TRADE & INDUSTRIAL POLICY STRATEGIES

INDUSTRY STUDIES UPDATE

Electrical equipment

November 2025

TIPS industry studies aim to provide a comprehensive overview of key trends in leading industries in South Africa. For each industry covered, working papers will be published on basic economic trends, including value added, employment, investment and market structure; trade by major product and country; impact on the environment as well as threats and opportunities arising from the climate crisis; and the implications of emerging technologies. The studies aim to provide background for policymakers and researchers, and to strengthen our understanding of current challenges and opportunities in each industry as a basis for a more strategic response.

This note provides an update to the TIPS Electrical Equipment Study, published in November 2023. The update focuses on developments related to the regulatory/policy environment, aiming to highlight potential drivers of increased demand. It also provides policy relevant updates regarding exports and imports.

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POLICY LANDSCAPE

The recently approved Integrated Resource Plan 2025 outlines that, by 2039, there will be over 105 GW in new capacity (DEE, 2025). The updated Transmission Development Plan (TDP 2025-2034) projects 56 GW of new generation capacity between 2025 and 2034, requiring the construction of almost 14 500 km of new power lines, and the installation of 210 new transformers (National Transmission Company South Africa, 2024). To support the rollout of transmission infrastructure, within the context of constrained Eskom and broader government budgets, the Department of Electricity and Energy and National Treasury have advanced the Independent Transmission Projects (ITP) Programme. The ITP Programme is a public-private initiative designed to "rewire" South Africa's electricity infrastructure. Its pilot phase aims to procure 1164 km of 400 kV transmission power lines and associated infrastructure for the North West, Northern Cape, and Gauteng (National Treasury and DEE, 2025; Pienaar and Brewis, 2025). For producers, the TDP and ITP present potentially increased medium-term demand for high-voltage transformers, line hardware, and electrical wiring and cables.

Among the most significant regulatory reforms was the signing of the Electricity Regulation Amendment Act in August 2024, which creates the basis for a more competitive electricity industry (The Presidency, 2024). This is expected to open new opportunities for private investment in generation and grid infrastructure, driving demand for a wide range of electrical equipment.

Government has also advanced industrial policy initiatives to leverage the energy transition for domestic manufacturing growth. The most significant development for the electrical equipment industry, since 2023, has been the approval and launch of the South African Renewable Energy Masterplan (SAREM) in the first half of 2025. SAREM sets out a comprehensive industrialisation framework for the renewable energy and battery storage value chains, which, among other things, targets investment in manufacturing of R15 billion and the creation of 25 000 jobs by 2030 (DEE, the dtic and DSTI, 2025). It emphasises localisation, supplier development, and skills training, positioning renewable energy as a driver of manufacturing opportunities in renewable energy components, cables, transformers, switchgear, batteries, and related equipment. Essentially, SAREM seeks to align industrial policy with the energy transition to ensure that the rollout of renewables stimulates domestic production rather than deepening import dependence. Concerns remain, however, that existing concessions, such as "staged consignments", effectively allow duty-free imports and undermine local operations (Groenendaal, 2025). Nevertheless, there has been local investment in strategic segments of the value chain (Arnoldi, 2024).

TRADE

A key development in international trade has been the United States tariff action, announced in April 2025 and implemented in August, which imposed a 30% rate on the import of most South African products, and exemptions for some. In the second quarter of 2025, South Africa exported a total of R11 billion of products from Chapter 85 of the Harmonised System (HS).[1] While most of South Africa's exports from this chapter are directed to Africa (62%), the US, which received 6%, is a major destination for certain products. In the second quarter of 2025, for instance, 45% of South Africa's R138 million in exports of automatic circuit breakers (HS85362015) went to the US, along with 54% of

[1] It is noted that Chapter 85 includes both electrical equipment and electronics. Electronics do not fall within the electrical equipment manufacturing subsector.

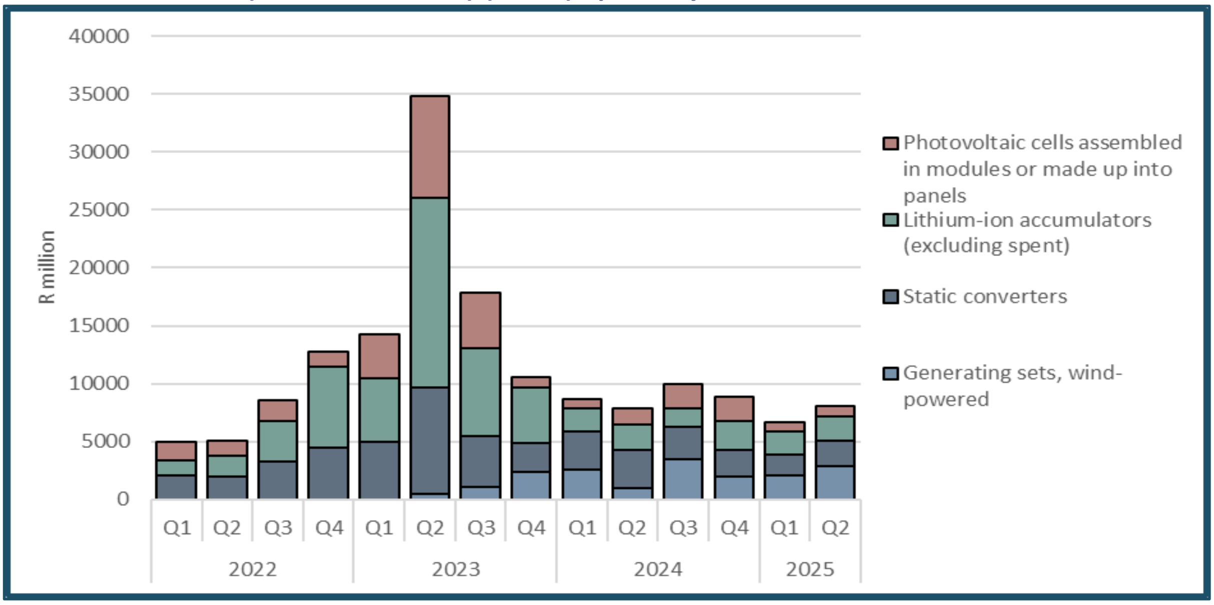
R84 million in exports of motors with an output of 37.5W or less (HS85011000), among others. These products are not exempt from the tariff action, with only 1% of South Africa's R676 million in HS85 exports to the US in the second quarter of 2025 eligible for exemptions (calculated from ITC, no date; The White House, 2025). These were, however, in electronics rather than electrical equipment.

With imports, the update focuses on renewable energy technology, for which South Africa aims to localise the production, and electrical and telecommunications cables, which are designated for government procurement.

Quarterly imports of renewable energy technology and associated components (solar panels, lithium-ion batteries, static converters (inverters) and wind powered generating sets), for the past year-and-a-half, have hovered between R6 billion and R10 billion (Graph 1). This is significantly lower than its three-and-a-half-year peak of a cumulative R34.8 billion, in the second quarter of 2023 at the height of loadshedding. In the second quarter of 2025, South Africa imported a total of around R8.1 billion of these products, down 77%, in real terms, from two years earlier. The largest reduction was in lithium-ion accumulators, which fell by R14 billion, in constant 2025 rand, followed by solar panels (down by R8 billion), and static converters (down by R7 billion). Imports of wind generating sets, in contrast, increased by just over R2 billion.

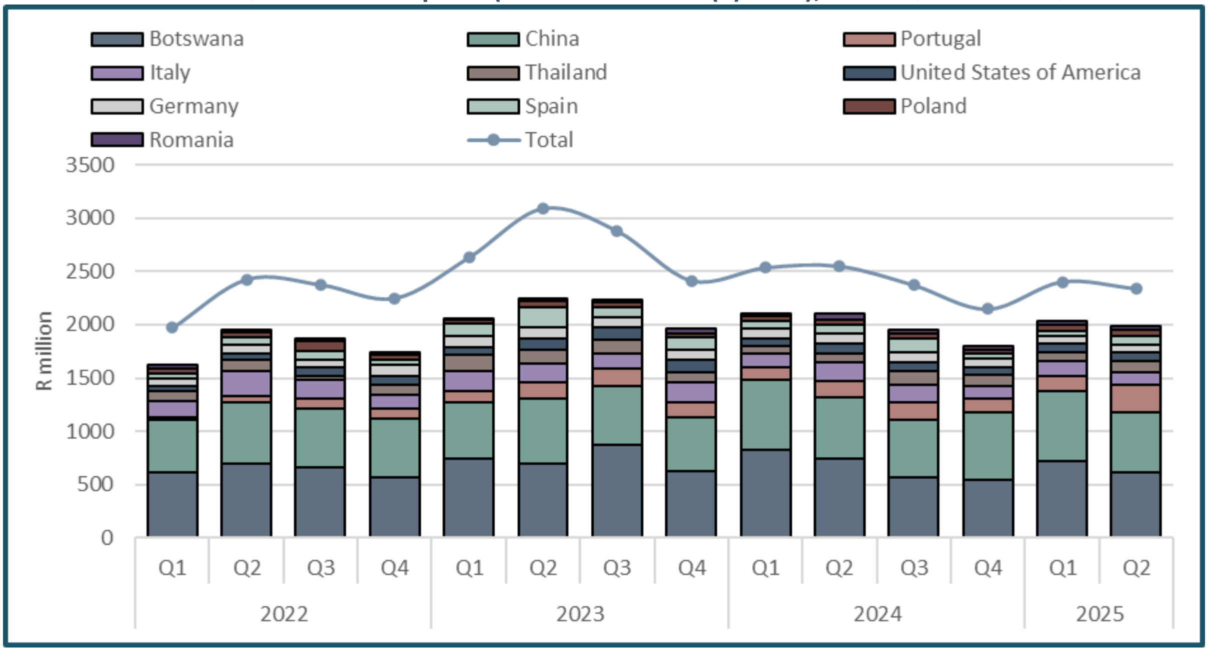
Quarterly imports of electrical and telecommunications cables (from the tariff heading HS8544) have increased moderately, in real terms, from almost R2 billion in the first quarter of 2022, to just over R2.3 billion in the second quarter of 2025 (Graph 2). Imports spiked in 2023, coinciding with the trend shown in Graph 1. Botswana and China have featured, consistently, as top import partners, while India, which ranked third in the second quarter of 2023, ranks 15th in the second quarter of 2025.

Graph 1. South Africa's imports of renewable energy technology and associated components (in constant 2025 (a) Rand), quarterly, 2022-Q1 to 2025-Q2



Note: (a) Rand values are reflated using implicit GDP deflator, rebased to the second quarter of 2025.
Source: Trade data calculated from ITC. Trade Map. Interactive database. Downloaded from www.trademap.org in October 2025. GDP deflator calculated from Statistics South Africa. GDP P0441 – Q2 2025. Excel spreadsheet. Downloaded from www.statssa.gov.za in September 2025.

Graph 2. Imports of electrical and telecommunications cables, top 10 import partners in 2025-Q2 and total imports (in constant 2025 (a) rand), 2022-Q1 to 2025-Q2



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CONCLUSION

Recent policy developments signal an effort to align South Africa's energy transition with industrial development, creating new demand for locally produced electrical equipment. At the same time, trade pressures, such as US tariffs, highlight the ongoing risk of external shocks while imports of key equipment, although lower than previously, indicate continued import reliance. This highlights the opportunities for industrial growth and enhancing competitiveness in the industry.

REFERENCES

Arnoldi, M. 2024. 'Deputy Minister confident that more battery sector investments are in store'. *Engineering News.* 25 October. Available at: https://www.engineeringnews.co.za/article/deputy-minister-confident-that-more-battery-sector-investments-are-in-store-2024-10-25 (Accessed 22 September 2025).

DEE. 2025. *Integrated Resource Plan 2025.* (Infographic). Department of Electricity and Energy. Available at: https://www.dmre.gov.za/Portals/0/Energy%20Resources/IRP/IRP%202025/IRP-2025-Infographics.pdf?ver=mikaBx3HXniQafzjmQiXlQ%3D%3D (Accessed 3 November 2025).

DEE, the dtic and DSTI. 2025. *South African Renewable Energy Masterplan*. Department of Electricity and Energy, Department of Trade, Industry and Competition and Department of Science, Technology and Innovation. Available at: https://www.gov.za/sites/default/files/gcis_document/202506/south-african-renewable-energy-masterplan.pdf (Accessed 22 September 2025).

Groenendaal, B. 2025. 'Local renewable energy supply chains cry fowl over alleged loophole in SARS "staged consignments" import concession'. *Green Building Africa - Net Carbon Zero Buildings and Cities.* 8 July 2025. Available at: https://www.greenbuildingafrica.co.za/local-renewable-energy-supply-chains-cry-fowl-over-alleged-loophole-in-sars-staged-consignments-import-concession (Accessed 22 September 2025).

ITC (no date) Trade Map. Available at: https://www.trademap.org/ (Accessed 1 October 2025).

National Treasury and DEE. 2025. *Government advances bold reforms to unlock transmission investment and drive economic growth and development through the introduction of the independent transmission programme*. National Treasury and Department of Electricity and Energy. Available at: https://www.treasury.gov.za/comm_media/press/2025/2025060601%20Media%20Statement%20-%20Independent%20Transmission%20Programme.pdf (Accessed 22 September 2025).

National Transmission Company South Africa. 2024. *Transmission Development Plan (TDP) 2025-2034*. Presentation. Available at: https://www.ntcsa.co.za/wp-content/uploads/2024/11/TDP2024_Public_Forum_Presentation_30Oct2024_Final_Pack_Rev1.pdf (Accessed 22 September 2025).

Pienaar, A. and Brewis, T. 2025. 'Opportunity to connect: Section 34 determination and draft regulations pave the way for private sector involvement in new electricity transmission infrastructure'. *Cliffe Dekker Hofmeyr*, 10 April. Available at: https://www.cliffedekkerhofmeyr.com/news/publications/2025/Sectors/Projects-Energy/projects-and-energy-alert-10-alert-Opportunity-to-connect-Section-34-determination-and-draft-regulations-pave-the-way-for-private-sector-involvement-in-new-electricity-transmission-infrastructure- (Accessed 22 September 2025).

Statistics SA. 2025. GDP P0441 – Q2 2025. Statistics South Africa. Available at: https://www.statssa.gov.za/?page_id=1854&PPN=P0441&SCH=73854 (Accessed 15 September 2025).

The Presidency. 2024. President Ramaphosa assents to Electricity Regulation Amendment Bill. 16 August 2024. Available at: https://thepresidency.gov.za/president-ramaphosa-assents-electricity-regulation-amendment-bill (Accessed 22 September 2025).

The White House. 2025. Annex II. Available at: https://www.whitehouse.gov/wp-content/uploads/2025/04/Annex-II.pdf (Accessed 1 October 2025).

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