## **FSD Africa Impact**



# Greening transport in Ghana: Transforming mobility with electric vehicles



### SolarTaxi

AN INNOVATIVE AND FAST-GROWING ELECTRIC VEHICLE MANUFACTURING BUSINESS IN GHANA







With affordable solar-powered electric vehicles, SolarTaxi reduces carbon emissions, enhances mobility, and creates jobs.



### With funding, SolarTaxi has:



Addressed Ghana's transportation challenges



Created 100 job and new income opportunities



Contributed to reduced outlet of fossil fuels



Empowered women in the tech sector



Provided sustainable transport solutions for enhanced inclusivity and livelihoods in Africa.



SolarTaxi received the Most Outstanding SDGs Automobile Company of the Year at Ghana's Think Energy SDG Awards 2023, acknowledging its remarkable growth and market impact.



Ghana's transportation faces challenges like inefficiency, unreliable infrastructure, and poor road conditions due to urban overpopulation. Conventional transport heavily depends on fossil fuels, causing pollution. FSDAi investee Persistent Energy Capital supports SolarTaxi, an electric vehicle manufacturer in Ghana.

SolarTaxi is on a mission to tackle these pressing problems by designing, assembling, selling, and leasing low-cost electric solar-powered vehicles. Led by CEO Jorge Appiah, SolarTaxi has emerged as a leader in the electric transportation industry in Ghana since its inception in 2018. The company offers electric two-wheel and four-wheel vehicles for transportation and delivery services.

SolarTaxi has implemented multi-city operations and set up an assembly plant in Accra, Ghana. Local engineers assemble the company's products using imported and locally sourced components and materials. This strategy allows SolarTaxi to achieve a 40% cost reduction, making their electric vehicles competitively priced compared to imported alternatives and similar to the cost of used foreign vehicles. The company has directly generated over 100 full-time jobs, and the vehicles contribute to job creation. For instance, producing ten bikes daily equates to creating one delivery job.

# EMPOWERING WOMEN IN THE TECH SECTOR



SolarTaxi recruits and promotes women in the company, creating a pipeline of talented female engineers who can assume leadership roles in the industry. Among the talented engineers at the company is Gifty Famila Afun:

"When people get to know I'm an engineer building electric bikes, they're stunned. They want to know what my day is like, what electric vehicles are, and they want to learn engineering as not just a man-based domain."

Gifty's dream is to move up the ladder to become a head technical officer in the company and to inspire more women to join the engineering industry.

SolarTaxi is revolutionising transportation and empowering the local community through initiatives such as the driver training academy. This academy offers extensive training, covering electric vehicle operation, traffic laws, maintenance, and the benefits of clean transportation, with a focus on empowering women. SolarTaxi plans solar charging stations to support increased electric vehicle usage as the market expands. The company has secured contracts to supply solar electric buses to Burkina Faso and Cote d'Ivoire, establishing itself as Africa's premier sustainable transportation firm. Additionally, the upcoming SolarCampus app will connect university students to e-transportation services and e-bike deliveries, fostering environmental consciousness among the youth.

SolarTaxi's electric vehicles, renowned for their efficiency, reliability, and incorporation of smart technologies like GPS and real-time tracking, have gained significant traction among car rental firms, couriers, and e-hailing services. Notable customers in Ghana, including Jumia and Bolt, utilise SolarTaxi's electric bikes for efficient and eco-friendly customer order deliveries in Accra.

With funding support from FSDAi investee firm Persistent Energy Capital, SolarTaxi is spearheading the greening of transport in Ghana and driving sustainable mobility solutions across Africa. SolarTaxi addresses Ghana's transportation challenges while creating economic opportunities, reducing pollution, and empowering women in the tech sector. SolarTaxi's expansion of its operations and product offerings will play a pivotal role in shaping the future of sustainable transportation on the continent.