Energy Access Policy Brief Series

Clean Energy Access

DECEMBER 2024 | ISSUE NO.1

POLICY BRIEF

Accelerating Energy Access in Africa: Policy Recommendations for The AFDB New Deal on Energy for Africa



List of Acronyms

AfDB	African Development Bank
ASEAN	Association of Southeast Asian nations
CSOs	Civil Society Organizations
IEA	International Energy Agency
SDG	Sustainable Development Goal
SYND	Strategic Youth Network for Development

Introduction

The African Development Bank's (AfDB) New Deal on Energy for Africa is a strategic initiative aimed at addressing Africa's severe energy challenges. With more than 600 million people lacking access to reliable and affordable energy, the New Deal seeks to transform the continent's energy sector¹. The main objective is to achieve universal access to modern energy by 2025. This policy assessment evaluates the New Deal's alignment with its goals, the opportunities it presents, and the gaps hindering its progress.

Access to energy is vital for economic growth and social development. However, Africa's energy sector remains underdeveloped, contributing to high costs, limited access, and sustainability concerns. In response, the AfDB launched the New Deal on Energy for Africa, with a focus on universal access by 2025. This assessment examines the objectives of the New Deal by evaluating its opportunities, existing gaps and provides recommendations that need to be addressed.

Distribution of population without access to electricity by region % of total population, 2013 <25% 25% to 49% 100% = 7.0 billion 50% to 75% 1.2 billion >75% 0% Other 18% 1% Middle East LatAm 34% ASEAN1 & China 31% South 24% 53% Asia² Africa 16% World Population population without access to grid Association of Southeast Asian Nations Bangladesh, DPR Korea, India, Mongolia, electricity Nepal, Pakistan, Sri Lanka, Other Asia

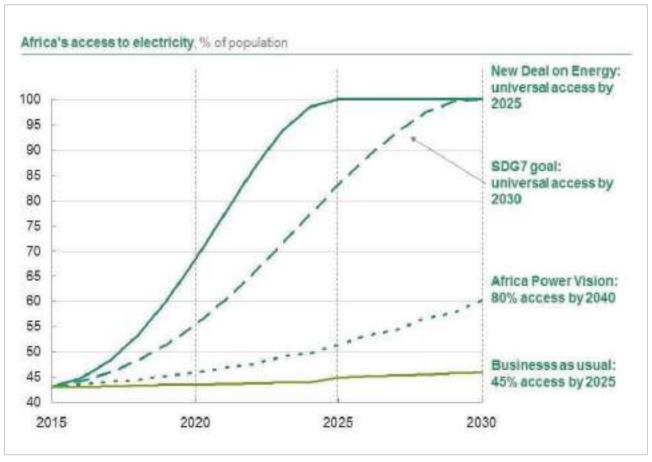
Figure 1: More than half a million people living in Africa access to energy in Africa

Source: IEA, 2015. World Energy Outlook 2015; Electricity Access Database, as cited in AfDB, New Deal on Energy for Africa 2016

The New Deal on Energy for Africa aligns with the Sustainable Development Goals (SDGs), particularly SDG 7 (Affordable and Clean Energy), SDG 1 (No Poverty), SDG 13 (Climate Action), SDG 3 (Good Health and Well-being), SDG 5 (Gender Equality), and SDG 10 (Reduced Inequalities). By expanding energy access, promoting clean energy, and fostering inclusive growth, the New Deal addresses critical development challenges across the continent.

¹ AfDB, 2016, The Bank Group's Strategy for The New Deal on Energy for Africa 2016 – 2025

Figure 2: The New Deal aims to achieve universal energy access by 2025



Source: IEA, 2014. World Energy Outlook as cited in AfDB, New Deal on Energy for Africa 2016

The primary objective of the New Deal is to achieve universal energy access by 2025, ensuring that all African populations have access to modern and reliable energy services. This includes reaching 100% access in urban areas and 95% access in rural areas through a combination of on-grid and off-grid solutions. While these goals may seem lofty, Africa draws inspiration and lessons from successful case studies around the world, particularly in Asia. By examining these success stories, Africa can develop strategies tailored to its unique challenges and opportunities.

Asia has achieved remarkable progress in energy development, setting a precedent for Africa to emulate. China, for example, has rapidly expanded its energy capacity, with significant contributions from coal and solar power. Since 2011, China has

added over 50 GW of new coal capacity annually, alongside a remarkable installation of 10 GW of solar PV capacity each year². Similarly, Vietnam and Bangladesh have achieved substantial milestones in rural electrification and solar home systems installation, showcasing the effectiveness of targeted initiatives.

Objectives of the New Deal on Energy for Africa

To achieve the New Deal's objectives, Africa must adopt comparable levels of ambition and innovation. Africa's annual targets should meet or surpass the successes of leading Asian nations. For example, to reach its on-grid generation targets, Africa must deliver the equivalent of one-third of China's annual commitments every

² AfDB, 2016, The Bank Group's Strategy for The New Deal on Energy for Africa 2016 – 2025

On grid generation Off-grid connections On grid connections GDP: USD8,724 bn GOP, USD98 bn GDP: USD118 bn . Population, 1,364 M Planufation, 91 M. Population, 109 M GDP/capita GDP/capital USD 3.886 USD 1,078 USD 748 China's 5 year plan for Energy Vietnam's 5th Power Bangladesh's target to install & targeting 300 GW between 2011 and 2015, with progressive Development Master Plan (2000–10) sargeting 90% million solar home systems by Amortions 2018 introduction of rene wables electrification by 2010 (esp. PV) in the mix Annual achievements. Annual achievements 666k connections

connections

-12x etiat Vietnam complishes yearly

By the end of 2005, 90%

electrification attained

Figure 3: China has made significant progress in it's energy capacity.

Source: WOE, press as cited in AfDB New Deal on Energy for Africa paper 2016 - 2025

-4 GW of coal fired plants and

~1GW of PV commissioned per

173 of China e

yearly installations

year until 2025. Likewise, Africa needs to achieve 12 times the annual on-grid connections of Vietnam and 11 times the off-grid connections of Bangladesh each year³.

Achievements

What would

Africa need to

do every year until 2025?

Within Africa, notable success stories offer valuable insights. Tunisia's integrated approach to rural electrification, embedded within broader development plans, resulted in universal access. large-scale electrification program, connecting around 1.8 million households since 2011, demonstrates the potential for impactful initiatives led by national utilities.4 By aligning strategies with proven models and tailoring interventions to local contexts, Africa can accelerate its energy transition, driving economic growth and improving livelihoods across the continent.

The New Deal on Energy for Africa is a collaborative initiative led by the African Development Bank (AfDB) to mobilize resources and expertise. By forging partnerships with governments, the

private sector, and multilateral initiatives, the AfDB seeks to create a Transformative Partnership on Energy for Africa, driving innovative financing solutions and providing critical policy support.

Successful involvement of

11x what Bangladech accomplishes yearly

private sector to roll out

The New Deal on Energy for Africa focuses on seven strategic themes which are the overarching initiatives that all partners align with. The Bank seek to support these themes through;

- 1. Enabling Policy **Environment:** Creating conducive policy frameworks to support the development of the energy sector and attract investment. This includes regulatory reforms, incentives for private sector participation, and capacity building for effective energy governance.
- 2. Bankable Energy Projects: Increasing the number of viable energy projects that can attract financing and support from investors. The New Deal aims to identify and develop bankable projects that align with national

³ AfDB, 2016, The Bank Group's Strategy for The New Deal on Energy for Africa 2016 – 2025

- energy priorities and have the potential for sustainable returns.
- 3. Funding Pool Expansion: Enhancing funding mechanisms to mobilize resources for new energy projects and initiatives. This includes exploring innovative financing models, leveraging public-private partnerships, and attracting investment from diverse sources to meet the funding needs of the energy sector.
- 4. Bottom of the Pyramid Access: Ensuring energy access for underserved communities through targeted programs and innovative financing solutions. The New Deal focuses on reaching marginalized populations through micro-grid solutions, pay-as-you-go models, and community-based energy initiatives.
- 5. **Regional Integration:** Accelerating the development of major regional energy projects to promote integration and efficiency. By fostering cross-border cooperation and infrastructure development, the New Deal aims to enhance energy security, promote trade, and drive economic growth at the regional level.
- 6. Country-Wide Transformations: Implementing comprehensive energy sector transformations at the national level to drive sustainable development. This involves modernizing energy infrastructure, promoting renewable energy sources, and enhancing energy efficiency to meet growing demand and address climate change challenges.

Aside from the foregoing, the New Deal is expected to encourage the following throughout Africa:

1. Job Creation and Economic Growth: The project seeks to boost economic growth by creating jobs in the energy and related industries. By improving energy availability, the New Deal is anticipated to promote

- productivity, industrialization, and general economic development across the continent.
- 2. Climate Resilience: The New Deal promotes clean and renewable energy sources to help achieve global climate targets. This focus not only reduces greenhouse gas emissions, but it also strengthens African communities' climate resilience, making them better prepared to deal with the effects of climate change.
- 3. Monitoring and accountability: The New Deal contains tools to track progress and ensure accountability. The AfDB and its partners will evaluate energy project execution on a regular basis, measure progress toward targets, and make adjustments as needed to keep on track.
- **4. Technology Promotion:** The project highlights the need of using contemporary technology to achieve its objectives. This includes the implementation of smart grids, energy storage technologies, and other innovations that can increase the efficiency and reliability of Africa's energy systems.

Implementation Approach:

- 1. Flagship **Programs:** Developing specific programs aligned with the strategic themes to drive tangible impact and progress. These flagship programs will serve as catalysts for change, demonstrating innovative approaches and best practices that can be replicated and scaled up across the continent. For instance, the Lights Up and Power Africa initiative aims to connect millions of households to electricity by leveraging solar and wind energy.
- 2. Collaborative **Efforts: Partnering** with Finance Development Institutions, governments, and local stakeholders to ensure successful implementation and scalability of key initiatives. By fostering partnerships and knowledge sharing, the New Deal aims to leverage collective expertise and resources to address complex energy challenges effectively.

- 3. Financial Support Mechanisms: Establishing various financial facilities to provide concessional funding, low-interest debt, and micro-financing to support energy projects across Africa. These financial mechanisms will help bridge the funding gap for energy projects, particularly in underserved regions and for innovative technologies.
- 4. Regulatory Frameworks: Creating enabling regulatory environments to promote off-grid power solutions, pay-as-you-go models, and other innovative approaches to enhance energy accessibility. By developing clear and supportive regulatory frameworks, the New Deal aims to attract private sector investment, stimulate innovation, and ensure sustainable energy development.

Stakeholder engagement

The New Deal promotes multi-stakeholder collaboration, involving governments, private companies, and multilateral institutions. Partnerships critical are for mobilizing investments and technical support. However, greater involvement of civil society organizations and local communities is essential for long-term sustainability and accountability. Meaningful engagement with CSOs can facilitate avenues for constructive feedback mechanism on implementation projects and of policy formulation.

Several initiatives align with the New Deal's objectives, offering funding and targeted interventions to accelerate progress. Partnerships with entities like Power Africa, Energy Africa campaign, ElectriFI, Sustainable Energy for All, and the African Energy Leaders Group strengthen coordination and resource mobilization, amplifying the impact of collective efforts. The New Deal on Energy for Africa represents a transformative strategy aimed at achieving universal energy access, promoting renewable energy, and fostering sustainable development across the continent. "We urge governments, private sector stakeholders, and international partners to unite in this ambitious effort to electrify Africa, expand access to clean cooking solutions, and promote decentralized renewable energy systems, ensuring a brighter future for all".

Existing gaps and challenges

While the New Deal on Energy for Africa sets forth an ambitious roadmap for achieving universal energy access and fostering sustainable development across the continent, several significant gaps and challenges identified must be addressed to realize these objectives. Achieving universal energy access in Africa requires addressing challenges across on-grid generation, grid connections, off-grid solutions, clean cooking, and energy efficiency. Existing challenges financial, regulatory, infrastructural, institutional, and technological domains, each requiring targeted strategies and collaborative efforts. Understanding and overcoming these barriers is crucial for accelerating Africa's energy transition, attracting investment, and ensuring the long-term success of energy initiatives. The key challenges include:

- 1. Financial shortfalls: The scale of investment required to meet the New Deal's ambitious targets remains a significant challenge. Achieving Africa's energy and climate related goals by 2030 will require annual investments of over USD 200 billion through the end of this decade⁵
- 2. Regulatory and policy barriers: Inadequate regulatory frameworks in many African countries deters investment thus there is need for stable policy environments to attract large-scale energy projects.

- 3. Slow progress in rural electrification: While urban electrification is making strides, rural areas lag behind in many energy deficit Decentralized off-grid solutions countries. require significantly greater policy support and investment to scale effectively in rural regions. Despite their potential to provide immediate and sustainable energy access in underserved areas, these solutions often face hurdles such as insufficient funding, unclear regulatory frameworks, and a lack of incentives for private sector participation. Without stronger policy backing and dedicated financial resources, the expansion of off-grid energy systems will remain limited, leaving rural communities without reliable access to electricity and hindering broader development efforts.
- 4. Limited institutional capacity: Limited institutional capacity significantly hinders the advancement of energy projects in many African nations. This challenge includes not only a shortage of skilled personnel but also weaknesses in governance structures and administrative systems. The African Development Bank's (AfDB) 2016 New Deal Strategy identifies this as a critical barrier, noting that many governments lack the necessary expertise to effectively plan, implement, and monitor complex energy projects.
- 5. **Technological barriers:** The adoption of smart grids, energy storage solutions, and advanced renewable technologies in Africa remains limited due to high costs and a shortage of technical expertise. Despite some progress, investment levels are still insufficient to meet the continent's needs.

Conclusion:

The AfDB's New Deal on Energy for Africa is a transformative initiative that presents significant opportunities for the continent's energy transformation. However, substantial challenges remain in terms of financing, policy reform, and rural electrification and access to clean cooking solutions. The success of the New Deal on Energy in Africa beyond 2025 will depend on closing the highlighted gaps and challenges, fostering strong partnerships, and accelerating investment in innovative clean energy solutions.

Recommendation

To achieve the New Deal on Energy for Africa's goals, a comprehensive approach is needed to address challenges in financing, policy, capacity, and technology. Key recommendations include:

- 1. Scaling up of investment in the right type of energy solutions to address energy poverty for the countries with the highest deficits delivered through mechanisms that do not add to their significant debt burdens.
- 2. Strengthen countries policy frameworks by creating favorable regulatory environments to attract energy investments and promote innovative energy solutions through an inclusive, cross-sectoral energy planning models and approaches to ensure that services are planned to meet local needs relevant to their local context including those of marginalized and vulnerable groups.
- 3. Provide support for capacity Building and knowledge sharing initiatives by supporting African countries in developing capacity and inclusive collaborations with stakeholders including CSOs for energy project management, regulatory oversight, and monitoring.
- 4. Integrate modern technology by promoting the use of smart grids, energy storage technologies, and leapfrogging opportunities for electric cooking to overcome technological barriers and enhance the efficiency and reliability of energy systems.

End notes

- 1. AfDB, The Bank Group's Strategy for The New Deal on Energy for Africa 2016 2025, 2016, https://www.afdb.org/fileadmin/uploads/afdb/Documents/Generic-Documents/Bank_s_ strategy_for_New_Energy_on_Energy_for_Africa_EN.pdf
- 2. International Energy Agency, World Energy Investment Report, 2024 https://iea.blob.core. windows.net/assets/60fcd1dd-d112-469b-87de-20d39227df3d/WorldEnergyInvestment2024. pdf

ACCESS COALITION

The Alliance of Civil Society Organizations for Clean Energy Access (ACCESS Coalition) is a global coalition of over 100 civil society organizations and practitioners delivering energy services to poor and marginal communities. We work with our members to advocate for access to safe, reliable, and affordable energy and for environmentally sustainable and efficient energy systems globally.

SYND

Strategic Youth Network for Development (SYND) is a youth-oriented NGO aimed at promoting active youth inclusion in the governance of natural resources and environmental sector in Ghana. Over the years, SYND has become a driving force in advocating for sustainable development through its strategic focus on Climate Change, Biodiversity, Forestry, and Renewable Energy.