



SDG 7: Ensure Access to Affordable, Reliable, Sustainable, And Modern Energy for All

Introduction

Affordable and Clean Energy (SDG 7) seeks to ensure universal access to reliable, sustainable, and modern energy by 2030. Its key objectives include expanding energy access, increasing the share of renewables, and accelerating improvements in energy efficiency. Energy

access is essential for economic growth, poverty reduction, and progress toward other Sustainable Development Goals.

Key Components

SDG 7 aims to ensure access to affordable, reliable, sustainable, and modern energy for all by 2030, focusing on three core targets: universal electricity and clean cooking access (Target 7.1), significantly increasing the renewable energy share (7.2), and doubling energy efficiency improvements (7.3). Key enabling components include enhanced international cooperation, increased investment, and advanced infrastructure.

- **Universal Energy Access:** Ensure affordable, reliable, and modern energy services for all by 2030, including electricity and clean cooking solutions.
- **Renewable Energy Expansion:** Substantially increase the share of renewable sources—such as solar, wind, and hydro—in the global energy mix.
- **Energy Efficiency:** Double the global rate of improvement in energy efficiency by 2030 to reduce consumption.
- **Infrastructure Development:** Upgrade and expand energy infrastructure, including smart and decentralised grids, with a focus on developing regions.
- **Global Cooperation:** Strengthen international collaboration, investment, and technology transfer to advance clean energy research and deployment.
- **Clean Energy Investment:** Promote investment in sustainable energy systems and phase out inefficient fossil fuel subsidies.

Challenges and Progress

Progress on SDG 7 (affordable and clean energy) is uneven, with global electricity access rising to 91% by 2023 but missing the 2030 universal access target. While renewables grew to 30% of electricity generation, significant challenges include 685 million people still lacking electricity (mostly in Sub-Saharan Africa), 2.1 billion relying on polluting cooking fuels, and slow energy efficiency improvements.

- **Electricity Access:** Global access reached 92% in 2023, up from 87% in 2015, though progress has slowed.
- **Renewable Energy:** The share of renewables in global energy consumption continues to rise, driven by significant solar and wind investments in China, the EU, and the US.
- **Clean Cooking:** Access to clean cooking fuels grew by 16% between 2015 and 2023, but lags behind electricity access.
- **Decentralised Solutions:** Off-grid renewable systems are closing energy gaps in remote regions, particularly in sub-Saharan Africa.
- **Electricity Access:** Sub-Saharan Africa remains the primary challenge, with over 80% of those without electricity living in the region.
- **Clean Cooking:** 2.3 billion people still lack access to clean cooking solutions, causing severe health impacts, particularly for women and children.
- **Energy Efficiency:** Global efficiency improvements have stagnated at 1.3% annually (2010-2021), far below the 2.6% target for 2030.
- **Financing:** Limited investment in developing economies hampers progress, as only a small share of global energy funding reaches these regions.
- **External Crises:** COVID-19, the war in Ukraine, and other disruptions have further delayed advancements in vulnerable countries.
- **Overall Pace:** Current progress is insufficient to meet any SDG 7 targets by 2030.

Targets and Indicators

Target	Indicator
7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services	7.1.1 Proportion of population with access to electricity
	7.1.2 Proportion of population with primary reliance on clean fuels and technology
7.2 By 2030, increase the share of renewable energy in the global energy mix	7.2.1 Renewable energy share in the total final energy consumption
7.3 By 2030, double the global rate of improvement in energy efficiency	7.3.1 Energy intensity measured in terms of primary energy and GDP

7. A By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	7.A.1 International financial flows to developing countries in support of clean energy research and development and renewable energy production, including in hybrid systems
7. B By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	7.B.1 Installed renewable energy-generating capacity in developing and developed countries (in watts per capita)

SDG 7 and the UNEP Medium-Term Strategy (MTS) 2026-2029

The [UNEP Medium-Term Strategy \(MTS\)](#) addresses [SDG 7 \(Affordable and Clean Energy\)](#) by accelerating the global transition to renewable energy and improving energy efficiency to combat climate change. The strategy focuses on decarbonising the energy sector, increasing renewable energy shares, and promoting sustainable infrastructure, directly supporting the 2030 Agenda for sustainable development.

Key Aspects of the 2026-2029 Strategy regarding SDG 7:

- **Decarbonization Pathways:** The strategy aims to reduce the carbon intensity of energy systems, addressing the fact that energy is the dominant contributor to climate change.
- **Integrated Solutions:** UNEP supports national, country-led actions to increase renewable energy (solar, wind, geothermal) and improve energy efficiency to meet the 2030 targets.
- **Sustainable Infrastructure:** Efforts are focused on investing in modern, sustainable energy infrastructure to ensure universal access to reliable and clean energy.

- **Action Areas:** The strategy addresses the urgent need to transition away from fossil fuels, supporting the global goal of doubling the rate of energy efficiency improvements.

The 2026-2029 strategy strengthens the 2022-2025 framework, positioning UNEP to facilitate rapid, science-based, and inclusive energy transitions.

Relevant linkages with other SDGs

SDG 7 (Affordable and Clean Energy) is a critical enabler for the 2030 Agenda, with deep interlinkages to nearly all other SDGs. It is most directly linked to poverty reduction (SDG 1), health (SDG 3), gender equality (SDG 5), sustainable cities (SDG 11), and climate action (SDG 13), where clean energy drives economic growth, improves living standards, and reduces emissions.

Key interlinkages include:

- **SDG 1 (No Poverty) & SDG 8 (Decent Work)**: Access to reliable energy powers businesses, creates jobs, and boosts economic productivity.
- **SDG 3 (Good Health and Well-being)**: Clean cooking fuels reduce indoor air pollution, improving health outcomes, while electricity powers hospitals.
- **SDG 4 (Quality Education)**: Electricity enables lighting, technology, and internet access in schools.
- **SDG 5 (Gender Equality)**: Clean energy reduces the time women and girls spend collecting firewood, allowing for education and economic activities.
- **SDG 6 (Clean Water and Sanitation)**: Energy is required for water pumping, treatment, and purification.
- **SDG 11 (Sustainable Cities)**: Modern, renewable energy solutions are essential for sustainable urban infrastructure.
- **SDG 13 (Climate Action)**: Transitioning to renewable energy and improving efficiency is central to reducing greenhouse gas emissions.

Key Science Reports for SDG 7

Key scientific and tracking reports for Sustainable Development Goal (SDG) 7—Affordable and Clean Energy—are primarily produced by a consortium of custodian agencies, including the International Energy Agency (IEA), International Renewable Energy Agency (IRENA), United Nations Statistics Division (UNSD), [World Bank](#), and [World Health Organization \(WHO\)](#).

The most crucial, recurring, and recent reports include:

- **Tracking SDG 7: The Energy Progress Report (2024 & 2025 Editions)**: This is the definitive global reference for monitoring progress on electricity access, clean cooking, renewable energy, and energy efficiency.

- *Key Findings (2025)*: Global electricity access reached 92% in 2023, but 666 million people still lack it, with 85% of that deficit in Sub-Saharan Africa. The report highlights the need to triple renewable energy capacity and double energy efficiency improvements by 2030.
- **The Sustainable Development Goals Report (2024 & 2025)**: Produced by the UN Department of Economic and Social Affairs (UN DESA), this annual report provides an overarching analysis of SDG 7 progress, highlighting that improvements are insufficient to meet 2030 targets.
- **SDG 7 Policy Briefs (2024 & 2025)**: These reports highlight the intersectionality of energy with other SDGs, focusing on gender equality (SDG 5), health (SDG 3), and the specific needs of least developed countries (LDCs), landlocked developing countries (LLDCs), and small island developing States (SIDS).
- **Tracking SDG 7 - The Energy Progress Report - Analysis (IEA)**: Specifically focuses on the acceleration of renewable energy in the power sector and the challenges in the heat and transport sectors.
- **SEforALL (Sustainable Energy for All) Reports**: These provide detailed data on "last-mile" electrification and the role of decentralised renewable energy (DRE) in bridging access gaps.

Funding SDG 7

Financing SDG 7 (Affordable and Clean Energy) requires an estimated **\$4.2-4.5 trillion annually** in energy-transition-related investments by 2030, with a critical need to increase flows to developing economies. Key requirements include mobilising private capital via blended finance, scaling up decentralised renewable solutions (solar mini-grids), and strengthening policy frameworks to reduce investment risks.

Key areas for financing SDG 7 include:

- **Bridging the Investment Gap**: While global clean energy investment exceeded \$1.7 trillion in 2023, only 15% reached emerging and developing economies (excluding China), necessitating a massive shift in capital.
- **Blended Finance & Risk Mitigation**: Using public and philanthropic, or concessional, capital to reduce risks and attract private sector investment is crucial.
- **Decentralised Solutions**: Significant funding is needed for off-grid, solar mini-grids, and clean cooking solutions to achieve universal access, especially in sub-Saharan Africa.
- **Innovative Instruments**: Utilising green bonds, debt-for-nature swaps, and leveraging African pension/sovereign wealth funds can unlock necessary capital.
- **Capacity Building**: Strengthening regulatory frameworks to create an enabling environment for energy infrastructure projects.

To accelerate, financial support must focus on overcoming high capital costs, promoting energy efficiency, and expanding infrastructure in low-resource settings.

SDG 7 and the Just Transition

[SDG7](#) contributes to a just transition by ensuring that the shift to sustainable energy is equitable, affordable, and inclusive, aiming for universal access to modern energy, clean cooking, and renewable technology by 2030. It facilitates a "leave no one behind" approach, reducing energy poverty, creating green jobs, and protecting vulnerable populations from health risks associated with traditional fuels.

Key ways SDG7 contributes to the just transition:

- **Universal Access and Equity:** Focuses on bringing electricity to the roughly 660 million people currently without access, ensuring that the transition does not neglect vulnerable or underdeveloped regions.
- **Clean Cooking Solutions:** Addresses the health impacts of burning traditional fuels for 1.8 to 2.1 billion people, aiming to improve health, particularly for women and children.
- **Economic Opportunity:** Promotes the creation of new, sustainable jobs in the renewable energy sector, facilitating a transition for workers from traditional, carbon-intensive industries.
- **Affordability and Reliability:** Emphasises that energy transitions must not make energy unaffordable for low-income households, which is crucial for a socially just transition.
- **Environmental Justice:** Reduces harmful emissions and pollution by increasing the global renewable energy mix, providing cleaner air and reduced health risks for marginalised communities.
- **Technology Transfer and Finance:** Encourages investment and technology sharing to help developing nations leapfrog to cleaner energy sources, supporting both climate and development goals.

By accelerating these actions, SDG7 serves as a cornerstone for a net-zero future that is equitable, addressing both climate change and social inequality.

UN Energy and Partnerships and Commitments

UN Energy: UN-Energy was established by the UN System Chief Executives Board for Coordination (CEB) in 2004 as the United Nations' mechanism for inter-agency collaboration in energy.

To accelerate the achievement of the 2030 Agenda for Sustainable Development and the Paris Agreement, countries are increasingly adopting sustainable energy solutions, embarking on an energy transition by creating enabling conditions that catalyse public and private investment to scale up action on energy access, renewable energy, and energy efficiency. By making their energy sectors more sustainable, their economies can follow a more equitable growth path, contributing to poverty eradication, combating climate change, and increasing resilience.

As there is no single entity in the United Nations system that has sole responsibility for energy, UN-Energy's principal mission is to serve as the primary agent within the UN for promoting system-wide collaboration on energy-related issues.

Specifically, UN-Energy aims to:

- Promote coherence in the UN system's multi-disciplinary response to achieve SDG7 in support of the 2030 Agenda and the Paris Agreement;
- Enhance coordination and collaborative actions within the United Nations with regard to policy development, implementation, and knowledge sharing in the area of energy.

Partnerships and Commitments: The delivery of each Sustainable Development Goal and its targets cannot be achieved solely by governments. In 1992, the UN Earth Summit identified nine stakeholder groups to help implement its outcomes, and that approach was further developed at the World Summit on Sustainable Development in 2002 and at Rio+20 in 2012.

For the Sustainable Development Goals, we saw an acceleration of multi-stakeholder partners. You can find over 1000 partnerships registered in the [SDG database here](#). The [SDG Report on SDG 7 progress is here](#).

SDG 7 partnerships focus on advancing universal access to sustainable energy through international cooperation, investment in clean energy infrastructure, and multi-stakeholder collaboration. Key priorities include expanding renewable energy, improving energy efficiency, and delivering modern energy services, particularly in developing and least developed countries and small island states. Notable initiatives include the [UN Global Compact](#), the [UN-Energy Plan of Action](#), and the [SDG 7 Partnership Exchange](#).

Examples of SDG 7 partnerships:

- **First Movers Coalition:** A partnership led by the U.S. Special Presidential Envoy for Climate and over 65 global businesses, which has committed to buying green technologies to help decarbonise industries like cement and concrete.
- **Renewable Energies in Latin America and the Caribbean (RELAC):** An initiative involving around 14 countries and stakeholders to increase renewable energy generation to 70% in the region.
- **Global Alliance for Clean Cookstoves:** This partnership brings together governments, NGOs, and businesses to accelerate the adoption of clean cooking solutions globally.

- **Sustainable Fashion Collective**: Provides online educational resources and expert advice for businesses to build more responsible and sustainable fashion operations, working with partners like Offset Warehouse and Conscious Fashion and Lifestyle Network
- **Youth employment and entrepreneurship**: Partnerships between organisations like the UN and AIESEC aim to increase youth engagement in sustainable development by providing skills development, promoting youth-led entrepreneurship, and creating professional opportunities in sectors like clean energy.
- **The 2030 Agenda Partnership Accelerator**: Provides research and capacity development to help stakeholders create and implement effective partnerships for the SDGs, including those related to clean and affordable energy.

Key events for Energy in preparation for the 2027 High-Level Review of the SDGs

February 24-27: HLPF regional meeting Asia-Pacific (ESCAP Bangkok, Thailand)

March 3-6: UN Statistical Commission

March 31-2 April: HLPF regional meeting Western Asia (ESCWA Beirut, Lebanon - tentative)

April 13-17: HLPF regional meeting Latin America and the Caribbean (ECLAC Santiago, Chile)

April 21-22: HLPF regional meeting Europe and Central Asia (UNECE Geneva, Switzerland)

April 28-30: HLPF regional meeting Africa (ECA Kampala, Uganda)

May 6-7: 11th Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals.

July 6-15: UN High-level Political Forum on Sustainable Development

The theme of the HLPF will be “Transformative, equitable, innovative and coordinated actions for the 2030 Agenda for Sustainable Development and its Sustainable Development Goals for a sustainable future for all”. The 2026 HLPF, with full appreciation for the integrated, indivisible and interlinked nature of the Sustainable Development Goals, will conduct in-depth reviews of: SDG 6. Ensure availability and sustainable management of water and sanitation for all; SDG 7. Ensure access to affordable, reliable, sustainable and modern energy for all; SDG 9. Build resilient

infrastructure, promote inclusive and sustainable industrialisation and foster innovation; SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable; and SDG 17. Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development.

Previous key events

2018: Global SDG 7 Conference: Energising the 2030 Agenda - the Global SDG7 Conference

The 2018 Global SDG7 Conference aimed to prepare substantive inputs on the review of SDG7 during the HLPF in 2018. It facilitated the exchange of lessons, insights, and experiences to date among Member States and all stakeholders and enabled consideration of challenges and opportunities for furthering progress towards 2030. More specifically, it discussed:

- Trends and gaps toward the achievement of SDG7.
- Interlinkages between SDG7 and other SDGs.
- Means of implementation, including finance, capacity building and innovation.
- Key areas of opportunities for action by policy makers and all stakeholders on achieving SDG7 and leveraging its interlinkages with other SDGs in support of the 2030 Agenda.

The outcome document can be found [here](#).

2021: High-level Dialogue on Energy in 2021

This produced the Global Roadmap for Accelerated SDG 7 Action and Energy Compacts, which represent new commitments to achieving the goal.

2022 to now: Organised by UN Energy

There is an annual “Energy Now SDG 7 Action Forum” held around the annual UN General Assembly High-Level meeting every year.

2022 Action Forum focused on:

- sharing energy action commitments and solutions towards the achievement of SDG7 and net-zero emissions;
- reporting progress on Energy Compact commitments totalling over US\$600 billion to accelerate access and a just, inclusive energy transition; and
- learning the latest on trends, technologies and the impact of the global energy crisis.

The UN-Energy Highlights and the Energy Compacts Annual Progress Report are useful documents to review.

The 2023 Action Forum focused on: announcing new commitments, including new and strengthened Energy Compacts; discussing progress and next steps in implementing the UN-Energy Plan of Action Towards 2025; showcasing success stories and best practices; and strengthening multistakeholder dialogue in support of accelerated SDG7 action.

The annual progress to Energy Compacts can be read [here](#).

The 2024 Action Forum focused on sharing experiences and presenting initiatives for partnership and new initiatives that would accelerate progress to achieve SG 7.

The third edition of the Energy Compacts Annual Progress Report was launched by Damilola Ogunbiyi, the Special Representative of the UN Secretary-General for Sustainable Energy for All and co-chair of UN-Energy. The report shows that Compacts continue to grow in number and impact, with new commitments to boost renewable energy and increase access to electricity and clean cooking technologies by 2030, bringing the finance and investment pledged through the Energy Compacts to US\$1.4 trillion.

The M300 project, spearheaded by the World Bank and the African Development Bank to bring energy access to 300 million Africans by 2030. Ms. Ogunbiyi said that 129 projects had been identified in over 46 countries that would provide electricity to over 302 million people and urged all partners to support the initiative.

The 2025 Action Forum focused on how best to scale up innovative solutions and mobilise resources and partnerships to end energy poverty and advance a just energy transition, aiming to accelerate progress towards Sustainable Development Goal 7 (clean and affordable energy for all) and a net-zero future.

At the Forum, the annual progress report on the Energy Compacts was launched, showing how governments, businesses, foundations, and others are moving forward on their commitments by which they have pledged over \$1.4 trillion in finance and investment towards boosting renewables and energy access by the 2030 SDG target.