



EXECUTIVE SUMMARY

OVERVIEW

Since its inception in 2018, *Tracking SDG 7: The Energy Progress Report* has become the global reference point for information on the realization of SDG 7. It is produced annually by five of the custodian agencies responsible for tracking global progress toward Sustainable Development Goal 7 (SDG 7), which is to “ensure access to affordable, reliable, sustainable, and modern energy for all.” The custodians developing the report are the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA), the United Nations Statistics Division (UNSD), the World Bank, and the World Health Organization (WHO).

The report offers the international community a global summary of progress on energy access, energy efficiency, renewable energy, clean cooking, and international cooperation to advance SDG 7. It presents updated statistics for each of the indicators and provides policy insights on priority areas and actions needed to spur further progress on SDG 7, as well as related SDGs. Figure ES.1 offers an updated snapshot of the primary indicators for the most recent year.

Despite some progress across the indicators, the current pace is not adequate to achieve any of the 2030 targets. As in previous years, rates of progress vary significantly across regions, with some regions making substantial gains and some slowing their progress or even moving backward. Among the major economic factors impeding the realization of SDG 7 globally are the uncertain macroeconomic outlook, high levels of inflation, currency fluctuations, debt distress in a growing number of countries, lack of financing, supply chain bottlenecks, tighter fiscal circumstances, and soaring prices for materials. The effects of the COVID-19 pandemic and the steady rise in energy prices since summer 2021 are expected to be a further drag on progress, particularly in the most vulnerable countries and those that were already lagging behind.

Although certain policy responses to the global energy crisis appear likely to improve the outlook for renewables and energy efficiency, other necessary policy actions, as well as financial flows, continue to lag. This particularly concerns lacking universal access to electricity and clean cooking in developing economies, with projections indicating that SDG 7 will not be reached by 2030.

This year marks the mid-point of the implementation of the UN 2030 Agenda for Sustainable Development. The picture on progress since the adoption of the Agenda in 2015 is mixed. Target 7.1 on ensuring universal access to affordable, reliable, and modern energy services is off track, with an estimated 675 million people still without access to electricity and 2.3 billion without access to clean cooking in 2021. Current trends suggest that the world’s shot on the target will fall very wide of the mark in 2030.

The uptake of renewable energy (target 7.2) has grown since 2010, but efforts must be scaled up to substantially increase the share of renewables in total final energy consumption. Likewise, despite steady progress, the rate of improvement in energy efficiency (target 7.3) is not on track to double by 2030, with the current trend of 1.8 percent falling short of the targeted increase of 2.6 percent each year between 2010-2030. To make up for the lack of progress, improvements would need to accelerate further from now to 2030.

Finally, progress on target 7.a—to increase international public financial flows supporting clean energy in developing countries—began to decline even before the onset of the COVID-19 pandemic, with financial resources more than a third lower since 2020 than the average of the previous decade (2010-19). As financial flows have contracted for the third year in a row, they have become increasingly concentrated in a small number of countries. The decreasing trend in international public financial flows may delay achievement of SDG 7, especially for the least-developed countries (LDCs), landlocked developing countries, and small island developing states.

FIGURE ES.1 • Primary indicators of global progress toward the SDG 7 targets

	INDICATOR	2010	LATEST YEAR
	7.1.1 Proportion of population with access to electricity	1.1 billion people without access to electricity	675 million people without access to electricity (2021)
	7.1.2 Proportion of population with primary reliance on clean fuels and technology for cooking	2.9 billion people without access to clean cooking	2.3 billion people without access to clean cooking (2021)
	7.2.1 Renewable energy share in total final energy consumption	16% share of total final energy consumption from renewables	19.1% share of total final energy consumption from renewables (2020)
	7.3.1 Energy intensity measured as a ratio of primary energy and GDP	5.53 MJ/USD primary energy intensity	4.63 MJ/USD primary energy intensity (2020)
	7.a.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems	11.9 USD billion international financial flows to developing countries in support of clean energy	10.8 USD billion international financial flows to developing countries in support of clean energy (2021)

ACCESS TO ELECTRICITY (SDG INDICATOR 7.1.1)

Recent progress is not on track to reach universal access by 2030. Globally, access to electricity grew by an annual average of 0.7 percentage points between 2010 and 2021, **rising from 84 percent of the world's population to 91 percent**. The number of people without electricity almost halved during the period, from **1.1 billion in 2010 to 675 million in 2021**. The pace of annual growth slowed during 2019-21 to 0.6 percentage points.

To bridge the gap, especially for people living in poor and remote regions, the annual rate of growth in access must be 1 percentage point per year from 2021 onward—almost twice the current pace. If no additional efforts and measures are put in place, some 660 million people, mostly in Sub-Saharan Africa, would still be unserved in 2030 (IEA 2022a). Policies for energy access should demonstrate political commitment and maximize the socioeconomic benefits of access, keeping the most vulnerable populations at the forefront of efforts to close the access gap.

CLEAN COOKING SOLUTIONS (SDG INDICATOR 7.1.2)

The global population lacking access to clean cooking fell from **2.9 billion in 2010 to 2.3 billion in 2021**, but the goal of universal access by 2030 remains elusive: some **1.9 billion people would still be without access to clean cooking in 2030**. If current trends continue, almost six out of ten people without access to clean cooking in 2030 would reside in Sub-Saharan Africa.

With the ongoing impact of COVID-19 and soaring energy prices, the IEA estimates that 100 million people who recently transitioned to clean cooking may revert to using traditional biomass (IEA 2022a). Eastern Asia and Latin America and the Caribbean were the only regions to sustain progress in access to clean cooking between 2019 and 2021 (ESMAP 2022). Unless efforts are rapidly scaled up today, polluting cooking fuels and technologies will continue to claim millions of lives each year while perpetuating gender inequity, deforestation, and climate damage. Integrating clean cooking into broader energy planning, improving affordability, and devising better delivery mechanisms are some of the key policy levers to drive clean cooking. If such efforts are paired with sustained financing at an adequate level, the world can get back on track to making clean cooking a reality for all.

RENEWABLE ENERGY (SDG INDICATOR 7.2.1)

Universal access to affordable, reliable, sustainable, and modern energy depends on faster deployment of renewable energy in electricity, heat, and transport. But unless the pace quickens, the share of renewable energy in total final energy consumption (TFEC) will remain sluggish. **In 2020, the share of renewable energy in TFEC stood at just 19.1 percent** (or 12.5 percent if traditional use of biomass is excluded), not much more than the 16 percent a decade earlier.

If the world is to be on track to limit the temperature rise to less than 1.5°C throughout the century, the share of renewables must reach 33–38 percent by 2030 (In the power sector, renewables would need to account for 60–65 percent of electricity generation.). Much greater effort is needed to increase the use of renewables in transport and heating, both directly (through the use of bioenergy, solar thermal and geothermal, and ambient heat) and indirectly (through electrification), while progressing on energy conservation.

Enhancing renewables-based electricity supply in developing countries deserves particular attention. Positively, developing countries saw a record-breaking renewable capacity growth in 2021 (+9.8 percent year-on-year), with cumulative installations reaching 268 watts per capita. Yet this growth is unevenly distributed, and further action is required in the least developed countries.

ENERGY EFFICIENCY (SDG INDICATOR 7.3.1)

SDG target 7.3 calls for doubling the global rate of improvement in energy intensity over the average rate during 1990–2010—which means improving energy intensity by 2.6 percent per year between 2010 and 2030.¹ **Yet progress between 2010 and 2020 averaged only 1.8 percent.** To make up for lost ground, improvement in energy intensity **must now exceed 3.4 percent globally from 2020 to 2030**—twice the rate achieved in the past decade. An even greater improvement would be needed to be on track to limit the end-of-century temperature rise to less than 1.5°C.

The needed improvements will require more aggressive efficiency mandates—including bans on the sale of the most inefficient equipment—and codes requiring that new buildings meet net-zero standards.

INTERNATIONAL PUBLIC FINANCIAL FLOWS (SDG INDICATOR 7.A.1)

International public financial flows in support of clean energy in developing countries began to drop before the onset of the COVID-19 pandemic and continued to fall through 2021. **In 2021, these flows amounted to USD 10.8 billion, an 11 percent drop from 2020**, 35 percent less than the 2010–19 average and only about 40 percent of the 2017 peak of USD 26.4 billion. Commitments remain heavily concentrated in a handful of countries. It is expected that the downward trend in public investments continued in 2022. Data released in 2022 and 2023 will provide a clearer picture of the effects on public financial flows of the energy crisis in Europe sparked by the war in Ukraine.

While there is no quantitative target for this indicator, IEA and IRENA scenarios estimate that staying in line with international climate and energy goals requires annual investments in renewable electricity generation and related infrastructure of USD 1.4–1.7 trillion through 2030. Investments will be needed not only in technologies, but also in policy interventions and international cooperation. Although the private sector finances most renewable energy investments, the public sector remains a critical source of finance, particularly for many developing countries. Overall, redirecting investments from fossil fuels, increasing aid commitments, introducing structural reforms in international public finance, innovating funding mechanisms, and improving the transparency of commitment reporting are all necessary steps.

As the path to realizing SDG 7 and related SDGs by 2030 narrows, the SDG 7 custodian agencies also emphasize the need for stronger and more tangible commitments to close the gaps in access to electricity and clean cooking fuels and technologies; the need for a fundamental transformation of the global energy system as a precondition for sustainable development and global energy security; and the importance of international cooperation and financing to deliver on the vast promise of the energy transition.

Continued improvements on data and the tracking of global SDG 7 targets will be critical to ensure evidenced-based decision and policy making. The custodians will further enhance the global dashboard now freely accessible online and continue to refine this annual report, which has strengthened institutional, organizational, and sectoral collaboration.² Results emerging from the joint work of the custodians have included joint publications (including analytical guidebooks), capacity-building actions, and coordinated dissemination efforts.

1 Energy intensity is the ratio of the total energy supply to the annual GDP created—in essence, the energy used per unit of wealth created.

2 The global dashboard is available online here: <https://trackingsdg7.esmap.org/>

The custodian agencies further urge the international community and policy makers to safeguard the gains made toward achieving SDG 7; to advance structural reforms to overcome obstacles to action on affordable, reliable, sustainable, and modern energy for all; and to maintain a strategic focus on the vulnerable countries needing the most support.

The remainder of this summary is devoted to the major SDG 7 target areas: access to electricity, access to clean fuels and technologies for cooking, renewable energy, energy efficiency, and international public financial flows to developing countries in support of clean energy.