MISSION 300:

ELECTRIFYING 300 MILLION AFRICANS BY 2030

KYUIN LEE

CRITERIA FOR SUCCESSFUL INTERVENTIONS:

1. RELEVANCE	**Responsiveness** to the country's needs, policies, priorities
2. EFFICIENCY	**Delivering results** in an **economic** and **timely** manner
3. COHERENCE	**Compatibility** of the intervention with other policies
4. SUSTAINABILITY	**Continued long-term benefits** upon its completion
5. IMPACT	**Transformative effects** of the intervention, at the higher-level

MISSION 300 HAS BEEN CAREFULLY DESIGNED TO MEET ALL 5 CRITERIA

ADDRESSING AFRICA'S PERSISTENT ENERGY ACCESS DEFICIT

RELEVANCE

Challenges:

Global disparity

The rate of electrification has not kept pace with Africa's population growth. As a result:

- [Electricity access] **Sub-Saharan Africa** is home to **85%** of the world's population (**600 million Africans**) without access to electricity – up from **50%** in 2010.
- [Clean cooking] Africa is the **only region** where the number of people reliant on polluting cooking fuels and technologies is **growing.**
- [Capital mobilization] Despite being home to 20% of the world's population, Africa accounts for only **3%** of global energy investment.

Rural-Urban divide

- [Clean cooking] Urban (**42%**) vs. Rural population with access (**7%**)

☛ Mission 300 seeks to **reverse this trend.**

Objective of the Mission 300:

By 2030, to halve the number of Africans without access to clean, affordable, and reliable electricity – from 600 million to 300 million.

STRONG BUY-IN FROM AFRICAN COUNTRIES

RELEVANCE, COHERENCE, SUSTAINABILITY

National Energy Compact:

An implementation plan that sets out **specific policy measures to address the following constraints** across the energy sector:

Key components of the Mission 300

1) Expanding energy infrastructure at **competitive costs**
2) Leveraging the benefits of **regional power integration**
3) Embracing **distributed renewable energy** and **clean cooking solutions** as critical elements of the access agenda
4) Fostering **private sector participation** to unlock additional resources
5) Strengthening the **utilities** sector through transparent financial management and cost recovery

- Since **governments take the initiative** in developing the Compact, it ensures that the energy targets are **tailored to the national context.**
- As governments are encouraged to **hold public consultations** **with civil society and other relevant stakeholders** to inform the development of the Compacts, it ensures **policy coherence**.
- **Strong national ownership** contributes to the **long-term sustainability** of the energy initiative, beyond its lifecycle

There is evidence of **growing political momentum**:
The number of African countries committed to the Compact will almost **triple from 12 to 32**.

CROSS-BORDER ENERGY INFRASTRUCTURE AND TRADE AND ITS ALIGNMENT WITH THE AU'S AGENDA 2063

COHERENCE

Agenda 2063

Africa's long-term 50-year vision (2013-2063) that aspires to transform the continent into a global powerhouse:

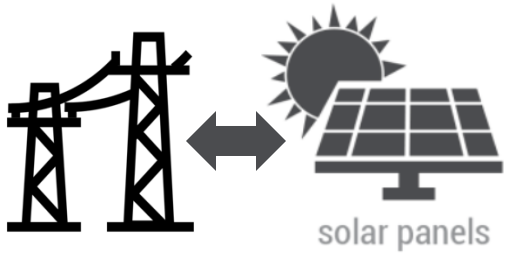
- A **prosperous** Africa, with
  - A high standard of living for all citizens
  - Well-educated citizens and skills, underpinned by Science, Technology, and Innovation
- A **united** Africa
  - Pan-African unity
  - World-class **infrastructure that crisscrosses Africa**
- A **stable** and **peaceful** Africa

Key components of Mission 300:

- Mission 300's **efforts to expand cross-continental power transmission infrastructure** explicitly caters to the continent's vision of a **united** Africa.
- As cross-border energy connectivity and trading enables **energy security** and **reduces the cost of electricity** through diversified supply and economies of scale, it would close Africa's access deficit – delivering tangible benefits to all Africans (A **prosperous** Africa)
- In the long-run, increased energy trading would foster not only **economic cooperation** but also **stronger political relations** among African countries, ultimately contributing to a **stable** and **peaceful** Africa.

SCALABLE & AFFORDABLE SOLUTIONS TO CLOSE AFRICA'S URBAN-RURAL DIVIDE

EFFICIENCY



Distributed Renewable Energy (mini-grids, off-grids)

Small-scale, *isolated*, *renewable* power generation system that operates *independently* of the main grid and generates energy *at or near the point of consumption.*

Challenge:

Due to **low population density** in rural areas, **rough terrains**, and **low economies of scale**, extending traditional energy grids to reach remote populations has been economically and technically challenging.

Solution:

- [Time-wise efficiency] Mini-grids and stand-alone off-grids that can be **deployed faster** than grid extension **at a lower cost per connection**
- [Cost-wise efficiency] Innovative **pay-as-you-go models** and **lease arrangements that eliminate the need for large upfront payments** for installing new clean energy infrastructure
  - Use of solar system equipment as **per prepayment**
  - **Perpetual lease** or **Lease-to-own system** (where the user is entitled to ownership of the technology, upon successful completion of installed payments)

POSITIVE SPILLOVER EFFECTS OF SDG7

IMPACT

However, Mission 300 is not just about the energy agenda.

In that **energy is the cornerstone of sustainable development**, attaining universal access to clean, affordable, and reliable energy (SDG7) will reinforce the realization of other SDGs.

LESSONS LEARNED FROM THE ASIA-PACIFIC

1. **Cross-border grid connectivity enables energy security, coupled with increased share of renewables in the power mix. The three go hand in hand.**
   - Linking the **renewable energy-rich countries** with **energy-deficit countries** optimizes the utilization of renewable resources that are distributed unevenly across the region and hence ensures reliable access to energy.

2. **Where cost-benefit analysis does not justify the expansion of grid solutions, decentralized energy solutions are key to reaching remote communities.**
   - Given that energy infrastructure is lacking in Africa, **the quickest and the most feasible solution** to increasing electricity access would be through **mini-grid** and **off-grid** technologies.

3. **Securing critical minerals will be increasingly important, amid rising demand for clean energy technology.**
   - The clean energy transition will be an **untapped opportunity for Africa**, as the region is home to 30% of the world's known critical minerals.