



PATHWAYS TO ENERGY TRANSITION

Zambia

Zambia intends to conditionally reduce its greenhouse gas (GHG) emissions by at least 47% by 2030. At the same time, improving energy access remains a priority, as only 43% of the population has access to electricity.² To meet growing energy demand, the government has identified energy efficiency as a priority in the country’s nationally determined contributions (NDCs) under the Paris Agreement. Zambia’s National Development Plan includes plans to increase geothermal, wind and solar electricity generation by 2030.³

Beyond its domestic energy transition efforts, Zambia plays an important role in the global energy transition as a major exporter of copper, a mineral used for low-carbon technologies and electricity networks. As copper production increases, the country also faces increasing demand for energy needed to sustain copper mining activities.⁴ In this context, EITI reporting and multi-stakeholder dialogue can spur debate on energy access, use and efficiency, inform sustainable transition pathways and help monitor climate commitments.

Seventh largest

Global ranking of Zambia’s copper production¹

How EITI data and dialogue can be used

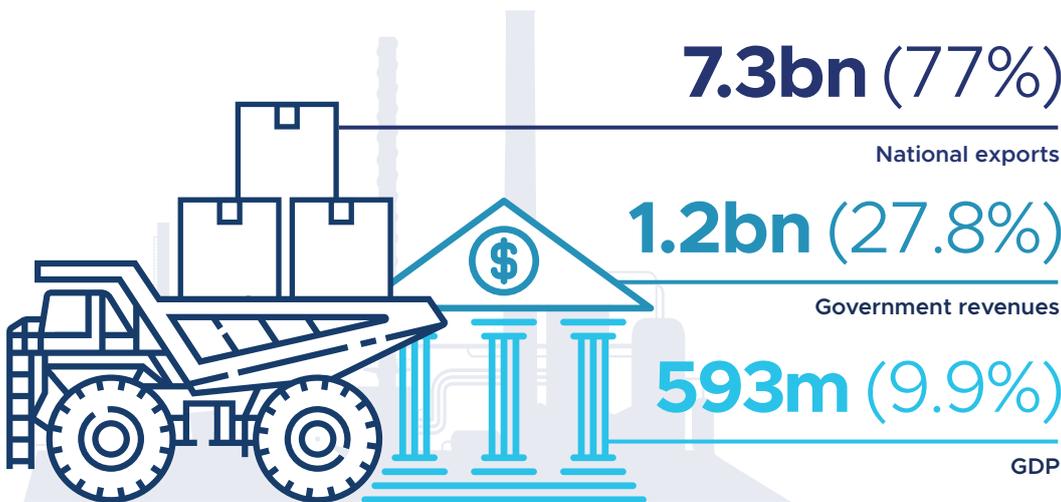
Data reported through the EITI can serve as an entry point to inform debate and policymaking related to the energy transition and its impact in Zambia. EITI data-driven forecasting can help to understand potential benefits, address economic implications of the energy transition and provide evidence for policymakers to manage risks and leverage opportunities.

Issue	Key questions for debate and analysis	Data reported through the EITI
 Revenue resilience and optimisation	How much government revenue is Zambia’s mining sector currently generating, and how might these revenues be affected by shifts in global demand for minerals?	Comprehensive disclosure of taxes and revenues (Requirement 4.1) Revenue management and expenditures (Requirement 5.3)
 Public finance at risk	How much public finance is invested in the mining sector (including assets and liabilities)? To what extent are the investments of state-owned enterprises informed by considerations around the risks and opportunities presented by shifting minerals demand from low-carbon technologies?	State participation (Requirement 2.6) Transactions related to state-owned enterprises (Requirement 4.5)
 Energy transition policies	Does the government have a plan or policy related to critical minerals? Is the government taking measures to address associated governance challenges related to critical minerals exploration, production and exports?	Legal framework and fiscal regime (Requirement 2.1)

1 US Geological Survey (2022), *Mineral Commodity Summaries: Copper*. Retrieved from <https://pubs.usgs.gov/periodicals/mcs2022/>.
 2 World Bank, “Access to electricity (% of population) – Zambia”. Retrieved from <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=ZM>.
 3 Republic of Zambia (2017), *Seventh National Development Plan 2017-2021*. Retrieved from https://zambiaembassy.org/sites/default/files/documents/7NDP_final_07-06-17.pdf.
 4 World Bank, “Access to electricity (% of population) – Zambia”. Retrieved from <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=ZM>.

Zambia's energy and mining sector in numbers

Extractive sector contribution to the economy (USD, 2019)⁵



853,000
mega
tonnes

Zambia's total copper production in 2019⁵

Total energy supply (by source, 2019)⁷



Laws and policies

National Policy on Climate Change of 2016

National Development Plan 8NDP (2022-2026)

ENERGY TRANSITION IN ACTION

Renewable energy and Zambia's mining sector

Zambia traditionally generates most of its renewable energy from hydropower, however, in the past few years drought has hampered the reliability of this source of energy. The proliferation of wind and solar energy in Zambia can contribute to the country's efforts to meet its climate commitments, improve energy access, and power the mining industry and support its growth.

To this end, the Zambian government signed a deal in March 2022 with energy companies Total Eren and Chariot to build a solar and wind energy farm in Solwezi, which will power mining operations in the Kansanshi mine – Africa's most productive copper mine – and the Sentinel copper mine.⁸

Government, company and civil society stakeholders represented on Zambia's EITI multi-stakeholder group could use the EITI process and data to assess the impact of renewable energy projects in the mining sector, for example by tracking contract awards and revenue flows from the renewables sector, including direct and indirect subsidies.

5 Zambia EITI (2020), *Zambia EITI Report 2019*, <https://eiti.org/documents/zambia-2019-eiti-report>.

6 Ibid.

7 International Energy Agency, "Zambia", <https://www.iea.org/countries/zambia>.

8 Tena, N. (March 2022) Renewable energy sector in Zambia receives 430MW boost. *ESI Africa*. Retrieved from <https://www.esi-africa.com/renewable-energy/renewable-energy-sector-in-zambia-receives-430mw-boost/>.