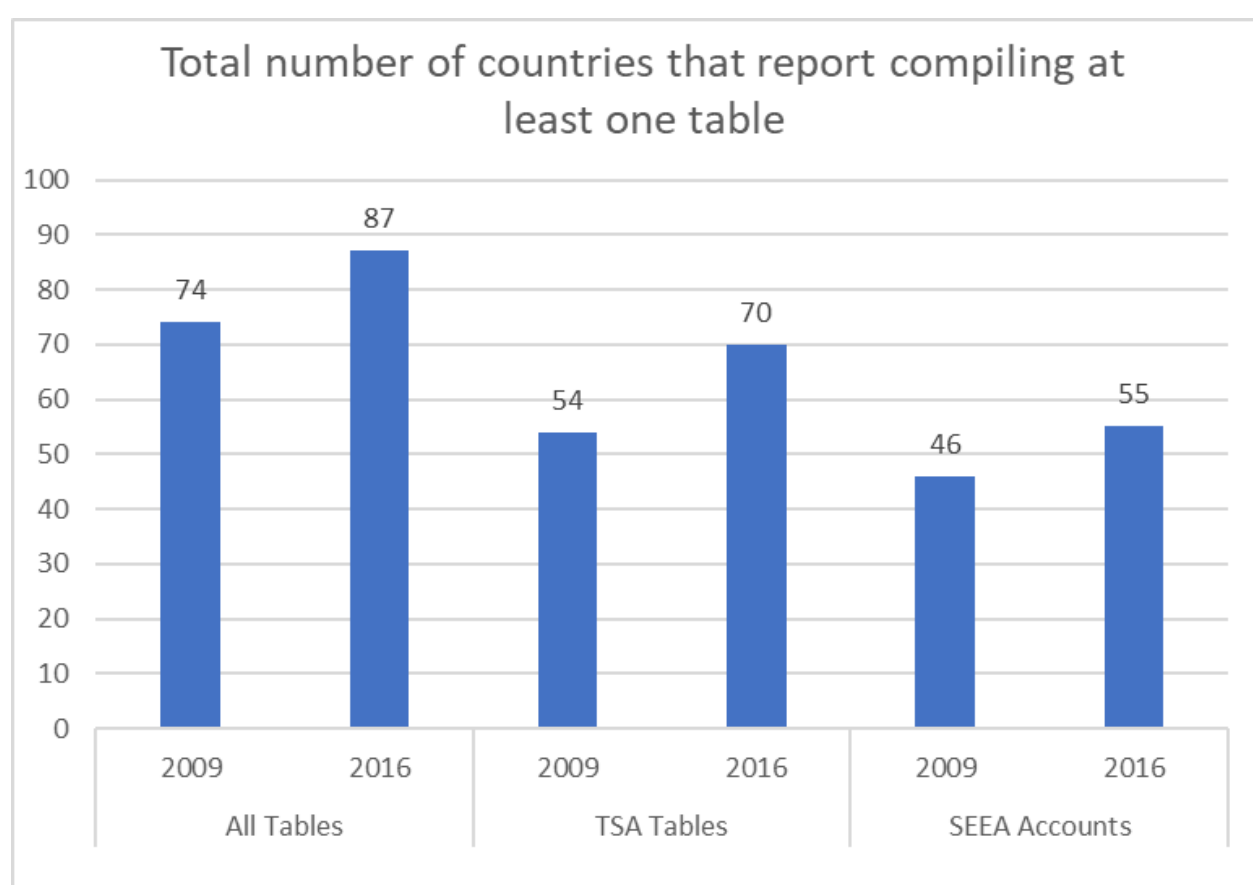
In 2019, UNWTO collected for the first time data on indicator 12.b.1. After the second cycle of data collection in 2020, data is now available for 156 countries. The number of countries with data on TSA and SEEA for the reference year 2016 has increased when compared with 2009. While there are TSA tables for 54 countries for the reference year 2009, there are 70 countries that have compiled TSA tables for 2016. Similarly, 46 countries have compiled SEEA accounts relevant to the MST for the year 2009, with this value increasing to 65 countries for 2016.

In addition, those countries that compile tables seem to be compiling an increasing number on average for more recent reference years, and therefore present more complete accounts. Member States that reported implementing TSA for 2009 compiled an average 5.2 core tables (out of 7), while this average increased to 5.6 among countries that compiled TSA tables for 2016. Similarly, these averages increased from 1.7 SEEA accounts (out of 4) for 2009 to 2.3 for 2016.

At the regional level, Sub-Saharan Africa and Western Asia and Northern Africa show the lowest proportions of countries that have these monitoring tools in place, with about 25 percent reporting countries in these regions compiling TSA tables and less than 10 percent compiling SEEA accounts. Central and Southern Asia also shows low values with 11 and 32 percent respectively. Implementation of TSA seems to be relatively advanced in certain parts of the world, especially in Australia and New Zealand, Eastern and South-Eastern Asia, Northern America and Europe and, to a lesser extent, Latin America and the Caribbean.

In general, the collected data show that the availability of TSA and SEEA data has significantly increased at the global level since 2009, showcasing the efforts of Member States. This can be considered a positive development in the potential for measuring the sustainability of tourism. However, there is still room for improvement, as only 56 and 47 percent of responding countries reported compiling at least one TSA table and SEEA account respectively. In addition, while TSA and SEEA can provide valuable data on the economic and environmental aspects of tourism, there are also important social considerations in the sustainability of tourism which are not captured through these tools. Measuring tourism in its economic, social and environmental dimensions is especially relevant in the aftermath of the COVID-19 global crisis, for the monitoring of a sector that has been highly impacted and that aims to restart in a more sustainable manner.

Figure 1. Implementation of TSA and SEEA at the global level, 2009 vs 2016



Additional resources, press releases, etc. with links:

- Measuring the Sustainability of Tourism: <https://www.unwto.org/standards/measuring-sustainability-tourism>
- Statistical Framework on MST: <https://www.unwto.org/standards/statistical-framework-for-measuring-the-sustainability-of-tourism>

- Pilot experiences on MST: <https://webunwto.s3.eu-west-1.amazonaws.com/s3fs-public/2020-09/Experiences-from-pilot-studies-in-Measuring-the-Sustainability-of-Tourism.pdf>
- https://www.unwto.org/standards/studies_experiences
- Tourism data: <https://www.unwto.org/tourism-statistics-data>
- SDG data for targets 8.9 and 12.b: <https://www.unwto.org/statistic-data-economic-contribution-of-tourism-and-beyond>

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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 declined in 2019, and likely saw a drastic fall in 2020 due to the pandemic and oil price shock – but continued support means countries missing opportunities to Build Back Better.

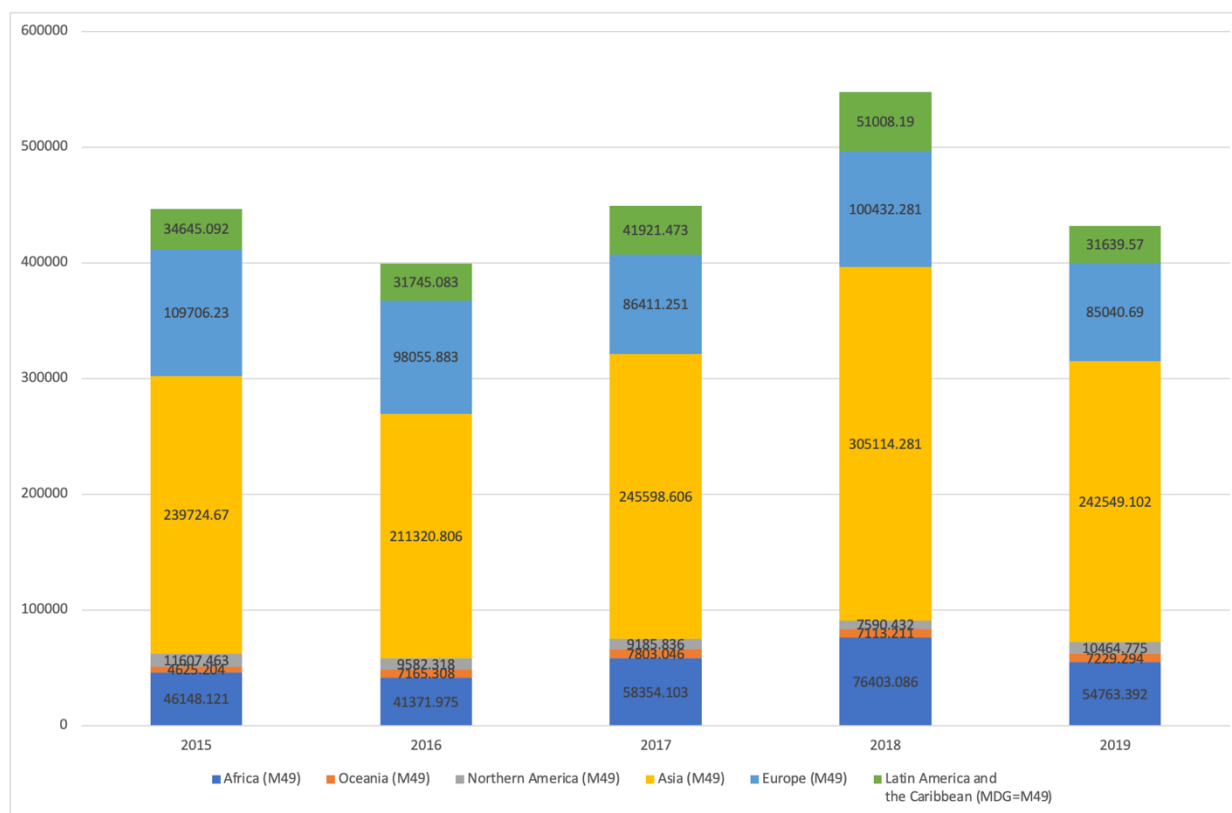
Fossil fuel subsidies declined in 2019 after two years of increase. Although this is encouraging, the amounts spent on supporting fossil fuel investments is incompatible with progress towards Agenda 2030 and higher ambition NDC objectives. Globally, the amount of fossil fuel subsidies declined by USD 115 billion in the year 2019 - a decline of ~21% (from 2018).

Even though the estimates for 2020 are not yet final, it is likely that fossil fuel subsidies will have fallen sharply – possibly to the lowest amount in 5 years. This would have been largely owing to some key factors. One likely factor would have been the demand disruptions caused by COVID-19, leading to plunging demand for fossil fuels, and a decline in the market-based fossil fuel prices. An example of severe demand disruption was the heavy reduction in transport activities worldwide. The oil price shock of 2019, during which WTI prices/barrel fell below zero, also lowered the opportunity cost for subsidy reforms. However, the SDG 12c1 indicator data for 2020 (as a proportion of GDP) can be expected to see a smaller decline due to a simultaneous decline in the GDP for almost every country in the last year.

While many countries have used the opportunity of lower fuel prices in the past two years to press for reforms to try to phase out these subsidies, the progress remains uneven and unaligned with commitments to build back better. Fossil fuel prices have by and large recovered to pre-pandemic levels by February 2021 and with the decline in renewable energy prices (e.g. solar energy becoming the cheapest source of electricity in history in some parts of the world (IEA, 2020)), continued support for fossil fuel subsidies is an unnecessary fiscal burden for countries, and a contributor to health risks, mortality and inequality for citizens, at a time when resources are scarce for investing in COVID-19 recovery spending.

UNEP will be conducting regional workshops throughout 2021 to develop and strengthen country reporting capacity on SDG 12c1 indicator

Global fossil fuel subsidies USD (2015-19, by region)



Progress analysis: [See progress chart](#)

Additional resources, press releases, etc. with links:

- IEA Database - <https://www.iea.org/topics/energy-subsidies>
- OECD Database - <https://www.oecd.org/fossil-fuels/data/>
- IMF Database - <https://www.imf.org/en/Data>
- IEA (2020), WEO - <https://www.iea.org/reports/world-energy-outlook-2020>

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