Gayam motor is fixing e-vehicle charging time issues with battery swaps

Electric vehicle manufacturer Gayam Motor Works allows e-vehicle owners to swap drained batteries with fully charged ones to eliminate charge-time waiting. Autorickshaw driver Vijay Kumaram switched to an electric vehicle two years ago. Since then, business has improved as costs have fallen. Add to that the satisfaction of driving a vehicle that is not adding to the ever-increasing pollution on the streets.

Another benefit that Vijay has is that he doesn’t need to wait for hours charging his battery. He can simply swap his drained battery at a nearby charging hub. Vijay is one of the many fleet drivers attached with various startups who are seeing the benefits of e-rickshaws and SmartAutos manufactured by Hyderabad-based Gayam Motor Works. The company manufactures electric vehicles and focuses on electric three-wheelers and electric bicycles.

However, running an electric vehicle in India comes with the challenge of battery charging stations. For an electric rickshaw, a single battery charge gives a running of 110-150 km, after which the driver has to wait three to four hours to allow the battery to charge. “In India, introducing electric rickshaws is a real challenge because the drivers don’t even have a parking place for their vehicles, let alone for battery charging. The infrastructure for charging stations would cost massively to companies such as ours, so we decided to sell our vehicles to B2B (business to business) and B2G (business to government) segments. We created hubs at the premises of these clients for battery swapping service,” says Gayam Motor Works Co-founder Raja Gayam.

This model has two major aspects. First, the batteries are removable from the vehicles so they can be swapped and charged separately. Two, batteries are connected to cloud in real time. The drivers get a mobile application which is linked to the vehicle. It works like a dashboard, so when a battery begins to drain, he gets a notification along with the location for the nearest swapping station.

While logistics companies deploy their vehicles for last-mile deliveries, government bodies are using them for municipal waste disposal applications and police patrolling. The battery exchange points are at the hubs of BigBasket, Ekart and government municipal offices. Read more..