Gaingo Project Introduction

Gaingo means the combination of Gain+go, which is just like our mission, vision and values. We hope that with our help, hardworking people who are willing to yearn for a better life can realize their dreams.

Ride to a better life

Company Introduction

Gaingo, a mobility-focused subsidiary of Smartcity — Zambia's leading energy technology company, carries forward Smartcity's core philosophy of "Technological Innovation, Energy Equity, and Sustainable Development". Committed to serving aspiring African passenger transport entrepreneurs seeking prosperity through diligence, Gaingo provides high-quality and sustainable production materials services. This approach ensures the sustainable development of its business model while establishing efficient passenger transport capacity foundations for Africa's commercial ecosystem.

Corporate Values

- **Mission**

To enable diligent African passenger transport entrepreneurs to thrive through quality, sustainable production materials services.

- **Vision**

To achieve a clean, efficient, and sustainably developed transportation ecosystem in Africa.

- **Values**

Client First, Authenticity, Efficiency, Innovation.

Business Model

Gaingo

Vehicle rental, battery replacement service

Rental and battery replacement service electricity charges

Motorcycle rider

Provide transportation services

transportation fee

Passenger

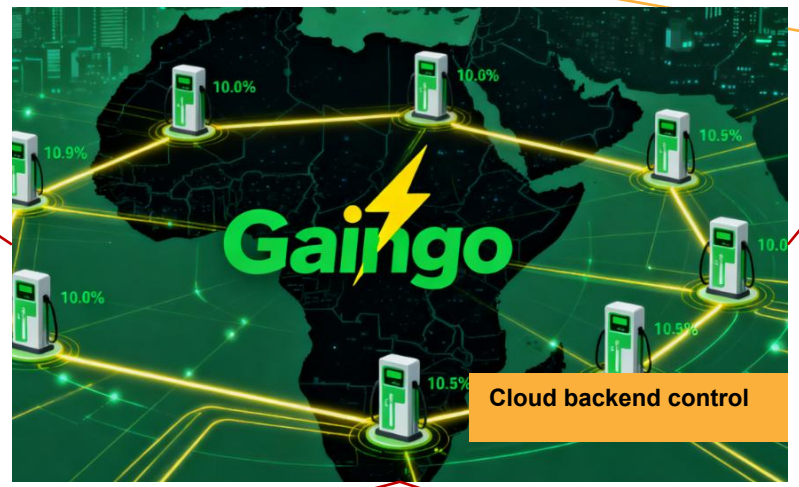
Operation Model



Battery circulation

Motorcycle rider



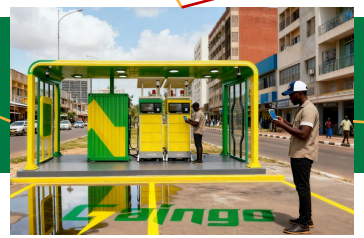

Field battery swap station


Cloud backend control

Mobile battery swap stations



Information flow and control


Urban battery swap stations

Village battery swap stations

Market Introduction

Population and Urbanization

As of 2025, Zambia has a total population of approximately 21.91 million, with a high annual growth rate of 2.81% (2025 data). This growth rate indicates that the country's population is projected to double approximately every 25 years. Lusaka, serving as the nation's capital and largest city, had a provincial population exceeding 3.3 million according to the 2022 census preliminary results, accounting for over 17% of the national total.

Zambia faces significant traffic congestion, which is highly concentrated. Its capital city, Lusaka, forms the absolute epicenter of this congestion. The resulting low commuter efficiency has fostered a strong demand for convenient short-distance transportation solutions.

Market Introduction

Current Transportation Structure

• Vehicle Composition: Dominated by informally operated fuel-powered minibuses, which account for over 80% of public transport. Private car ownership is low (approx. 4.5 per 100 people), while motorcycles (Boda-Boda) play a significant role in short-distance travel.

• Travel Patterns: Trips are primarily for commuting (mining, services) and daily livelihood purposes, with severe congestion during peak hours.

• Energy Mix: Nearly complete reliance on fossil fuels (petrol/diesel), with extremely low electric vehicle (EV) penetration (<0.1%). However, hydropower constitutes over 80% of the electricity supply, presenting a significant potential advantage for any future transition to electrification. The current prevalence of older, high-fuel-consumption vehicles results in low energy efficiency and prominent pollution issues.

Market Introduction

In-Depth User Needs Interviews

A study of 300 typical users (150 individual riders, 100 logistics couriers, and 50 tuk-tuk drivers) revealed the following insights:

Charging Pain Points: 87% of respondents cited insufficient public charging stations, while 62% reported order delays due to charging wait times. With each charging session taking 4–8 hours, effective daily working hours are reduced by an average of 2.3 hours.

Cost Concerns: Monthly fuel expenses for gasoline vehicles range from USD 120–150, whereas the theoretical cost for electric vehicles is only USD 30–40. However, the upfront battery cost (USD 600–800) remains a major barrier to adoption.

Range Anxiety: Existing electric vehicles offer an average range of 80 km, sufficient for only 25% of users' daily needs. 75% of logistics riders expressed the need for a minimum range of 180 km.

Pricing Strategy

- Time-of-day pricing:
- Peak hours (7-9 AM, 4:30-6:30 PM): Battery swap price increased by 20% ($3.60/trip)
- Off-peak hours (10 PM - 6 AM): Battery swap price decreased by 30% ($2.10/trip)
- Volume discounts:
- Monthly battery swaps Unit price Discount rate Target users
- 1-10 swaps $2.50 - Low-frequency users
- 11-30 swaps $2 $16.7% Regular riders
- 30+ swaps $1.50 33.3% Logistics riders

Vehicle-XP

Dasicdata	
Product dimensions	2020*780*1060mm
Wheel base	1300mm
Tire size(Front/Rear)	(Front)2.75-18/(Rear)19/19-18
Minimum Ground Clearance	220mm
Net weight(Without battery)	102kg
Max load	300kg
Brake mode(Foot or Hand)	Front hand brake; Rear foot brake
Brake type	Front disc brake;Rear drum brake
Absorber	Hydraulic absorber
Power data	
Motortype	Mid-motor 3000W-4000W Flat wire
Controller	24 tube 100A
Max Speed	80km/h
Range	50-200km
Climbing capacity	⩾ 25°
Battery capacity	72V27Ah-72V115Ah
Gear shift	3
Reversing function	✓
Double flash	✓
Dashboard display	Speed/Battery/Turn/Signal light/Gear

Vehicle-BOX

Dasicdata	
Product dimensions	2100*750*1030mm
Wheel base	1350mm
Tire size(Front/Rear)	Front2.75-17/Rear3.00-17
Minimum Ground Clearance	230mm
Net weight(Without battery)	106kg
Max load	300kg
Brake mode(Foot or Hand)	Front hand brake; Rear foot brake
Brake type	Front disc brake;Rear drum brake
Absorber	Hydraulic absorber

Power data	
Motortype	3000-4000W Mid-mounted flat wire reducer 3000-4000W 5000-7000W Mid-mounted flat wire reducer 5000-7000W
Controller	24 tube busbar current 100A phase line current 330A 30-36 tube busbar current 130A phase line current 420A
Max Speed	80km/h
Range	50-200km
Climbing capacity	⩾ 25°
Battery capacity	72V27Ah-72V115Ah
Gear shift	3
Reversing function	✓
Double flash	✓
Dashboard display	Speed/Battery/Turn/Signal light/Gear

Vehicle-Jin CG

Dasicdata	
Product dimensions	2050*720*1030mm
Wheel base	1260mm
Tire size(Front/Rear)	Front3.00-18/Rear90/90-18
Minimum Ground Clearance	205mm
Net weight(Without battery)	96kg
Max load	260kg
Brake mode(Foot or Hand)	Front hand brake; Rear foot brake
Brake type	Front disc brake;Rear drum brake
Absorber	Hydraulic absorber

Power data	
Motortype	3000-4000W Mid-mounted flat wire reducer 3000-4000W 5000-7000W Mid-mounted flat wire reducer 5000-7000W 3000-4000W Mid-mounted direct-drive round wire 3000-4000W
Controller	24 tube busbar current 100A phase line current 330A 30-36 tube busbar current 130A phase line current 420A 24 tube busbar current 120A phase line current 400A
Max Speed	80km/h
Range	50-200km
Climbing capacity	⩾ 25°
Battery capacity	72V27Ah-72V115Ah
Gear shift	3
Reversing function	✓
Double flash	✓
Dashboard display	Speed/Battery/Turn/Signal light/Gear

Battery

Lithium iron phosphate has a warranty of 1000 cycles, while lithium nickel cobalt manganese oxide has a warranty of 700 cycles.

Regular maintenance plan

To ensure battery performance, it is recommended to participate in a regular maintenance plan. For specific details, please consult customer service.

Battery swap cabinet

City battery swap stations (using city grid power for charging and battery swapping)

Rural battery swap stations (using solar energy for charging and battery swapping)

Battery swap cabinet

Off-road battery swap station (using solar energy for charging and battery swapping)

Mobile battery swap station (using solar energy for charging and battery swapping)

Cloud backend

Data Dashboard	Operational Data Monitoring Platform					
Scenario Services	Cabinet Services		SaaS Services		Battery Swap User App	
Business Operations	Package Configuration	Battery Swap Management	Package configuratio	Rental Management	Membership Management	Real-name Authentication
	Insurance Configuration	Order Management	Insurance setup	Order mgmt	E-signature	Credit Waiver
Business Applications	Operator Configement	Channel Management	Cabinet Configuration	Cabinet Management	Battery Configuration	Battery Management
	Franchise Management	Store Management	Cabinet Control	Cabinet OTA	Battery Configuration	Battery BMS
Infrastructure	Lithium Batteries		Battery Swap Cabinets		E-motorcycles & E-bikes	

Coupon Promotions	Channel Promotions	Vehicle Setup	Vehicle Management	Financial Management	Report Management
Referral Programs	Event Configuration	Vehicle Types	Vehicle Typeol	Spit Billing	System Settings
Open API Integration		Other Infrastruction			

Batteries and vehicles with IOT can aggregate information to the cloud backend server, which can monitor vehicle and battery information in real time (location, power, battery health)

Gaingo

Thank you for reading.
Join Gaingo.
May clean energy empower the African continent, may every hardworking and courageous person enjoy a better life, and may the development of a community with a shared future for mankind become increasingly harmonious.