

Energy-related impact of the MIDDLE EAST CONFLICT



Mitchell Brooke

By January 2026, global energy markets had reached a three-year low. Mitchell Brooke reports

At the beginning of the year, the energy-market slump saw Brent Crude averaging USD 60/BBL and Marine Bunker Fuel clocking USD 450/MT. Simultaneously, the South African rand strengthened to R16/USD (Figure 1), improving from R18.5/USD in 2025, and coastal diesel prices dropped to R17.92/ℓ by February. However, electricity remained an outlier, with a 9% hike in early 2026 culminating in a 74% rise in cost since 2016.

The energy burden on exports

The Southern African citrus export sector is heavily dependent on electricity, diesel, and marine fuel (see Table 1). Because the industry relies on a consistent logistics and cold chain ecosystem, from harvest

to market, every stage of the value chain consumes energy – often requiring multiple energy sources simultaneously. While the early 2026 outlook promised lower logistical costs, the unexpected conflict in the Middle East has reversed these gains. Energy prices have surged. The South African rand weakened to R17/USD. And by March, Brent Crude had spiked by 87% to USD 112/Bbl. Furthermore, diesel prices have risen to R28,60/ℓ in March, and Marine Bunker fuel has jumped 83% to USD 825/MT. Current sentiments suggest that shipping and logistics costs will remain prohibitively high until regional stability is restored.

A path toward energy independence

This volatility serves as a stark reminder that citrus producers must reduce their reliance

on traditional energy mixes. While energy alternatives are currently limited, a practical immediate step would be to move away from conventional practices. One viable alternative is to load citrus at ambient temperatures directly into containers at pack houses, using Genset units for transport to port terminals. This strategy bypasses two major energy-dependent stages: port cold storage and port container haulage. The viability of this approach could be further enhanced by adopting Performance Based Standards (PBS) “Smart Truck” applications. By using a single tractor to transport two 12-meter refrigerated containers, the industry may find the required breakthrough to make this logistical shift both practical and economically sustainable.

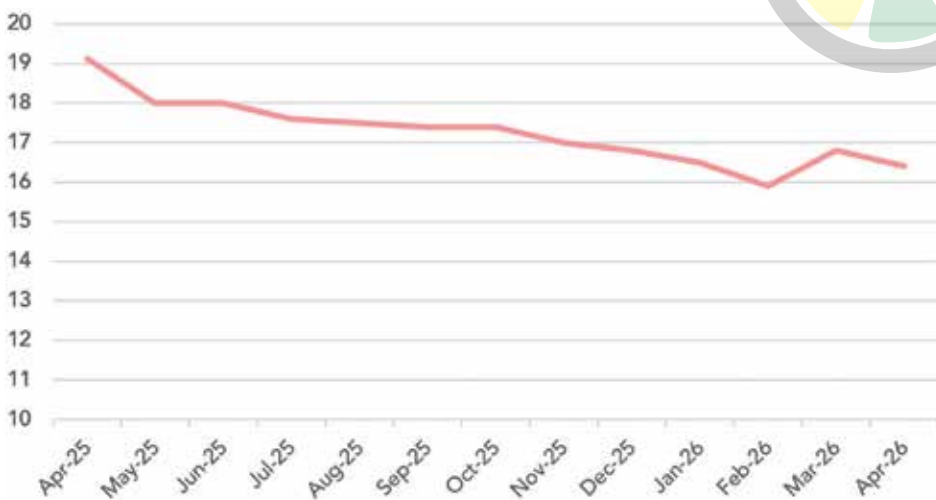


Figure 1: Trend in rand/dollar exchange rate, April '25-April '26

Table 1: The heavy dependence of the Southern African citrus industry on electricity, diesel and marine fuel, must be mitigated

Southern African citrus export energy-demand cycle in the value chain					
Area of energy dependency	Diesel fuel	Diesel fuel	Electricity	Marine fuel	Solar
Irrigation	Irrigation pumps can be powered by diesel generators or from electricity.		Irrigation pumps can be powered by diesel generators or electricity.		Solar power is commonly used for providing power to irrigation pumps.
Crop spraying	Most crop spraying is applied with tractors.				
Harvesting	Harvesting uses tractors to collect picked fruit in bins.				
Production and packing			Most pack houses use electricity to power heaters, pumps and conveyor motors.		Solar power can be used to power heaters, pumps and conveyor motors.
Transportation to port cold store	Trucks use diesel fuel during transport.	Diesel is used in refrigerator trucks fitted with generator sets, to power the reefer during transport.			
Cold store precooling			Cold stores use electricity to power Ammonia/CO ₂ plant pumps that cool fans and evaporator fans.		
Container transportation to port stacks	Trucks use diesel fuel during port cross-haul transport to port terminals.	Trucks fitted with generator sets to power the container during transport use diesel fuel to power the generator.			
Container storage in terminal	Container temperature is maintained with electricity or diesel fuel that comes directly from Eskom, which supplies generator units that power the containers.		Container temperature is maintained with electricity coming directly from Eskom, or diesel fuel supplying generator units that power the containers.		
Container handling onto ships	Port terminal landside equipment uses diesel fuel to power machinery motors.		Port terminal ship-to-shore cranes use Eskom electricity to power the crane motors and hoists.		
Shipping from port to port	Used to power the containers cooling unit during the voyage.			Used to power the ships drivetrain during voyage. Due to the length and time of shipping, marine fuel is a large component in the energy mix.	

