MISSION 300:
ELECTRIFYING 300 MILLION AFRICANS BY 2030

BACKGROUND

Spearheaded by the World Bank and the African Development Bank and in partnership with Sustainable Energy for All, Mission 300 is a bold initiative that connects 300 million Africans to clean, affordable, and reliable electricity by 2030. With Sub-Saharan Africa accounting for almost 600 million people still living without electricity, Mission 300 is a transformative effort to halve Africa's energy access deficit over the next five years. As electrification forms the backbone of economic growth, job creation, and the provision of essential services, Mission 300 is poised to lift millions of people out of energy poverty and transform the continent.

WHY THE MISSION 300 MATTERS

A renewed focus on Sub-Saharan Africa, where electrification is needed most

Mission 300 targets the region with the greatest and most persistent energy access deficit— Sub-Saharan Africa. According to the Energy Progress Report which monitors progress on SDG7 (Universal access to affordable, reliable, sustainable, and modern energy), global energy access gap has worsened, with Africa increasingly left behind[1]. Since 2010, Sub-Saharan Africa's share of the world's unelectrified population has increased from 50% to 85%, as electrification rates have failed to keep pace with Africa's rapid population growth[2]. With the global number of people without electricity rising for the first time in over a decade, Mission 300 seeks to restore momentum toward SDG7 by targeting African countries with the largest access deficits—such as Nigeria, Democratic Republic of Congo, Tanzania, Niger, Madagascar, Malawi, Chad, and Zambia—delivering impact where it is most needed.

[1] IEA, IRENA, UNSD, World Bank, and WHO. 2024. *Tracking SDG7: The Energy Progress Report 2024*. Washington, DC: World Bank.
[2] _____. 2025. *Tracking SDG7: The Energy Progress Report 2025*. Washington, DC: World Bank.

Scalable, innovative, and cost-effective renewable energy solutions to reach Africa's most remote and underserved population

Due to low population density, rough terrains, and limited economies of scale, extending traditional electric grids[3] to remote populations in Africa has been economically and technically challenging, contributing to the rural-urban access gap. This is where Mission 300 offers a game-changing solution: Decentralized Renewable Energy (DRE)[4] —small-scale, autonomous power generation systems, such as standalone solar[5] and mini-grids[6], that produce electricity on-site and reduce reliance on traditional main grids. Due to their modularity and rapid construction times, Decentralized Renewable Energy offer a competitive edge over main grids—in both affordability and scalability. However, Mission 300 takes a step further: To make clean energy not only available but truly accessible, Mission 300 employs innovative pay-as-you-go models and affordable lease arrangements that eliminate large upfront payments, leaving no one behind in the energy transition[7].

Catalyzing private finance to transform Africa's clean energy sector

Expanding energy infrastructure is a capital-intensive undertaking. Hence, for developing countries with limited fiscal space, mobilizing innovative financing and private investment is pivotal to driving the SDG7 agenda. Yet Africa attracts only 3% of global energy investment while accounting for 20% of the world's population, underscoring a stark financing gap[8]. Through conducive regulatory reforms and de-risking instruments—such as results-based financing[9], local currency financing[10],

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[3] Grid is a network of power plants, transmission lines, and distribution centers that generate, transmit, and deliver electricity from producers to end-consumers.

[4] There are two main approaches to energy production and distribution:
Centralized energy systems refer to the large-scale generation of electricity at power plants that are connected to high-voltage transmission networks. Since these facilities are located at a distance from end-users, electricity must be transmitted via long-range grid infrastructure. Centralized energy systems have wide service coverage, supplying electricity to large numbers of users across long distances.
On the other hand, decentralized energy systems involve small-scale power generation systems that are located close to the point of consumption and capable of operating either independently or in conjunction with the main grid. Decentralized Renewable Energy (DRE) systems are decentralized energy systems that harness renewable energy sources, such as solar panels and wind turbines.

[5] Small-scale photovoltaic devices that are isolated from the grid and typically power single households.

[6] Autonomous power generation-distribution systems that serve entire communities or regions but cannot transmit electricity beyond their service area. Mini-grids may be isolated or connected to the main grid—but in either configuration, they are capable of functioning independently of the national grid, via local power generation and distribution.

[7] Lighting Global, Energy Sector Management Assistance Program (ESMAP), The Public-Private Infrastructure Advisory Facility (PPIAF), Digital Development Partnership (DDP), and Strategic Impact Advisors (SIA). 2024. *Off-Grid Solar Policy Toolkit*. Washington, DC: World Bank.

[8] IEA. 2023. *Financing Clean Energy in Africa*. Paris: IEA.

[9] Funding arrangements that tie financial rewards or penalties to a set of predefined results. Disbursements are made only upon verification by an independent third party and successful delivery of the specified targets or outcomes.

[10] Long-term financing provided in the borrower's domestic currency, rather than hard currency such as the dollar or the euro. Local-currency loans insulate borrowers from higher debt-servicing costs in the event of currency depreciation and make loan repayments more predictable, thereby enhancing debt sustainability of developing countries.

low interest-bearing loans[11], tax incentives, feed-in tariffs[12], transparent and competitive tendering processes, and a "one-stop shop" licensing system for expediting project approvals—Mission 300 sets to unlock private capital. In short, through a suite of measures that boost investor confidence and project bankability, Mission 300 ensures that benefits accrue twofold—not only to Africans without power but also to the forward-looking private sector that acts on its commitments to the energy transition.

BENEFITS OF THE MISSION 300

The tangible impacts of Mission 300 transcend energy security, energy equity, and clean energy (SDG7). By powering homes, businesses, schools, and healthcare facilities, Mission 300 creates green jobs and drives economic growth (SDG8. Decent Work and Economic Growth); enables students to study after dark and access digital learning in the classroom (SDG4. Quality Education); streamlines many of the cooking and housekeeping activities traditionally done by women (SDG5. Gender Equality); and ensures the continuous operation of medical equipment and the storage of vaccines at adequate temperatures, extending their average shelf-life (SDG3. Good Health and Well-being).

Beyond the 2030 Agenda, Mission 300 is integral to advancing Agenda 2063, Africa's 50-year vision for a united, prosperous, and peaceful Africa that seeks to position the continent as a global powerhouse. Through interconnected, cross-border energy transmission infrastructure and regional electricity trade, Mission 300 translates this vision across all three fronts: it deepens pan-African cooperation and paves the way for the Africa Single Electricity Market (a 'united' Africa); creates new markets and improves livelihoods through increased access to energy (a 'prosperous' Africa); and reinforces regional stability by fostering stronger economic and political ties among African countries (a 'peaceful' Africa). In this regard, Mission 300 is not just an energy initiative. It is about powering Africa's collective future.

[11] Global lenders usually charge higher interest rates in Africa, citing higher risks, but loans under the Mission 300 will come at below-market interest rates to ensure affordable financing.

[12] Financial incentives designed to promote investment in renewable technologies, by providing renewable energy producers with a fixed payment for each unit of electricity they generate and supply to the grid. Since payments are set above market rates and guaranteed over the long-term—typically 15 to 25 years—it allows renewable energy producers to recover the costs of investment, operation, and maintenance of the renewable technology.

KEY TAKEAWAYS FROM GLOBAL BEST PRACTICES

Cross-border grid connectivity is a key enabler of all three pillars of SDG7— reliability, affordability, and clean energy

Putting cross-border grid connectivity at the center of SDG7 is a powerful lever for change, as it simultaneously advances energy security, energy affordability, and the deployment of renewables[13]. Sharing power grids across borders and pooling energy through trade offers myriad advantages over energy self-sufficiency, which typically focuses on fossil fuels. It connects renewable energy-rich countries with energy-deficit countries, optimizing uneven distribution of resources and balancing electricity supply and demand across borders (clean energy). Moreover, it adds to the variety of energy mix available to grid operators, thereby enhancing grid stability—highly important given the intermittent nature of renewables such as wind and solar (reliability). It also increases economies of scale, bringing down the cost of electricity for the end-consumers (affordability).

However, the establishment of cross-border grid connectivity and regional power trading is a complex endeavor that requires coordination and orchestration at all levels. For Africa, success will hinge on a combination of technical, institutional, and political requirements: the harmonization of grid codes, wheeling charges[14], and provisions for third-party access to domestic grids (technical); the effectiveness of regional operators and regional regulatory agencies that ensure local enforcement of agreed upon rules, as well as trade dispute mechanisms (institutional); and sustained political commitment and accountability (political)[15]. Taking into account the evolving nature of regional energy cooperation, governance structures should also be flexible—accommodating expanded memberships and enabling newly participating countries to take on substantive roles in projects that are already operational[16].

However, decentralized energy systems will be critical to reaching the 'last mile' of the population

Although Mission 300 pursues a two-pronged approach that encompasses both centralized (cross-border grid connectivity) and decentralized energy systems (off-grids and mini-grids), much of the progress in electricity access will be driven by the latter. Typically, the most cost-effective solution depends on the availability of existing infrastructure, population density, and projected growth in electricity demand[17]: While grid extension remains the least-cost option for densely populated areas

[13] UNESCAP. 2024. *Energy Connectivity for Sustainable Development in Asia and the Pacific*. Bangkok: UNESCAP.
[14] Fees paid for the use of a third-party transmission or distribution networks to deliver electricity across different utility territories.
[15] IEA. 2023. *Co-operation across borders is key to building interconnected power systems of the future*.
[16] Huda, M.S., Seah, S., and Qiu, J. 2023. *Accelerating the ASEAN Power Grid 2.0: Lessons from the Lao PDR-Thailand-Malaysia-Singapore Power Integration Project (LTMS-PIP)*. Singapore: ISEAS – Yusof Ishak Institute.
[17] IEA. 2020. *Defining Energy Access: 2020 Methodology*.

within reach of existing networks, off-grids and mini-grids offer the fastest and most affordable solution for remote areas where grid expansion offers a low return on investment. Given that grid infrastructure is often inadequate or absent in much of Africa and that over 80% of the region's unelectrified population live in rural areas[18], decentralized energy systems will be indispensable to attaining universal access.

Securing critical minerals will be increasingly important, amid rising demand for clean energy technology

As renewable technologies are far more mineral-intensive than their fossil fuel counterparts, access to critical minerals will define the future of global energy security. Home to 30% of the world's known critical minerals[19], Sub-Saharan Africa holds a competitive edge in the energy transition, with global demand for minerals expected to double by 2030 and increase thereafter[20]. Furthermore, the critical minerals boom offers Sub-Saharan Africa a pathway to economic prosperity as revenues from the extraction of key minerals could boost the region's GDP by at least 12% by 2050[21].

However, to reap the full benefits, the region must pivot from raw material exports to value-added transformation of minerals. Focusing on midstream (refining and processing) and downstream (component and product manufacturing) phases of the mineral supply chain as well as bolstering local processing capacity would not only boost profits, but also increase tax revenues, create higher-skilled jobs, and diversify Africa's exports—reducing exposure to commodity price fluctuations and exchange rate volatility, ultimately paving the way for sustainable development.

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[18] IEA. 2022. *Africa Energy Outlook 2022*. Paris: IEA.
[19] IMF. 2024. *Digging for Opportunity: Harnessing Sub-Saharan Africa's Wealth in Critical Minerals*. Washington, DC: IMF.
[20] Projections under the Stated Policies Scenario (STEPS). STEPS provides insight into the prevailing direction of the energy system based on a detailed, sector-by-sector and country-by-country assessment of energy-related policies that are already in place and under development. Relative to other scenarios, STEPS is a conservative benchmark that takes into account the likelihood that some climate commitments will be unmet.
IEA. 2024. *Global Critical Minerals Outlook 2024*. Paris: IEA.
[21] IMF. 2024.