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Sustainable Development Goal Progress Brief: Affordable and Clean Energy (SDG 7)

1. History of the Goal

The adoption of Sustainable Development Goal 7 (SDG 7) in 2015, which focuses on Affordable and Clean Energy, marked the start of the United Nations' 2030 Agenda for Sustainable Development. The target recognises that lack of access to affordable, reliable, sustainable and modern energy can be a barrier to overcoming poverty and a driver of climate change. This commitment to renewable energy, as noted above, combines decades of international dialogue beginning with the 1992 Earth Summit through the 2012 Rio+20 Conference that stressed the need for a transition away from fossil fuels. Sustainable Development Goal 7 was created to address the world's reliance on fossil fuels, which leads to greenhouse gas emissions and unsustainable environmental practices that disproportionately harm vulnerable populations. However, as of 2019, according to the International Energy Agency (IEA), approximately 759 million people still had no access to electricity, and more than 75% of those lived in sub-Saharan Africa (IEA, 2021). Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all. 2. How Progress Is Being Made Toward the Goal

2. Global and Local Progress Toward SDG 7

Progress on SDG 7 is developed at all levels from global, national and local levels. Two of the main solutions involve investing in renewable energy infrastructure and expanding decentralized energy solutions. They include: First, many countries and organizations focused on replacing carbon-intensive energy sources have invested heavily in solar, wind and hydropower. For example, for its part, India's National Solar Mission committed to installing 100 GW of solar power capacity by 2022, supporting energy transitions in rural and urban areas (Ministry of New and Renewable Energy, 2021). These investments promote climate goals articulated in the Paris Agreement, creating a nexus between climate action and energy access.

Second, decentralised and off-grid energy solutions, particularly micro-exchanges and solar home systems, have been crucial in providing electricity to remote communities. The widespread adoption of pay-as-you-go solar systems in sub-Saharan Africa is just one example of how new models, whether in terms of innovation or financing, can help enable energy equity. The delivery of clean lighting and mobile charging to over a million homes by companies like M-KOPA in Kenya shows that sustainable energy can also underpin livelihoods and local economies. 3. Illustrations of How the Goal Is Being Met

3. Examples of SDG 7 Implementation Around the World

There is also global progress being made to achieve SDG 7 through initiatives around the world. In 2021, according to REN21's 2022 Global Status Report, the share of renewables in global electricity generation reached 28.3%, propelled by robust growth in solar PV and wind power (REN21, 2022). China, the world leader in renewable energy, for instance added 136 GW of solar capacity in 2022 alone (IEA, 2023). Another noteworthy example is of Bangladesh, where the country's Solar Home Systems program has brought electricity access to over 20 million people. This not only reduced dependence on kerosene but also empowered women and increased education by fostering night-time study which collectively promote social development. Beyond the expansion of renewable energy, energy efficiency has become a pillar of SDG 7. A battery of measures from the EU's "Fit for 55" package to halve energy use by 2030. Such measures can go a long way toward enabling sustainable infrastructure, relieving pressure on grids and reducing emissions.

4. Challenges and Setbacks in Reaching the Goal

Although SDG 7 has achieved important progress, it is uneven and insufficient to achieve the targets set to be reached by 2030. Only through such diversified solutions can the millions of households without energy access be reached (and what a win it would be to reach the UN goal of energy access for all by 2030 (IEA, 2023)); 2023 will have the longest coverage of the UN energy access goals in the recent decade. But the COVID-19 pandemic rolled back some gains, particularly in low-income countries where investment in energy projects eased. Sub-Saharan Africa trails further behind, with more than 570 million people still without electricity. Nevertheless, countries such as Ethiopia and Rwanda have come a long way. In five years, Ethiopia's National Electrification Program has connected more than 12 million people with access to grid-based or off-grid solutions. In fact, Rwanda is targeting universal coverage by 2024, using a mix of grid expansion and decentralized sources. Renewable energy accounted for a steadily growing share of global energy use but needs to increase at more than double the current annual average to achieve SDG 7 targets. Financial flows into renewable energy in developing countries have also been inequitable, demonstrating the need for stronger cooperation on the energy transition globally and on just transitions, which prioritize the needs of historically marginalized communities," said Fossil Fuel Non-Proliferation Treaty Initiative executive director May Boeve.

5. 5 Key Course Concepts Related to SDG 7

Five important course concepts are closely linked to SDG 7. First, energy equity is integral to SDG 7, advocating for affordable, universal access to clean energy for all, with a focus on marginalized populations living in rural and disadvantaged communities. Second, the long-term provision of energy

services requires sustainable infrastructure. This covers renewable energy plants, smart grids and storage systems that help reduce emissions and environmental footprint. Third, the energy sector has a direct impact on greenhouse gas emissions. Switching to clean energy reduces emissions, slowing global warming and benefiting ecosystems and human health. Fourth, global cooperation is vital for financing, for sharing knowledge, and for aligning policies. A shining example is the UN's Energy Compact and the International Solar Alliance, which show how states can work together to pursue shared goals. Finally, energy transitions acknowledge that energy transitions should not be driven solely by economic and technology factors, but rather, energy transitions must incorporate a social justice framework, worker protection, and the inclusion of historically marginalized communities to avoid exacerbating current inequalities.

Citations:

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