

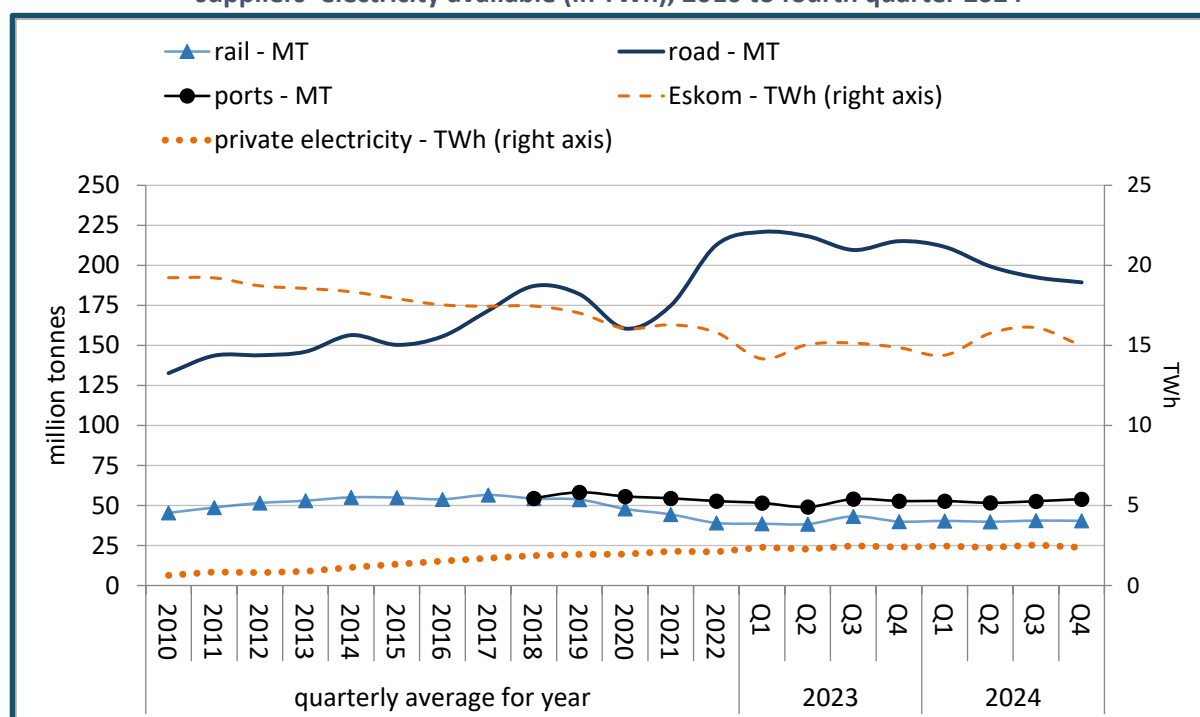
Infrastructure

Grid electricity dropped sharply in the final quarter of 2024. Although loadshedding returned in early 2025, it remained far lower than in 2023. That outcome likely reflected both continued growth in off-grid energy, mostly solar, combined with shrinking effective demand as Eskom tariff increases accelerated. Rail freight tonnage remained almost unchanged in the two years to December 2024, while road freight fell over 10%, reflecting slow economic growth.

Graph 14 summarises key trends in freight and electricity from 2008. Electricity distributed through the national grid decreased 7% from the third to the fourth quarter of 2024 in seasonally adjusted terms following an 11% recovery over first nine months of 2024. Eskom's supply fell by 7% in the fourth quarter, after climbing 12% in the first nine months of the year. Private supply to the grid dropped 6% in the final quarter.

Freight tonnage on rail and through the ports has stabilised since early 2023 after falling from 2019. Still, rail freight was 10% lower than in 2021 and 25% below its peak in 2019, before the sharp decline in Transnet services following the pandemic downturn. Road tonnage dropped 10% in the two years to the fourth quarter of 2024, reflecting the broader economic slowdown.

Graph 14. Road, rail and ports tonnage carried (in million tonnes) and Eskom and other grid suppliers' electricity available (in TWh), 2010 to fourth quarter 2024



Source: Calculated from Statistics South Africa. Electricity generated and available for distribution. Excel spreadsheet from 2000; and Land Transport Survey. Excel spreadsheet. Downloaded from www.statssa.gov.za in February 2025. For ports, Transnet National Ports Authority. Port Statistics. Webpage. Accessed at <https://www.transnetnationalportsauthority.net/Commercial%20and%20Marketing/Pages/Port-Statistics.aspx> in February 2025.

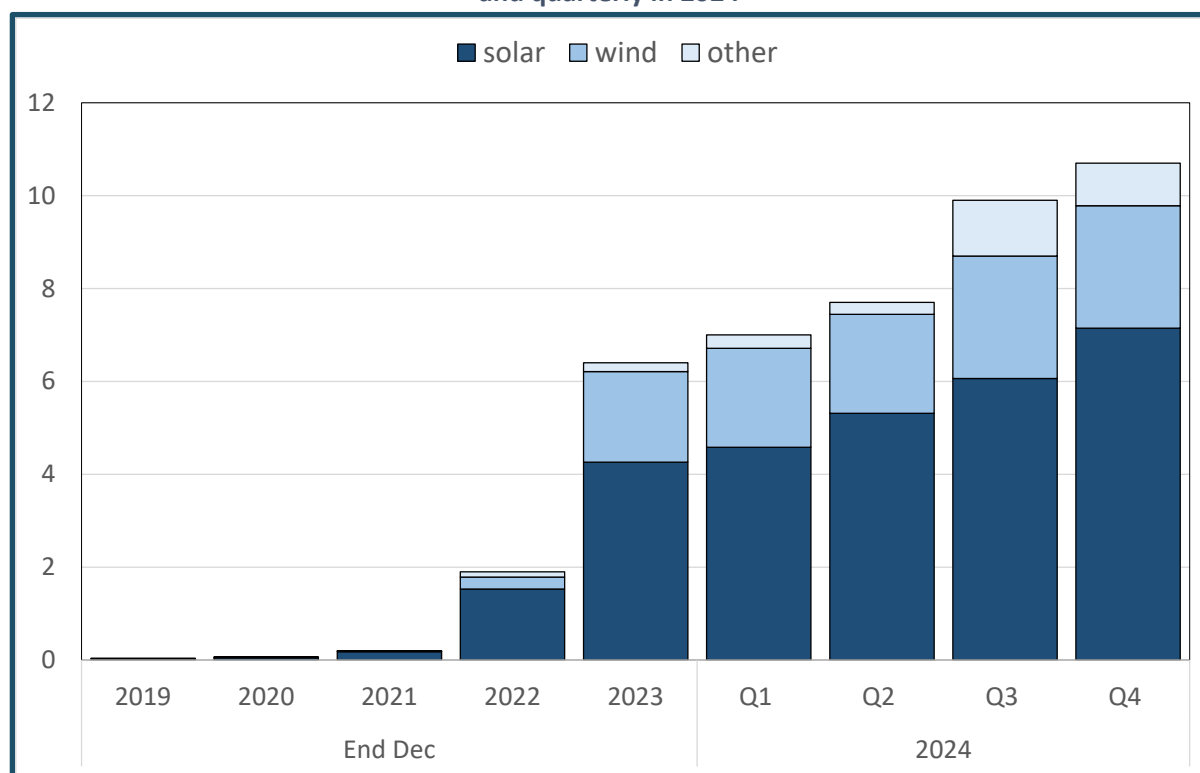
Although electricity distributed through the national grid declined, Eskom did not impose loadshedding in the final quarter of 2024, although there was some in the first two months of 2025.¹

¹ A graph of loadshedding incidents by level is included in the data set.

In addition to supply constraints, the downturn reflected falling demand for grid electricity due to its unreliability in 2022 and 2023 and accelerated tariff increases since 2020. In constant rand terms, grid electricity used per million rand of GDP fell almost 25% over the past 15 years, with a 6% decline from 2019. Per-person use fell 27% from 2010, and 12% from 2019. Meanwhile, Eskom's rates increased 7% a year above inflation from 2020 to 2024, or 33% for the whole period. That compared with an average annual increase of 2% above inflation from 2010 to 2020.

Lower demand for grid electricity has led to slower growth in energy-intensive production; increased efficiency in energy use; and a shift to off-grid electricity. In 2024, off-grid generation registered with the National Energy Regulator of South Africa (Nersa) climbed by 67%, after more than doubling in 2023 and increasing almost nine-fold in 2022. Two thirds of registered off-grid capacity was solar, but its share had fallen from above 90% in 2021. Wind generation climbed from 5% in 2021 to 25% in 2024. Other technologies, including gas, made up the remainder. (Graph 15)

Graph 15. Registered off-grid generation capacity in gigawatts, as of year end from 2019 to 2023 and quarterly in 2024



Source: Calculated from SAPVIA. Nersa registered plants dashboard. Accessed at <https://sapvia.co.za/nersa-registered-plants-dashboard/> in March 2025.