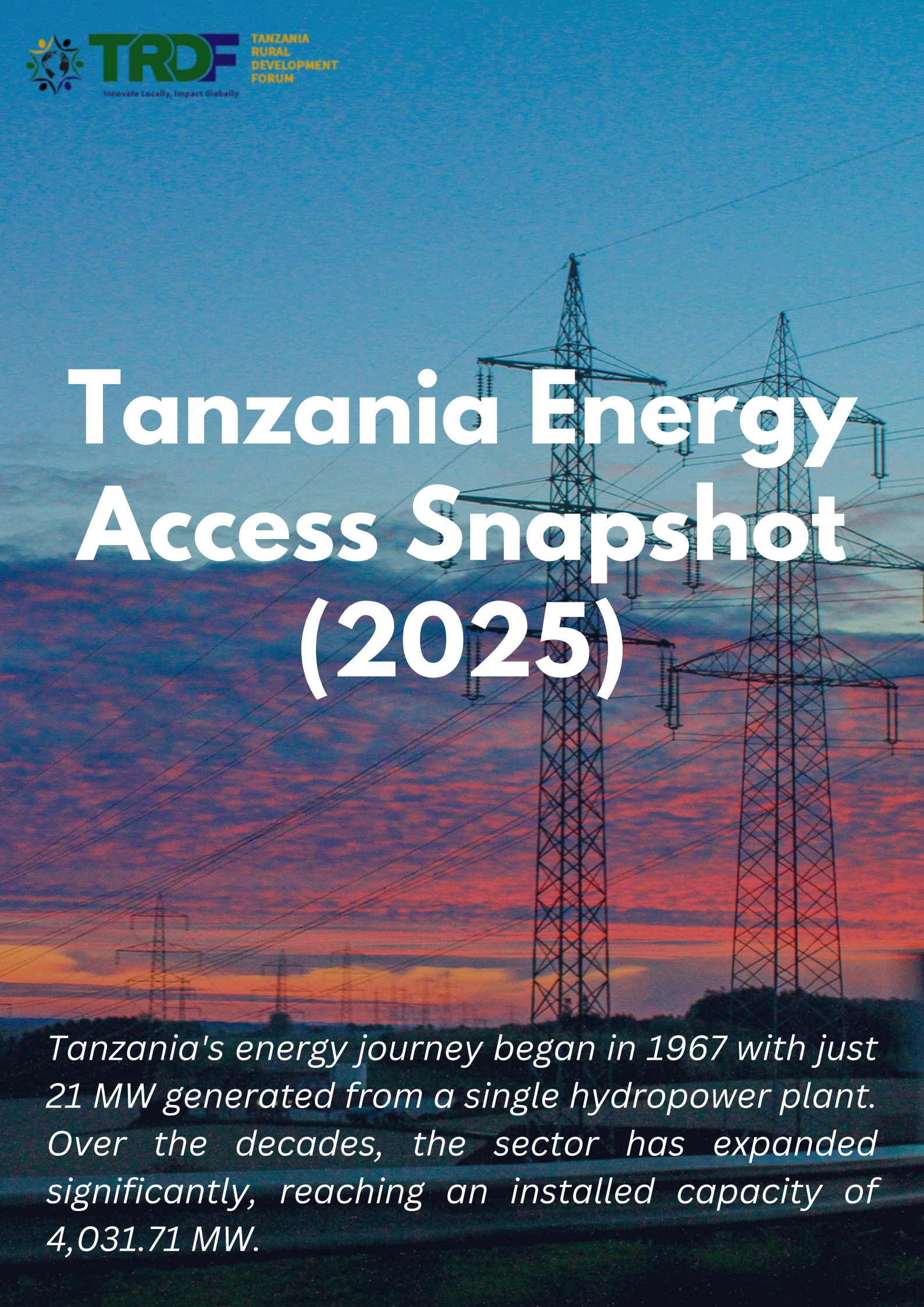
TRDF
TANZANIA RURAL DEVELOPMENT FORUM
Innovate Locally, Impact Globally

Tanzania Energy Access Snapshot (2025)



Tanzania's energy journey began in 1967 with just 21 MW generated from a single hydropower plant. Over the decades, the sector has expanded significantly, reaching an installed capacity of 4,031.71 MW.

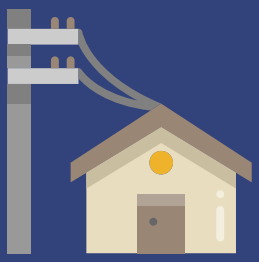
Current Status of Electricity Access in Tanzania

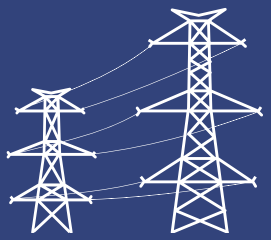
All **12,318 villages** in mainland Tanzania have been reached with electricity. And, a total of **33,657** out of **64,359** sub-villages (vitongoji) – equivalent to **52.3%** – have been connected to the power supply

Tanzania Mainland:

Electricity access increased from

14% (2011) to 78.4% (2020)





Connectivity reached

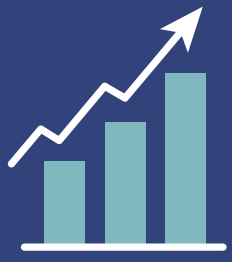
46% by 2022

Current pace:

500,000

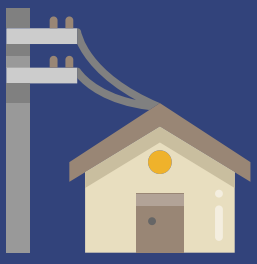
customer connections per year

Zanzibar:



Electricity access rose from

38.3% (2011) to 88% (2020)



Connectivity reached

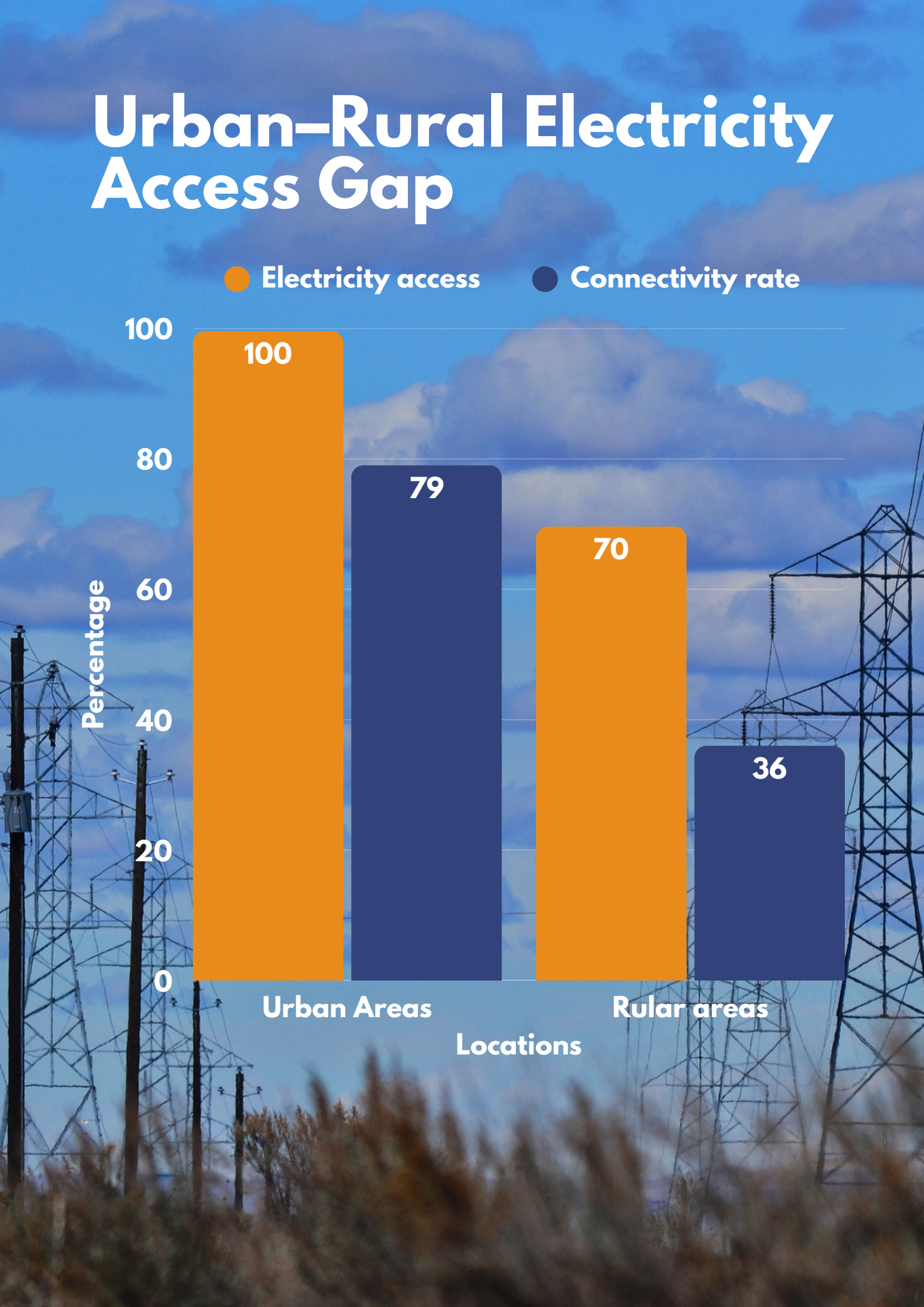
57% by 2024

Current pace:

63,000

customer connections per year

Urban–Rural Electricity Access Gap



Rural areas are significantly behind urban areas in both access and connectivity

Note: The Rural Energy Master Plan (2022) for Tanzania defines:

Access to Electricity Service: Total number of people living within a radius of 600 meters from the secondary side of the distribution transformer/total population.

Connectivity to Electricity Services: Total number of people in connected households/total population.

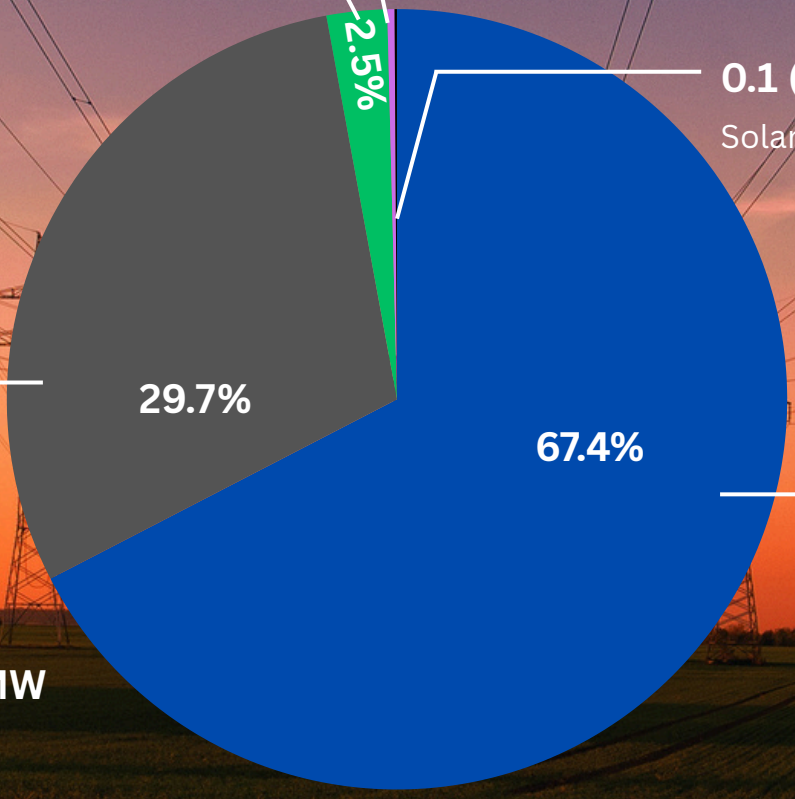
Installed Generation Capacity and Mix

Power Generation Capacity (as of April 2025)

4,031.71 MW
Installed generation capacity

1,921.44 MW
Peak electricity demand

Generation Mix



101.12MW
Heavy Fuel Oil (HO) & Diesel

0.3 (10.50MW)
Biomass/Cogeneration

0.1 (5MW)
Solar

1,198.82MW
Natural gas

2,716.27MW
Hydropower

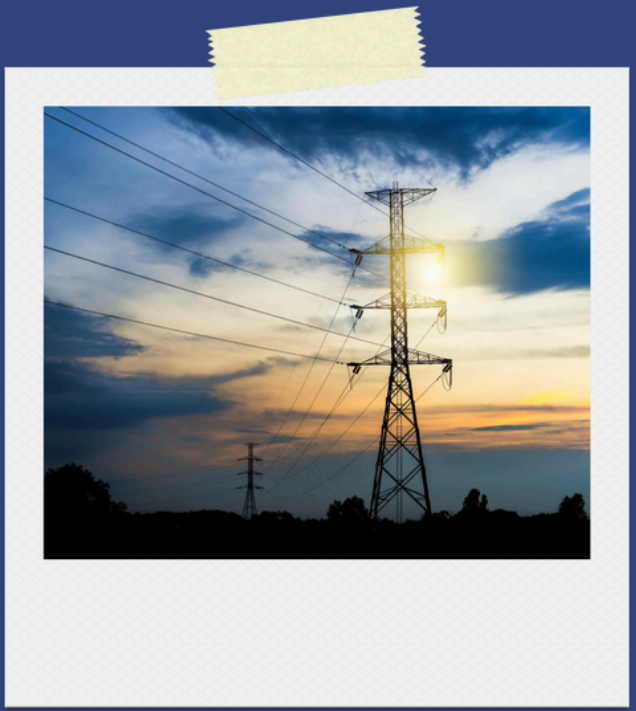
Renewable energy share: Approximately 67.8%

Who powers Tanzania?

- Ministry of Energy (MoE): Policy & planning.
- TANESCO: The state-owned utility (5.2Millions customers)
- EWURA: Regulates Technical and Economical functions
- REA: Expanding rural energy access.
- TPDC: Oversees petroleum & gas operations

Zanzibar Energy sector:

- Ministry of Water, Energy and Minerals (MoWEM: Sector coordination & policy.
- ZECO: the vertically integrated utility that provides service to 338,578 customers
- ZURA: Regulates electricity & water Power Source:



Note: Tanzania mainland is the only source of power supply for Zanzibar's islands through three submarine cables.

Clean cooking energy use in Tanzania

As of **2021**, only **6.9%** of Tanzanians had access to clean cooking solutions

Percentage of Households Using Each Energy Source:

63.5%

Wood: The most widely used cooking fuel, particularly in rural areas

26.2%

Charcoal: Commonly used in urban households due to convenience

5.1%

Liquefied Petroleum Gas (LPG): A cleaner alternative, though limited by affordability

3%

Electricity: Primarily used in urban areas with a reliable power supply

2.2%

Other fuels: Includes animal manure and food waste.

Note: 90% of households still rely on wood and charcoal as their main cooking fuels.

National Key Energy Targets by 2030

Expand Electricity Connectivity

- Connect 8.3 million additional households by **2030**
- Increase national connectivity from **46% (2022)** to **75% (2030)**
- Focus: Rural Electrification and Underserved Areas (Grid + Off-Grid Solutions)

Accelerate Access to Clean Cooking

- Promote alternative fuels and clean cooking technologies
- Boost clean cooking adoption from 6.9% (2021) to 75% (2030) and 80% access by 2034
- Transform lives, especially for women and children

Grow Renewable Energy Share

- Raise renewable energy in the power mix from 61.8% to 75%
- Key investments: Solar, Wind, Geothermal, Hydro

Mobilize Private-Sector Investment

- Create an enabling environment for private participation
- Target **$ 4.039 Billion** in private investments
- Support Tanzania's energy transition and development goals

Investment and Financing Needs (by 2030)

Total required investment

$12.89 Bil

Public sector

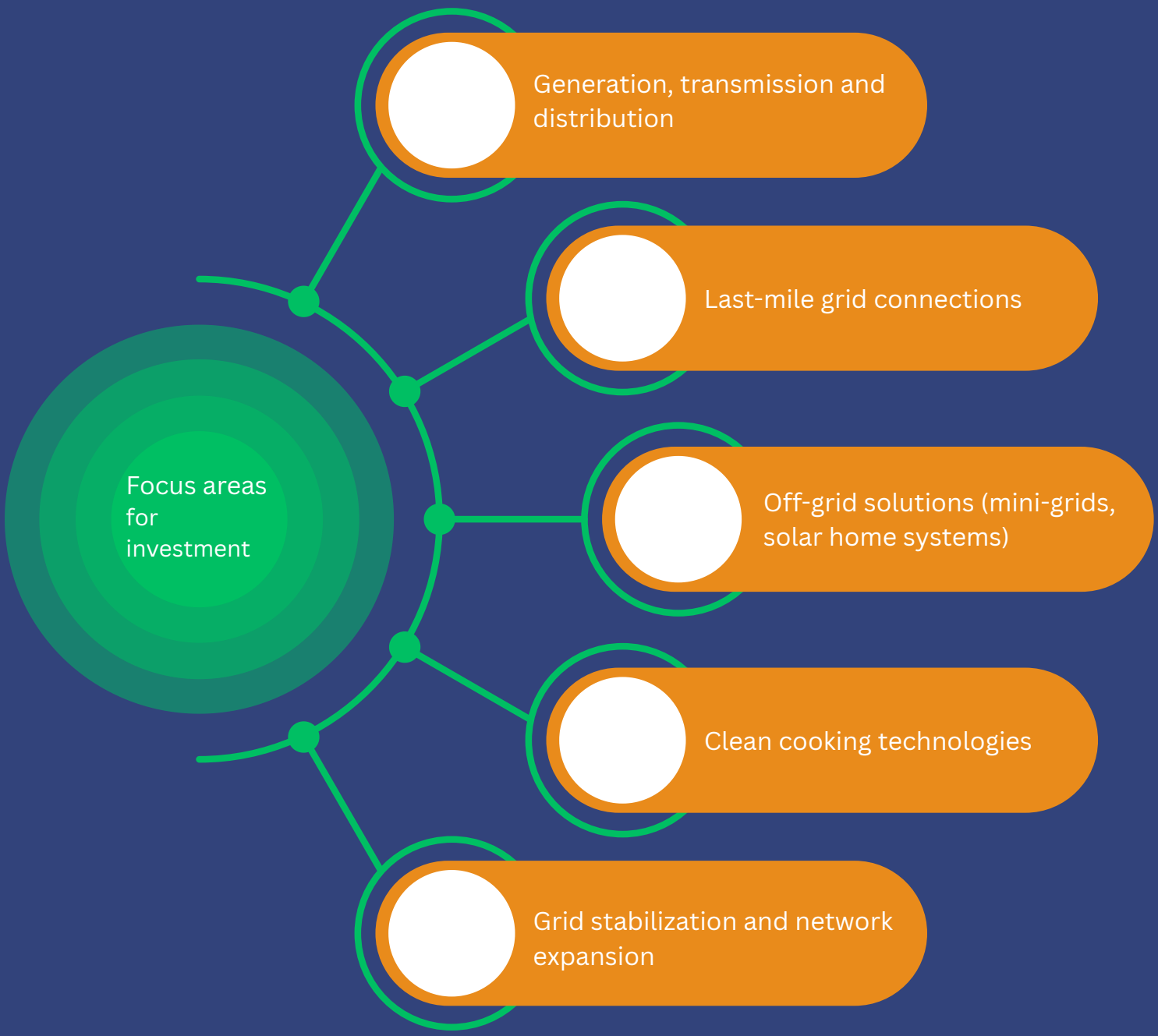
$8.85 Bil

Private sector

$4.04 Bil

Private sector share: about 31% of total needs

Focus areas for investment:



Major Infrastructure Expansion Plans by 2030

Generation Capacity

Add 2,463 MW of generation capacity from solar PV, wind, natural gas, and geothermal resources (2400MW Tanzania Mainland and 63MW Zanzibar)

Transmission Projects

Interconnections with Kenya, Rwanda, Burundi, Zambia, and Uganda. Strengthen Tanzania's role in East and Southern Africa Power Pools (EAPP & SAPP). Grid Rehabilitation and Stabilization:

Public Investment in Energy: Is Budget Following Ambition?

In the financial year **2024/25,** the Ministry of Energy was allocated a total of **TSh 1.88 trillion** (roughly USD 752 million). However, by the end of March 2025, only **TSh 1.00 trillion** (roughly. USD 400 million) had been disbursed.

This represents a **deficit of about 46.9%**, which raises a quiet but important question:
Can national electrification targets be achieved if nearly half of the allocated resources remain undisbursed?

2025/26 Budget: A Step toward Alignment?

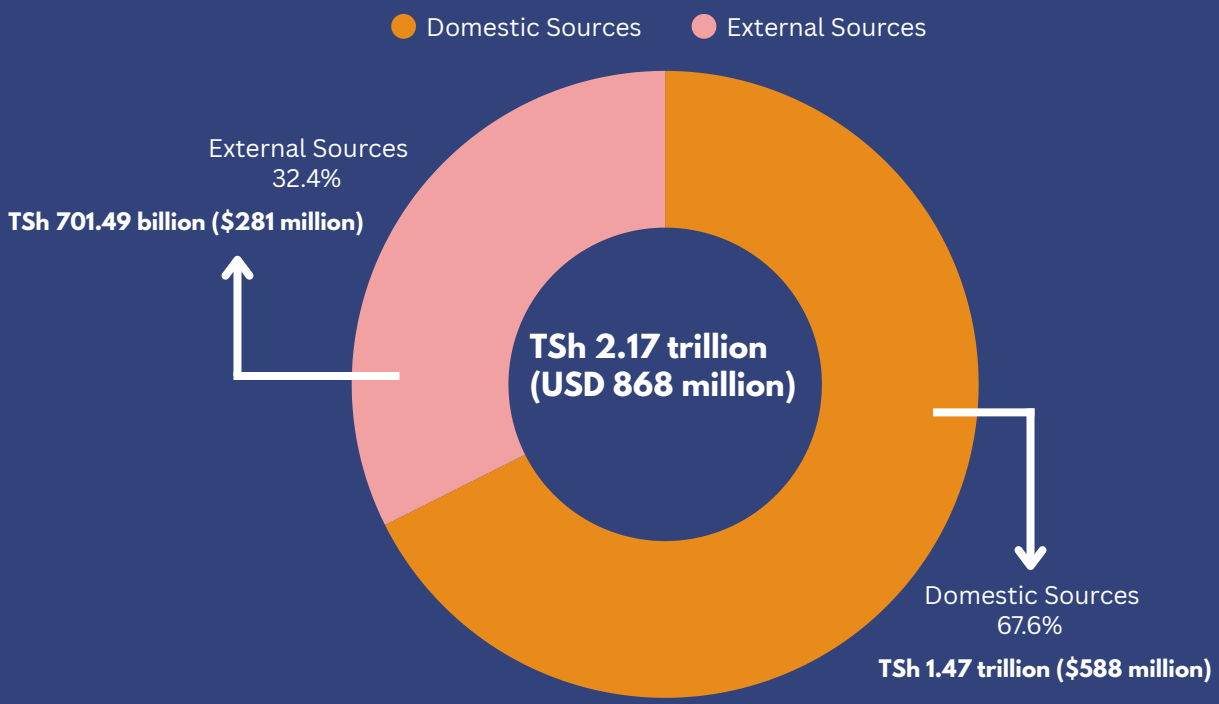
For the financial year **2025/26**, the government has approved a significantly larger budget — **TSh 2.25 trillion** (roughly USD 900 million) — for the Ministry of Energy.

Budget Structure:

Approved Total Budget

TSh 2.25 trillion (≈ $900 million)

1. Development Projects (96.5%):



2. Recurrent Expenditure (3.5%):

TSh 79.23 billion ($32 million)

Note: Tanzanian shilling (TSh) figures converted into U.S. dollars (USD) using a **"rounded exchange rate"** of 1 USD ≈ TSh 2,500

TRDF Recommendations to Strengthen Tanzania's Energy Sector

1. Focus on Rural Connectivity

Expand mini-grids, off-grid solar, and last-mile grid connections in rural areas with only 36% connectivity.

2. Promote Clean Cooking

Increase access to affordable, culturally appropriate clean cooking, especially for women and children in rural areas.

3. Strengthen Local Capacity

Support communities and CSOs with technical and financial skills for decentralized energy planning

4. Support Community Innovation

Simplify licensing, improve funding access, and integrate local knowledge in renewable energy projects.

5. Improve Transparency

Ensure access to data, clear budgets, and strong monitoring at local levels.

6. Close the Urban–Rural Gap

Align policies and budgets to reduce disparities in access and connectivity between urban and rural areas.

"Investing in rural energy is not charity—it's the smartest policy for inclusive, resilient, and sustainable growth."

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