

# Background note<sup>1</sup>

# Sustainable Development Goal 7 and interlinkages with other SDGs

#### **Executive Summary**

Energy is key to accelerating sustainable development and averting ever-worsening climate disasters. It is still possible to achieve SDG7 by 2030, an essential step towards reaching net-zero emissions by 2050, and limiting the rise in global temperature to 1.5 degrees Celsius. However, progress on SDG7 is insufficient, and countries are far off-track in meeting energy promises and commitments. It is high time to step up -- to achieve universal access to energy and accelerate just and inclusive energy transitions, which will also create green jobs and economic opportunities, improve health and education, and empower women and young people, among many multiplier effects across the 2030 Agenda. Now must be the time for ambition and action. People and the planet simply cannot wait. We must:

Do what is needed immediately to provide everyone with access to electricity and clean cooking. Ensuring access to clean, decarbonized energy for all by 2030 must be an urgent political priority at all levels. Energy access is one of the areas of sustainable development which has the most co-benefits for other SDGs, thus playing a catalytic role for the entire 2030 Agenda. As the majority of people without access to electricity are located in LDCs and Sub-Saharan Africa, these should be at the centre of the international community's efforts.

Urgently accelerate just, inclusive and equitable energy transitions world-wide. Without deep energy decarbonization to achieve net-zero by 2050, the 1.5°C goal of the Paris Agreement will fall quickly out of reach. The deployment of renewable energy, however, is lagging, especially in transport, industry, heating and cooling, and global energy efficiency improvements must increase significantly. In fulfilling its key role in efforts towards achieving net-zero emissions, energy action must also ensure that it produces just and equitable outcomes, leading to prosperity for both people and planet while leaving no one behind, including vulnerable countries and groups.

**Triple investment flows for clean energy.** Global investment in renewable energy and energy efficiency needs to be tripled towards 2030. Shifting fossil fuel subsidies to renewables as well as putting a price on carbon will also be crucial in accelerating the energy transition. International cooperation must be

<sup>&</sup>lt;sup>1</sup> This background note draws substantially from an expert group meeting (EGM) held in New York on 11-12 May 2023 organized by the Division for Sustainable Development Goals of the UN Department of Economic and Social Affairs (UN-DESA/DSDG) in collaboration with UN-Energy, to discuss progress and challenges regarding SDG 7, share lessons learned including on synergies with other SDGs, and distil key recommendations on way forward. The meeting built on a variety of inputs resulting from the broader process of consultations, including Regional Sustainable Development Forums convened by the UN Regional Commissions, and thematic and multistakeholder consultations, such as the SDG7 Technical Advisory Group.

dramatically scaled up to catalyse the public and private finance and investment needed to accelerate energy transitions, especially for developing countries.

Boost the overall impacts of energy action by better capitalizing on the links between SDG7 and other Goals, and across the various SDG7 targets on energy access, efficiency, and renewables. SDG 7 is one of the goals which can produce particularly high co-benefits in other areas of sustainable development, bringing many more development synergies than trade-offs for vulnerable populations. At the same time, the achievement of SDG7 also depends on progress made towards other SDGs. These co-benefits do not come about automatically: they require cross-sectoral approaches at the level of policy, planning, and implementation.

Invest in transformative partnerships that can rapidly expand progress towards SDG 7. Achieving SDG 7 requires engagement of all stakeholders, and building trust and partnerships. The Energy Compacts have proven to be an effective mechanism for creating momentum and mobilising commitments towards the implementation of the Secretary-General's Global Roadmap for Accelerated SDG7 Action. The selection of the Energy Compacts as a High-Impact Initiative in the framework of the SDG Summit provides an opportunity to further strengthen partnerships among all stakeholders, increasing ambition, matchmaking, and tracking progress on commitments. UN-Energy must be further strengthened and must step up its efforts to increase cooperation among its member organizations as to enable the UN to take a leadership role in mobilizing global multistakeholder action, including through the Energy Compacts.

**Establish a permanent platform for intergovernmental dialogues on energy at the UN, with strong engagement of business, civil society, youth and other stakeholders.** The High-level Dialogue on Energy in 2021 has highlighted that intergovernmental cooperation on energy is not optional, it is a must. The lead up to the global stocktaking on SDG7 in 2024, which marks the completion of the UN Decade of Sustainable Energy for All, is a great opportunity to further strengthen intergovernmental cooperation. A fundamental prerequisite for such cooperation is a sustained, global dialogue on energy at the UN, including at the technical level, ensuring universality and inclusivity. Such a platform would be an important step towards strengthening inclusive and meaningful multilateral cooperation.

## Introduction

Energy lies at the heart of both the 2030 Agenda for Sustainable Development and the Paris Agreement on Climate Change. Ensuring access to affordable, reliable, sustainable and modern energy for all, as SDG 7 calls for, will open a new world of opportunities for millions of people through new economic opportunities and jobs, empowered women, children and youth, better education and health, food security, more sustainable, equitable and inclusive communities, and greater protection from, and resilience to, climate change.

In 2021, the High-level Dialogue on Energy resulted in the Global Roadmap for Accelerated SDG 7 Action which provides a guide for collective action on energy across sectors that transcends individual and piecemeal approaches and delivers scaled-up and broad impact. Importantly, the Roadmap also includes two sets of milestones for 2025 and 2030. The Dialogue also triggered some 200 Energy Compacts with voluntary commitments of over US\$600 billion into SDG 7. These achievements must now be used as the foundation for transformational change through just, inclusive and equitable energy transitions.

The 2023 High-level Political Forum (HLPF) will be the second time after 2018 that SDG 7 on affordable and clean energy will be under review. To support this review of SDG 7 at the HLPF, a global expert

group meeting (EGM) was convened by DESA, in collaboration with UN-Energy, to discuss progress and challenges regarding SDG 7, share lessons learned including on synergies with other SDGs, and distil key recommendations on way forward. The meeting built on a variety of inputs resulting from the broader process of consultations, including Regional Sustainable Development Forums convened by the UN Regional Commissions, and thematic and multi-stakeholder consultations, such as the SDG7 Technical Advisory Group.

#### Stocktaking and challenges

While much progress has been made since 2015, the world is clearly not on track for the achievement of SDG 7. The multiple interconnected global crises affecting energy in recent years are further narrowing the prospects of getting on track. Globally, 675 million people were still lacking access to electricity and 2.3 billion people did not have access to clean cooking fuels and technology in 2021.

While electrification has been identified as part of the only 12% of all SDG targets towards which substantial progress has been made, it is still far from being on track: 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. With regard to access to clean cooking, the prospects are particularly concerning: At the current rate of progress, 1.9 billion people would remain without access to clean cooking in 2030.

The share of renewables in the global total final energy consumption (TFEC) is growing only slowly, having reached 19.1% in 2020. 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 would need to reach 33–38% by 2030. Current growth rates, however, are still way off target.

In addition, the energy efficiency improvement rate hit a new low with 0.6% in 2020, which means that the average annual rate going forward would need to be 3.4% if the 2030 target is to be met. This is even more concerning, considering that an even greater improvement rate would be needed to be on track to limit the end-of-century temperature rise to less than 1.5°C.

Meanwhile, International public financial flows in support of clean energy in developing countries have continued their downward trend since peaking in 2017. In 2021, these flows amounted to USD 10.8 billion, an 11 percent drop from 2020.

## **Key Messages**

The discussions at the EGM yielded many informed and insightful recommendations in support of the SDG7 review at the HLPF 2023, including amongst others the urgent necessity to:

Do what is needed immediately to provide everyone with access to electricity and clean cooking. Ensuring access to clean, decarbonized energy for all by 2030 must be an urgent political priority at all levels. Energy access is one of the areas of sustainable development which has the most co-benefits for other SDGs, thus playing a catalytic role for the entire 2030 Agenda.

- As the majority of people without access to electricity are located in LDCs and Sub-Saharan Africa, these should be at the centre of the international community's efforts.
- Particular attention should be given to universal access to clean cooking on which only marginal progress has been made in recent years;
- Creating access to sustainable energy for people in displacement settings and migrants must be one of the priorities in ensuring that no one is left behind.

**Urgently accelerate just, inclusive and equitable energy transitions world-wide.** Without deep energy decarbonization to achieve net-zero by 2050, the 1.5°C goal of the Paris Agreement will fall quickly out of reach. The deployment of renewable energy, however, is lagging, especially in transport, industry, heating and cooling, and global energy efficiency improvements must increase significantly.

- Energy generation and use account for more than two thirds of global man-made greenhouse gas emission. Every decision and action made in the energy sector will have an impact on the prospects of climate action. This means that energy actions are the key to achieve net-zero emissions, and must always factor in its potential effects on efforts in this regard.
- It is necessary to create a better understanding and more awareness of the connections between energy and climate. This is essential for leveraging opportunities in addressing both SDG7 and net zero emissions, a climate resilient energy infrastructure, and the overall value of energy services for adapting societies to a changing climate.
- The energy sector is both vulnerable to climate change and key in improving adaptation and resilience. Making the connections between energy and climate more visible, including by quantifying impact in these areas, can lead to more synergies and accelerated overall progress.
- End-uses such as heating and cooling may increasingly require attention as they have a growing impact across the targets of SDG7 and with regard to net-zero emissions
- Increasing the rate of improvement in energy efficiency, which has actually been decreasing needs to be a priority.
- In fulfilling its key role in efforts towards achieving net-zero emissions, energy action must also ensure that it produces just and equitable outcomes, leading to prosperity for both people and planet while leaving no one behind, including vulnerable countries and groups.
- Creating better understanding of the concept of just, inclusive, and equitable energy transitions can contribute towards this objective.

**Triple investment flows for clean energy.** Global investment in renewable energy and energy efficiency should be tripled towards 2030. International cooperation must be dramatically scaled up to catalyse the public and private finance and investment needed to accelerate energy transitions, especially for developing countries.

- Efforts to counteract the global trend of declining investments into clean energy must priorities increasing financial flows to developing countries, particularly the LDCs and SIDS.
- Shifting fossil fuel subsidies to renewables as well as putting a price on carbon will be crucial in accelerating the energy transition.
- Energy action can have enormous positive impacts and benefits. Perceptions of risks for investment, on the other hand, are often exaggerated.
- Considering more wholistically the climate benefits, economic prosperity, health savings, and time savings that energy action often entails, may help all stakeholders, including finance ministries, to better understand the importance and opportunity of energy for overall development and sustainability.
- Developing, exploring, and applying diverse financing mechanism, using systemic financing approaches which tie together various partners and mechanisms (for example via leveraging interlinkages between and within SDGs), and promoting public-private partnerships can help immensely to secure the necessary resources in support of SDG 7.

- Financing mechanisms, approaches and commitments must provide the transparency to enable the identification of bottlenecks causing delayed disbursements and opportunities for further improvement, as well as for follow-up and verification.
- Securing the finance needed to achieve SDG7 also requires a careful examination of the respective political economies and understanding in which areas market-based approaches can work and in which areas they cannot.
- While the returns may not be immediate, it is vital to emphasize the long-term nature of energy investments and the need for consistent and significant investments to drive lasting change. This is especially important with regard to grid infrastructure which may not always yield direct returns.
- Governments must aim to create opportunities for investors and also closely examine their tax policies, subsidies and incentives with regard to their impacts in the energy sector. National budgets need to earmark funds for SDG7.
- This also calls for consistent and long-term country plans on achieving the targets of SDG7 which can also support efforts to reach net-zero emissions, including the NDCs.
- Long-term investments in particular require solid data. It is crucial to collect and analyse
  data, and track progress with more granularity to better understand both successful and
  unsuccessful experiences.
- This also requires sustained investment in country data systems, the promotion of digitalisation, and better use of AI and big data. A wider and more inclusive adoption of AI is needed in supporting energy management and optimization, renewable energy integration, demand-side management, energy access and affordability, energy efficiency and conservation, smart grid management, and efficient use of appliances.
- Capacity building in support of enabling policy environments and long-term national planning is key to attracting investment. Capacity-building and raising awareness of local financial institutions is also a prerequisite to leverage local capital.
- The dissemination of knowledge on viable business models can lead to strengthening local entrepreneurship, and further locally-driven innovation.

Boost the overall impacts of energy action by better capitalizing on the links between SDG7 and other Goals, and across the various SDG7 targets on energy access, efficiency, and renewables. SDG 7 is one of the goals which can produce particularly high co-benefits in other areas of sustainable development, bringing many more development synergies than trade-offs for vulnerable populations. At the same time, the achievement of SDG7 also depends on progress made towards other SDGs.

- Energy action co-benefits include, but are not limited to: poverty reduction, health, education, gender equality, clean water, agrifood systems, and employment.
- Co-benefits in these areas do not come about automatically: they require cross-sectoral approaches at the level of policy, planning, and implementation.
- Ensuring that energy access goes beyond household use only, rather leading to productive
  uses and raising availability of electricity to levels which can support industrial processes
  is key to generating self-sustaining dynamics in sustainable development.
- The interlinkages between the individual targets of SDG 7, such as, e.g., between electrification and clean cooking, also require more attention, for example, by promoting the mutually reinforcing benefits of electric cooking.
- People must be put at the centre and the design and implementation of solutions must go beyond the consideration of technology only. Understanding the situation and needs of

- people must shape the approach and solutions applied. Energy access must be sufficient and affordable enough to effectively address the specific needs of the end-users.
- There must be a focus on building capacity within communities which factors in the
  particularities of the specific social, cultural, economic and environmental context, which
  enables uptake and helps to ensure the sustained functionality of energy systems beyond
  just installation.
- This is also a safety issue, as there are lethal risks associated with electricity supply and management methods, such as unsafe wiring and lack of understanding of energy usage.
- In developed and developing countries alike, social innovation must be a key ingredient in efforts towards universal energy access and just, inclusive and equitable energy transitions.
- Gender equality and women's empowerment must be prioritized, including empowering women in the design, production and distribution of modern energy services, including for productive uses, as well as equal representation of women in decision-making process in the area of energy.
- Gender issues should be streamlined in international efforts to achieve SDG7. It is concerning in this regard that only 9% of Official Development Assistance for energy projects addresses gender equality.
- The engagement and empowerment of youth is key to accelerating and sustaining progress towards SDG7. This includes involvement of youth in decision-making and equipping the youth with the skills needed to build, maintain and manage the energy systems we need.
- Data must be further improved and transformed into useful metrics, including to better address dimensions of equity and justice, as to support fact-driven discussions on SDG7, policy-making, planning and market mechanisms.

**Invest in transformative partnerships that can rapidly expand progress towards SDG 7.** Achieving SDG 7 requires engagement of all stakeholders, and building trust and partnerships. The Energy Compacts have proven to be an effective mechanism for creating momentum and mobilising commitments towards the implementation of the Secretary-General's Global Roadmap for Accelerated SDG7 Action.

- This must span governments, cities and municipalities, the private sector, civil society, academia, youth, and indigenous people as drivers for progress.
- Building and improving on existing initiatives can help to jump-start broader coalitionbuilding.
- The selection of the Energy Compacts as a High-Impact Initiative in the framework of the SDG Summit provides an opportunity to further strengthen partnerships among all stakeholders, increasing ambition, matchmaking, and tracking progress on commitments.
- UN-Energy must step up its efforts to increase cooperation among its member organizations as to enable the UN to take a leadership role in mobilizing global multistakeholder action, including through the Energy Compacts.
- UN-Energy must strengthen and expand engagements with multi-stakeholders as to facilitate targeted technical exchanges and dialogues by all stakeholders in support of policy, implementation and dialogue. Its interactions with the SDG7 Technical Advisory Group (SDG7 TAG) should be further consolidated with a view to establishing theme-based task forces at the expert level.

• UN-Energy must be further strengthened and resourced as to elevate the role of the UN-system in efforts towards SDG7.

Establish a permanent platform for intergovernmental dialogues on energy at the UN, including at technical level with strong engagements of multi-stakeholders. Institutional cooperation on energy is not optional, it is a must. A fundamental prerequisite for such cooperation is a sustained, global dialogue on energy at the UN, ensuring universality and inclusivity.

• A platform for intergovernmental dialogues on energy at the UN would be an important step towards strengthening inclusive and meaningful multilateral cooperation.

#### **Proposed guiding questions**

The SDG7 review at the HLPF 2023 could address the following guiding questions, considering also the key messages provided:

- How can progress towards ensuring universal access to energy be accelerated in support
  of rescuing the SDGs? How can we mitigate and reverse the setbacks in achieving universal
  energy access caused by COVID-19 and the global energy crisis in recent years?
- How can the application of renewable energy solutions and energy efficiency measures be
  accelerated, to turbo-charge just, inclusive and equitable energy transitions in support of
  climate action and net-zero emissions?
- How can international cooperation and the flow of finance to developing countries in support of achieving SDG 7 be improved, including addressing the needs of the most vulnerable?
- How can we further strengthen intergovernmental dialogues and cooperation on energy, and leverage multi-stakeholder partnerships in support of achieving SDG 7, effectively bringing into the fold key stakeholders such as the private sector, civil society, youth and others?