

**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 **utilities**

- As the preparation of the Compact is a **government-led** process, 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, 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:

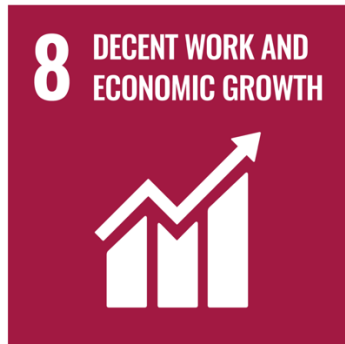
- [Time-wise efficiency] Mini-grids and stand-alone off-grids that can be **deployed faster** than grid extension **at a lower cost per connection**
- [Cost-wise efficiency] Innovative **pay-as-you-go models** and **lease arrangements that eliminate the need for large upfront payments** for the underlying 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.