SOUTH AFRICA

Electrifying Public Transportation

MARKET
INTELLIGENCE BRIEF

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Market Intelligence Brief

2026

ELECTRIFYING PUBLIC TRANSPORTATION

GreenCape

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CONTENTS

List of abbreviations and acronyms

BaaS	Battery-as-a-service
BEB	Battery electric bus
BESS	Battery energy storage system
BRT	Bus rapid transit
DBSA	Development Bank of Southern Africa
eNaTis	Electronic National Administration Traffic Information System
EV	Electric vehicle
GABS	Golden Arrow Bus Services
GDP	Gross domestic product
ICE	Internal combustion engine
MIB	Market intelligence brief
MBT	Minibus taxi
OEM	Original equipment manufacturer
PV	Photovoltaic
SA	South Africa
SANEDI	South African National Energy Development Institute
TCO	Total cost of ownership
TOU	Time-of-use
ZEBRA	Zero Emission Bus Rapid-Deployment Accelerator

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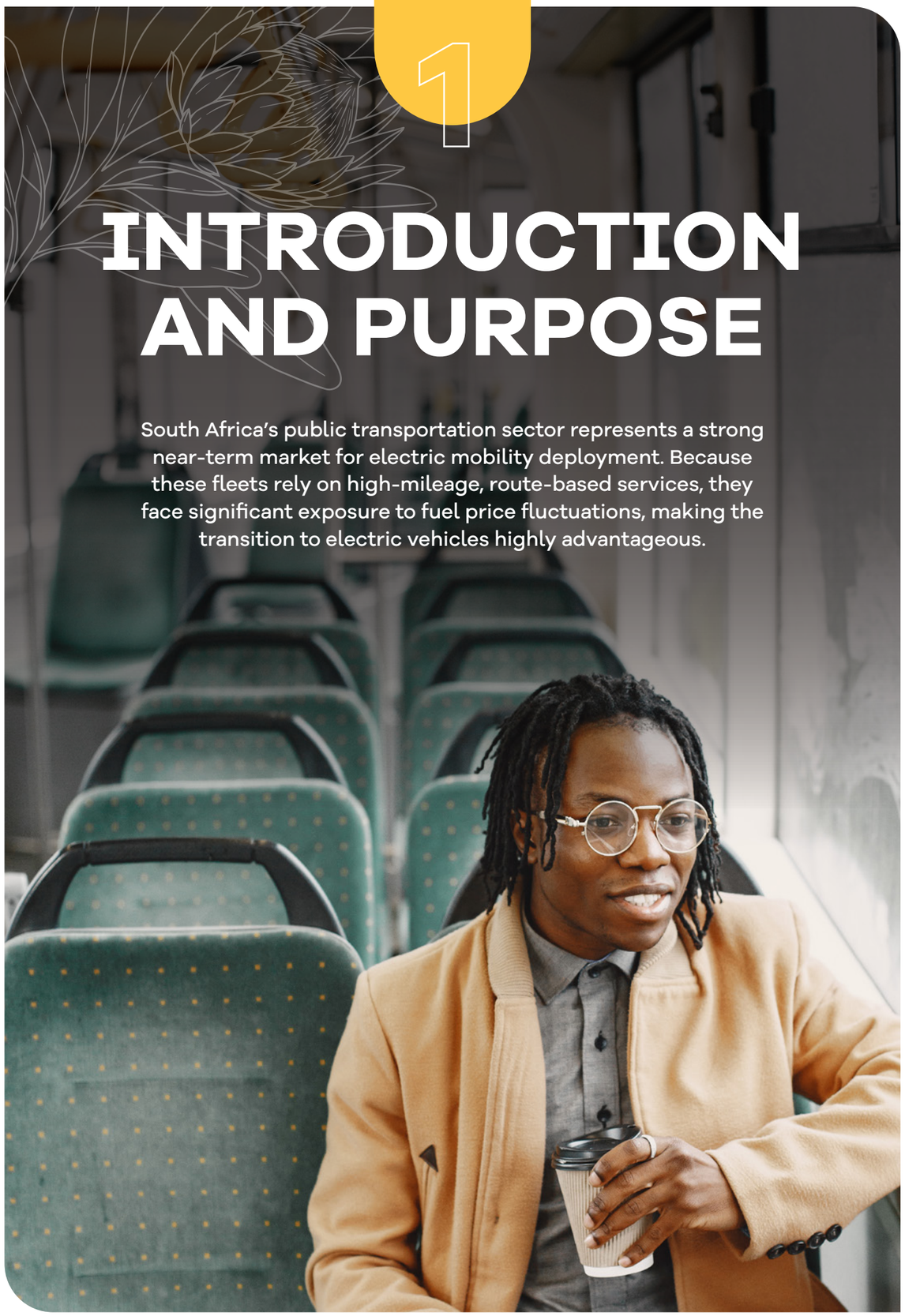
INTRODUCTION AND PURPOSE

South Africa's public transportation sector represents a strong near-term market for electric mobility deployment. Because these fleets rely on high-mileage, route-based services, they face significant exposure to fuel price fluctuations, making the transition to electric vehicles highly advantageous.



This market intelligence brief (MIB) is written for OEMs and passenger transport service operators. It outlines technical and operational dynamics of electrifying South Africa's public transport sector.

It covers scheduled commuter bus services, bus rapid transit (BRT) systems, municipal bus networks, contracted operators, minibus taxis, and commercial e-hailing[1] fleets. It highlights structural requirements for infrastructure development, local vehicle assembly, and depot energy integration.

This brief explores bus electrification as the main investment opportunity and showcases minibus taxi electrification and electric e–hailing as emerging trends to note.

1 The National Land Transport Amendment Act formally defines e-hailing as a public transport service, bringing it more clearly into the land transport regulatory framework, thus electric e-hailing should be considered part of the wider public transport electrification landscape.

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INVESTMENT OPPORTUNITIES

The transition to electric public transport in South Africa involves a systemic shift across three high-utilisation segments: Scheduled bus fleets, minibus taxis (MBTs), and commercial e-hailing fleets.

Rather than simple vehicle replacement, this transition requires long-term capital allocation for depot readiness, charging infrastructure, distribution grid upgrades, and specialised maintenance networks.

This shifts operational expenses from volatile fossil fuels to predictable, technology-backed energy infrastructure. The most operationally viable near-term opportunities are concentrated in corridor-specific and hub-based deployments. Operating on fixed, predictable routes ensures higher utilisation of charging infrastructure, mitigates local distribution grid capacity constraints, and optimises battery lifecycle performance. This establishes public transport electrification as a structured, long-term infrastructure investment.

2.1 Bus electrification

South Africa's electric bus market is made up of isolated pilots to early-stage deployment and structured procurement, driven by operator-led purchases, municipal tenders, and locally assembled demonstration vehicles. While scaled commercial adoption has not yet been achieved, current deployments demonstrate that battery electric buses (BEBs) are fully viable within South African operating environments.

According to Electronic National Administration Traffic Information System (eNaTis) registry data[2], South Africa had 66 249 registered buses, bus trains, and midibuses at the end of 2025. Public bus fleets are highly concentrated, with large operators such as Golden Arrow Bus Services (GABS), Putco, MyCiTi, Rea Vaya, and various metropolitan services operating structured fleets on fixed or semi-fixed routes. This operational model is ideal for planned charging schedules, depot-based energy infrastructure, and phased fleet replacement.

Annual bus sales in South Africa grew by 31.7% between 2020 and 2025, increasing from 728 units to 959 units. Despite this recovery, the market remains relatively small, which means near-term electric bus uptake is expected to be driven by phased fleet procurement rather than rapid full-fleet conversion.

By 2030, the cumulative electric bus market is projected to reach 576 vehicles, representing an estimated market opportunity of approximately R3 billion based on announced deployments, planned pilots, and public procurement signals. This would represent 3.0% of South Africa's active public transport bus fleet, or 0.9% of the broader registered bus and midibus parc[3].

The GABS electric bus pilot[4] reported lower energy costs compared with diesel, reduced maintenance requirements and potential fuel cost savings over the vehicle lifetime. By May 2026, GABS had deployed 120 electric buses, travelling 115 000 - 120 000 km per week and expected to reach close to 6 million electric bus kilometres in 2026. The buses represent around 10% of GABS kilometres travelled and are supported by a solar photovoltaic (PV) charging. GABS is currently assessing additional solar capacity, exploring green energy wheeling options, and trialling internal combustion engine (ICE) retrofits to evaluate second-life options for existing ICE fleet assets.[5]

2 https://www.natis.gov.za/index.php/statistics/live-vehicle-population/live-vehicle-population-2025
3 Vehicle parc refers to the total number or composition of vehicles currently in operation in a specific region.
4 https://greencape.co.za/library/case-study-electrification-of-public-transportation/
5 https://www.engineeringnews.co.za/article/golden-arrow-expects-electric-buses-to-run-6-million-km-this-year-mulls-wheeling-options-2026-05-06

Table 1: An overview of key bus electrification initiatives in South Africa

OPERATOR	SEGMENT	FLEET SIZE	BEB STATUS	CURRENT / PLANNED ACTIVITIES
GABS	Provincially subsidised commuter bus.	1 170 vehicles	120 BEBs	Active deployment with integrated depot Solar PV charging; Commercial proof point for commuter routes.
Paruk group	Private bus / passenger transport group.	2 000 vehicles	100 BEBs (by end 2027)	MAN Truck & Bus received a 100-unit order[6] (MAN's largest eBus order outside Europe), linking deployment to local production with chassis assembly in Pinetown and bodybuilding in Olifantsfontein.
MyCiTi	Municipal BRT / feeder system.	347 vehicles	38 BEBs (mid- 2026 - 2027)	Testing 12-metre Volvo BZRLE electric buses[7] on existing routes for 12 months before planned full operations in July 2027; Bodies manufactured in Johannesburg.
Tshwane & eThekwini	Municipal / city feeder services.	228 (Tshwane) & ~500 (eThekwini)	39 BEBs total (Feasibility study scheduled for 2026)	20 BEBs allocated for Tshwane and 19 for eThekwini via a South African National Energy Development Institute (SANEDI) and Development Bank of Southern Africa (DBSA) initiative. The project is delayed but remains a key municipal pipeline indicator.
University of Johannesburg	Inter-campus shuttle.	15 vehicles	5 BEBs deployed	Non-municipal fleet testing showcasing local battery integration (busses supplied by Mi Power). Features a 76-passenger capacity, 350 km range, 5.5-hour charge time, and solar PV integration.
Rea Vaya	Municipal BRT.	277 vehicles	Upcoming trials / expression of interest	Feasibility and expression of interest stage; procurement quantities are not yet public.
Buscor	Government-subsidised public transport operator.	450 vehicles	1 BEB pilot	Active pilot testing by a major subsidised commuter bus operator outside the Western Cape.

Source: GreenCape analysis[8]

6 https://press.mantruckandbus.com/corporate/100-electric-buses-for-south-africa-man-truck--bus-receives-largest-ebus-order-outside-europe/
7 https://www.myciti.org.za/en/contact/media-releases/citys_first_electric_bus_to_arrive_in_august/
8 Based on GreenCape research; provided as a non-exhaustive overview with errors and omissions excepted.

Drivers for bus electrification

- High mileage and fuel-cost exposure: Buses travel high daily distances on fixed schedules, exposing operators directly to diesel price fluctuations. In South Africa, fuel prices are strongly influenced by international crude oil and refined fuel prices and the Rand/US Dollar exchange rate, additionally, diesel prices are not fully regulated at the retail level. Wholesale and retail margins can vary between suppliers, resulting in price differences across locations and over time. Where electric buses are matched with appropriate routes and charging setups, their lower operating costs offset the higher upfront capital expenditure over the vehicle's lifespan. Operational energy costs are estimated to be 33% to 57% lower than diesel costs, although the final economic outlook depends on vehicle pricing, finance terms, and electricity tariff structures. In 2026, global oil market disruptions caused wholesale diesel prices to rise by roughly 40%. The transition to electric fleets serves as a key financial hedge.
- Decarbonisation, air-quality and public-health benefits: Bus electrification supports municipal, operator, and national decarbonisation goals while delivering immediate local air-quality benefits. Electric buses eliminate tailpipe emissions at the point of use, reducing passenger and pedestrian exposure to exhaust pollution in dense transport corridors, depots, interchanges, and city centres. They also lower urban noise pollution. While the net carbon mitigation potential of BEBs is currently constrained by South Africa's coal-dominated national electricity grid, the localised public health benefits are immediate. As the grid decarbonises and depot charging is increasingly paired with on-site solar PV, battery energy storage systems (BESS), and green energy wheeling[9], the lifecycle greenhouse gas emissions reduction case will strengthen proportionally.

Barriers and mitigations for bus electrification

- **High upfront vehicle cost:** A 2024 Zero Emission Bus Rapid-Deployment Accelerator (ZEBRA) study[10] indicated that a standard 12 m battery-electric commuter bus costs nearly double its Euro VI diesel counterpart (up to R9 million versus R5 million). Electric buses remain more expensive upfront than diesel alternatives. A 2024 Zero Emission Bus Rapid-deployment Accelerator (ZEBRA) study found that a standard 12-meter battery electric commuter bus costs nearly double that of a Euro VI diesel equivalent (up to R9-million versus R5-million), largely driven by the battery. Despite this steep upfront premium and the added expenses of charging infrastructure, the study reveals that their long-term operating costs are virtually identical, sitting at roughly R37.60 per kilometre. Given that South African buses operate for a minimum of 12 years (with an average lifespan of 17 years), local electric bus manufacturer, MAN Truck & Bus, says electric buses successfully reach a total cost of ownership (TCO) break-even point over a 12-year period.
- **Charging access and grid constraints:** Depot electrification requires careful coordination of grid infrastructure limits, charging logistics and safety systems. Traditional diesel refuelling hubs cannot easily be converted to electric fleet charging, especially in a constrained municipal grid. Operators often require grid impact assessments, dedicated electrical feeders, and automated demand-management systems. Furthermore, tariff structures may penalise grid charging through demand charges and high peak tariffs. Integrating solar PV, BESS, and smart charging configurations directly into the fleet planning phase is crucial to reducing exposure to local distribution constraints.
- **Regulatory and procurement framework uncertainty:** During the Department of Transport budget vote speech on 12 May 2026[11], the Minister of Transport announced that the existing funding instruments, including the Public Transport Operations Grant, Public Transport Network Grant, Taxi Recapitalisation Programme, and Learner Transport Programme, will be restructured into a unified public transport fund, resulting in a reduction of R8.6 billion in grants over the medium term. Furthermore, the Minister confirmed that the BRT subsidy framework will be discontinued due to underperformance of several BRT systems[12]. While some BRT systems, particularly MyCiTi in Cape Town and Rea Vaya in Johannesburg, have demonstrated stronger operational performance and continue to play an important role in urban mobility, the reforms signal a shift towards funding allocations based on passenger demand, operational performance and value for money across all public transport modes.

For electric public transport, procurement decisions will therefore increasingly need to be supported by lifecycle total cost of ownership (TCO) assessments, charging infrastructure planning, and long-term operating efficiencies.

9 https://greencape.co.za/library/industry-brief-unlocking-the-potential-of-wheeling-in-the-western-cape/
10 https://www.c40knowledgehub.org/s/topic/0TO1Q000000JMnHWAW/lessons-from-the-zero-emission-bus-rapiddeployment-accelerator-zebra?language=en_US
11 https://www.transport.gov.za/wp-content/uploads/2023/02/DM_Budget_speech_2026.pdf
12 https://www.parliament.gov.za/news/end-road-brt-system

2.2 Minibus taxi electrification

Minibus taxis (MBTs) represent South Africa's largest public transport segment. The Minister of Transport stated at the National Transport Conference[13] that the active national fleet of 250 000 to 285 000 vehicles generates up to R100 billion in annual revenue, contributes 1.4% to national GDP, and supports approximately 300 000 jobs. Consequently, this high-utilisation sector offers the largest scale potential for emissions reduction and fuel savings, improving localised air quality and creating a healthier environment at congested transit hubs.

While the operational case is supported by high daily mileages, the market is highly fragmented, privately owned, and capital constrained. Recent vehicle sales reflect these pressures: Annual new MBT sales fell 49.4% to 9 454 units in 2024 and declined further to 8 747 in 2025 due to stricter lending requirements from SA Taxi[14], a major financial services provider to the industry.

The Department of Transport's proposed consolidated public transport funding model is intended to improve the long-term sustainability of the sector and reduce investment risk in the taxi industry by strengthening regulation, transparency and safety standards. Reducing risk in the taxi industry remains a key priority for the department, although several structural and operational challenges still need to be addressed.

Stellenbosch University research on transitioning MBTs in Cape Town[15] found that electrification is technically viable under current operating patterns when charging access is planned around real vehicle behaviour. Access to suitable charging locations matters more than charger speed. Vehicles do not always return to a single depot, making centralised charging difficult. Combined depot and home charging allowed for more successful route electrification than depot-only charging. These charging locations can also become investable energy assets. Depots, ranks, interchanges, airports and other high-utilisation mobility nodes can combine charging with solar PV, battery storage and energy management. Where shared hubs also serve e-hailing, municipal fleets and logistics vehicles, higher utilisation can strengthen commercial viability.

The first planned electric minibus taxi routes in Century City, Cape Town (planned for late-2026), will be an important market test. The pilot, led by FlxEV, is expected to deploy the eKamva electric MBT, a vehicle model built by Higer Bus Company and designed specifically for South African operating conditions in a segment currently dominated by Toyota internal combustion engine (ICE) vehicles. The vehicle is a 15-seater with more than 200 km range between charges. It will be offered through a battery-as-a-service (BaaS) model, with access to all flxEV charging facilities charged on a consumption basis, and free basic servicing on vehicles as an additional bonus.. This model reduces upfront vehicle cost and shifts battery performance and replacement risk away from individual taxi owners.

Annual electric MBT sales could reach approximately 2 000 units by 2030, resulting in a cumulative electric MBT parc of around 3 700 vehicles, representing approximately 1% of the projected national MBT vehicle parc by 2030. Early adoption is expected to be initially concentrated in formal fleet applications, particularly scholar and staff transport, before broader uptake in the informal public transport market.[16]

GreenCape published an industry brief highlighting the manufacturing opportunity and providing an overview of the MBT sector.

DOWNLOAD BRIEF

13 https://topauto.co.za/news/154848/there-are-85000-too-many-taxis-in-south-africa-transport-minister/
14 SA Taxi claim to finance more than 11% of all operating taxis in South Africa.
15 https://www.researchgate.net/publication/396696492_A_sustainable_transition_to_electric_minibus_taxis_in_Cape_Town's_paratransit
16 Greencape analysis and stakeholder engagements with key industry players.

2.3 Electric e-hailing

Electric e-hailing is emerging as a high-utilisation passenger transport electrification opportunity in South Africa. In the absence of comprehensive public data on the size of South Africa's (SA's) e-hailing vehicle fleet and long-term market growth, early electric e-hailing activity provides useful evidence of market potential. Uber Go Electric launched in South Africa[17] in November 2025 with an initial fleet of 70 vehicles supplied and operated by Valternative Energy, expanding to 240 vehicles by May 2026. Bolt has also launched an EV ride category in Cape Town through a YugoRide fleet partnership, with a target of 500 EVs on its South African[18] platform by December 2026. Together, these deployments represent a confirmed pipeline of approximately 740 electric e-hailing vehicles, positioning the sector as one of SA's earliest commercial EV markets. As the two largest e-hailing platforms operating in SA, Uber and Bolt have both committed globally to transitioning to zero-emission or net-zero platforms by 2040.

The South African model appears to be developing through fleet-owner and platform-partner models rather than individual driver ownership. Platforms such as Uber and Bolt provide the digital demand platform, while specialist fleet operators procure, own or manage the electric vehicles and lease them to drivers. This approach reduces the upfront capital burden on drivers while enabling professional fleet management, standardised maintenance, coordinated charging and higher vehicle utilisation.

Charging utilisation provides the strongest early market evidence. WattSpot, a fleet-focused charging network developed by Valternative Energy[19], recorded 18 884 charging sessions, dispensed 205 845 kWh and supported more than 2 million electric fleet kilometres across three Gauteng sites in its first three months of operation. The network plans to expand to more than 200 charge points nationally by 2027. These figures show that electric e-hailing is not only a vehicle electrification opportunity, but also an opportunity in managed charging infrastructure and energy services.

The key test is whether fleet-owner models can improve driver economics while maintaining reliable service delivery. Lower energy and maintenance costs could improve earnings, but only if vehicle rental, charging cost and downtime remain competitive with ICE vehicles.

17 https://www.timeout.com/johannesburg/news/uber-launches-uber-go-electric-expands-motorbike-rides-in-johannesburg-120125
18 https://capechamber.co.za/latest-news/cape-town-short-circuit-fuel-blues-e-hailing-giant-launches-electric-vehicle-boost
19 https://www.engineeringnews.co.za/article/south-africas-first-dedicated-fleet-charging-network-hits-18884-sessions-in-gauteng-2026-05-04

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