

ZAMBIA ↔ TANZANIA INTERCONNECTOR

Global Gateway Interlinks Southern and Eastern Africa's Power Pools to Enhance Regional Resilience and Promote Sustainable Growth in Energy.

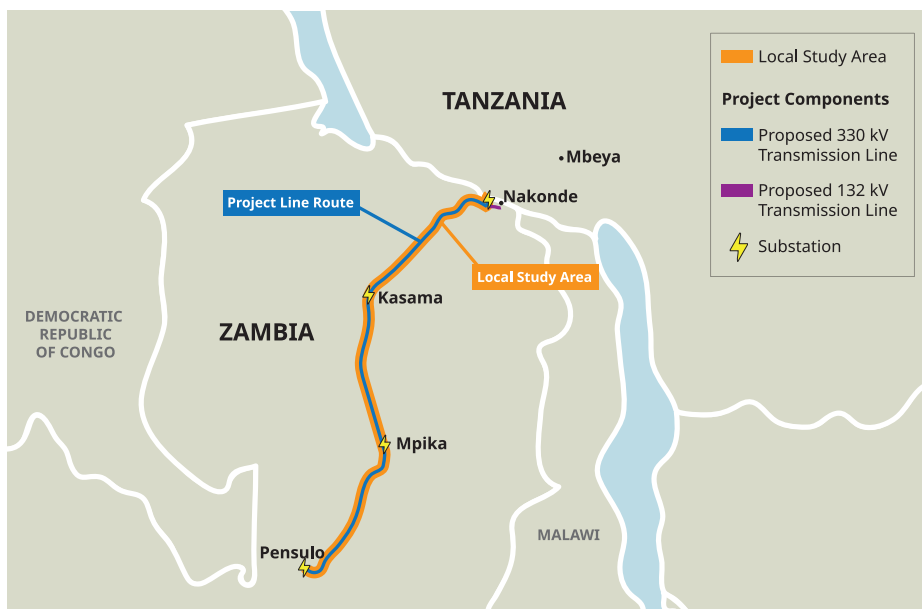
APRIL 2025

Connecting Southern and Eastern Africa's power pools to boost resilient growth and foster regional energy security while strengthening connections and moving the regions ahead with the Global Gateway.

SUMMARY

Zambia has long relied on hydro-based power generation for both domestic needs and exports. However, increasing droughts and climate shocks have exposed serious risks to energy security and economic stability. The **Zambia-Tanzania Interconnector** seeks to address these challenges by linking Zambia's national grid to Tanzania's, effectively connecting the **Southern African Power Pool (SAPP)** and the **Eastern Africa Power Pool (EAPP)**. This cross-border high-voltage transmission infrastructure will enable Zambia to import and export power more efficiently, improving the reliability of electricity supply for households, businesses, and vital public services. By leveraging Zambia's existing surplus capacity when water levels are favourable — and conversely importing power during drought periods — the project significantly reduces the economic and social impacts of power shortages. It also cuts reliance on expensive, high-emission diesel generators.

Funded through a major multi-partner effort under the **Global Gateway** framework, the interconnector is a flagship project that supports Zambia's ambitions for green growth, energy diversification, and industrial expansion. Ultimately, it paves the way for a more robust and climate-resilient energy ecosystem across Southern and Eastern Africa.



CO-FUNDED BY:

- World Bank
- European Union
- UK Foreign, Commonwealth & Development Office



PARTNERS:

- Ministry of Energy (Zambia)
- ZESCO
- Office for Promoting Private Power Investment (OPPI)
- Southern African Power Pool (SAPP)
- Eastern Africa Power Pool (EAPP)

Implementing Partners:

- ZESCO (Main Implementing Agency)
- World Bank (Lead Financier)



TOTAL BUDGET: €268 Million

World Bank: € ~220 million / US\$245 million IDA grant

European Union: €30 million

UK Foreign, Commonwealth & Development Office:
€~18 million / GBP £15 million



DURATION:

Start 2025 – End 2030



PROJECT REGION IN ZAMBIA:

Primarily Northern Zambia, covering the 620 km transmission route from Pensulo (Central Province) through Mpika and Kasama (Muchinga and Northern Provinces) to Nakonde at the Tanzanian border.

OBJECTIVES



1. **Strengthen Regional Power Trade:** Complete the remaining segment of the high-voltage transmission line between Zambia and Tanzania, enabling seamless electricity exchange across Southern and Eastern Africa.



2. **Enhance Energy Security and Resilience:** Mitigate the risks posed by droughts through diversified power sources, reducing dependence on hydro-based generation in Zambia.



3. **Boost Industrial and Economic Development:** Provide reliable electricity to critical sectors (mining, manufacturing, and services), driving job creation and inclusive growth in Northern Zambia and beyond.



4. **Reduce Environmental Impact:** Lower greenhouse gas emissions by substituting diesel-based generation with cleaner electricity flows within the region and fostering integration of renewable energy.



5. **Reinforce Institutional Capacity:** Support ZESCO and the Ministry of Energy via targeted technical assistance, strengthening regulatory frameworks, project management, and operational efficiency.

EXPECTED RESULTS

- Builds approximately **620 km** of 330 kV/400 kV transmission lines and substations, raising capacity from **17,647 kVA** to **588,235 kVA**, and adding 120 MVA in Nakonde.
- Makes it possible to import electricity when Zambia faces shortages and export when surplus, reducing load shedding — especially during droughts.
- Cuts reliance on diesel generation, lowering greenhouse gas emissions by up to **7.9 tCO₂e** per year.
- Boosts industrial growth, job creation, and public services (health centres, schools, and water systems), while reinforcing Zambia's role in regional power trade.
- Provides training for ZESCO's Project Implementation Unit to handle large-scale projects, and strengthens OPPPI's capacity for policy, regulation, and regional coordination with SAPP and EAPP.
- Aligns with the Global Gateway initiative and Zambia's Nationally Determined Contribution, contributing to SDGs **7, 10, and 13**.

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Implemented by



Ministry of
Energy

Project partners



KEY APPROACHES

Regional Integration:

The project closes the last major gap between SAPP and EAPP, ensuring robust cross-border energy trade.

Climate-Resilient Infrastructure:

Infrastructure design factors in variable hydrology and integrates complementary power sources to reduce outages.

Technical Capacity Building:

Comprehensive training and management support for ZESCO and OPPPI improves operational excellence and regulatory effectiveness, with special attention to gender and human rights considerations.

Public-Private Cooperation:

Collaborations with the World Bank, the Government of Zambia, and private stakeholders to attract investment and maintain transparent governance.

Sustainability and Green Growth:

By cutting carbon emissions and diesel reliance, the interconnector supports climate targets while driving equitable economic expansion.

Community Engagement:

Regular stakeholder consultations and communication campaigns ensure that local communities benefit equitably and are well-informed about project impacts.