

Building better after COVID-19 and acting where we will have the greatest impact on the SDGs

Sustaining efforts to ensure access to sustainable energy

(Most closely related SDGs: SDG 7, SDG 12, SDG 13, and SDG 17)

Wednesday, July 8, 2020, 3:00 pm - 4:00 pm

Secretariat Background Note

Executive summary

Energy lies at the heart of both the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change. As governments worldwide tackle the impacts of the coronavirus pandemic, we must not lose sight of the critical need for an accelerated clean energy transition. Ensuring access to affordable, reliable, sustainable and modern energy for all by 2030 will open a new world of opportunities for billions of people through new economic opportunities and jobs, empowered women, children and youth, better education and health, more sustainable, equitable and inclusive communities, and greater protections from, and resilience to, climate change impacts.

Successes and challenges

Significant progress has been recorded in several SDG 7 targets. But progress has been uneven, and concerted action is needed to achieve SDG 7 by 2030.

In recent years, pronounced progress in expanding access to electricity was made in many countries. As a result, the global population without access to electricity decreased to about 789 million in 2018 from 1.2 billion in 2010, but we are not on track to reach our 2030 target of universal access. Those still lacking access are increasingly concentrated in Sub-Saharan Africa.

The widespread use of polluting fuels and technologies for cooking continues to pose serious health and socioeconomic concerns. In 2010, 56% of the global population enjoyed access to clean cooking solutions; by 2018, that share had risen to 63%. Yet over the past two decades, population growth has





outpaced growth in access, leaving 2.8 billion people without access. **Unless rapid action is taken, the** world will fall short of achieving universal access to clean cooking facilities by some 30%, and exposure to household air pollution will continue to cause millions of deaths.

Despite a growing share of modern renewables in the power sector, their deployment is lagging in end use sectors, particularly in transport (particularly international shipping and aviation), industry, heating and cooling. Renewable energy accounted for 17.3% of global total energy consumption in 2017. A substantial increase of renewable energy is needed for energy systems to become truly affordable, reliable, sustainable, and focused on modern uses.

Primary energy intensity (total primary energy supply per unit of gross domestic product), improved by 1.7% in 2017, bringing the annual gain for 2010–17 to 2.2%—far better than the progress observed for 1990–2010, when annual improvements averaged 1.3% but still below the original target rate of 2.6%. Achieving SDG target 7.3 for energy efficiency will require a rate of improvement in primary energy intensity of at least 3% per year between 2017 and 2030—a challenging proposition. Preliminary estimates suggest that the improvement rate in 2018 and 2019 continues to be lower than the required rate, thus requiring even stronger improvements to reach the goal.

Interlinkages, synergies and trade-offs

Achieving SDG 7 will catalyse actions to combat climate change and advance targets of the other SDGs, including: poverty eradication, gender equality, food security, health, education, sustainable cities and communities, clean water and sanitation, jobs, innovation, transport, and refugees and other situations of displacement. Special emphasis should be placed on mainstreaming gender considerations into all SDG-related energy actions, as well as climate change responses, and on promoting energy services for productive end uses to enhance development benefits.

Greenhouse gas emissions are in sharp decline due to the COVID-19 pandemic, however this trend is expected to reverse unless bold policies and decisive measures are put in place. Emissions were down worldwide due to a decline in economic activity. It is necessary to fully utilize lessons learned from implementing the COVID-19 containment measures, such as reduced travel, use of digital technologies instead of in-person meetings, and increased telecommuting, to design and introduce transformational climate-friendly and energy-saving working arrangements and lifestyles. Absent strong government





support for clean energy moving forward and for reducing fossil fuel subsidies the pandemic will not reverse the upward trajectory of global carbon emissions. We should make a concerted effort to demonstrate the value of renewables for post-crisis economic recovery.

Recommendations for action: Mechanisms and partnerships to accelerate progress

Maintaining and extending the pace of progress on SDG7 will require strong political commitment, long-term energy planning, scaled-up private financing and adequate policy and fiscal incentives. It will be crucial to prioritize and promote grid and off-grid electricity access solutions (including solar lighting, solar home systems, and mini- grids), clean cooking fuels and technologies, and productive uses of energy. In addition, current costly energy practices in humanitarian assistance will need to be addressed through concerted efforts to deliver sustainable energy solutions to those in need.

Investments must increase from US\$ 1.3 to 1.4 trillion per year in order to meet SDG 7 targets—a twofold increase from the current level. Investment is not currently spread equally, and is leaving out many developing countries, in particular least developed countries, landlocked developing countries and small island developing States. Enabling environments, integrated policies, de-risking instruments, direct financial incentives, and digital finance solutions are critical in all sectors. Multilateral frameworks to facilitate the scaling up of finance and investments for sustainable energy will be critical.

The rapid deployment of renewables, coupled with energy efficiency, can achieve most of the emission reductions and decarbonisation in the energy sector needed by 2050, while advancing economic growth and development. Updated Nationally Determined Contributions (NDCs) under the Paris Agreement due in 2020 should fully reflect countries' ambitious goals for renewable energy and energy efficiency. Decarbonisation of the world's energy systems and the attainment of SDG 7 targets, including ensuring universal access to modern energy, are mutually reinforcing and must be advanced simultaneously.

The potential benefits from the global energy transition will include greater peace and security by fostering more inclusive, climate-resilient and sustainable societies. The global energy transformation will have new and far-reaching geopolitical implications, which will need to be carefully managed. Developing effective, accountable and transparent institutions at all levels can help achieve the potential benefits of this transformation.





Strengthening international cooperation at all levels is critical to promote innovation, investment, enhanced cross-border connectivity, capacity building, South-South cooperation and synergetic actions to advance sustainable energy, climate change mitigation, environment protection and SDGs simultaneously. There is a need for strengthening international cooperation and dialogues on energy involving all stakeholders.

Digitalisation could fundamentally transform the global energy system by breaking down sectoral boundaries, increasing flexibility and enabling integration across systems. Well-designed policies are crucial to unlocking the full benefits of digitalisation in achieving SDG 7, while managing potential risks around security, privacy, and rebound effects.

Guiding questions

- How does/will the COVID-19 crisis and associated volatility in oil prices affect the energy sector?
- How can clean energy investments contribute to a better and stronger recovery from the COVID-19 pandemic?
- How do we deploy the four "levers" identified in the GSDR governance, economy and finance, science and technology, and individual and collective action – to accelerate the clean energy transition?
- How do we accelerate the clean energy transition, while expanding access to electricity, achieving progress on clean cooking and ensuring the increase in transport movements is sustainable?
- How can we mainstream decarbonization, decentralization and digitalization of energy systems into updated Nationally Determined Contributions to maximize synergies between the energy transition and climate action?





- What are the outstanding challenges, and best practices to mobilize finance for clean energy investments, in particular in particular least developed countries, landlocked developing countries and small island developing states?
- How do we advance the SDG Decade of Action through innovative and knowledge-based policies and partnerships? What affordable, reliable and gender-responsive energy solutions do frontier technologies offer?

