Micro-mobility in Doha: sustainable and convenient or not?



Aya Elfahail, a Doha resident and freshman at Virginia Commonwealth University in Qatar, climbs onto an electric scooter and dashes across Education City, just in time for her morning

in the day to grab lunch at the Student Center during the short break between her classes.

class. "These scooters are just so convenient," she exclaims as she hops on a scooter again later

It's a car-free day in Education City. No cars or fuel-powered vehicles are allowed beyond the parking areas near Gates 1 and 5, which means that everyone is either using the EC tram or following the new trend of using electric scooters. But even on regular days, EC students and Doha residents outside of EC alike love using this new mode of transportation.

At the end of 2020, Qatar signed deals worth QAR 6 billion to implement an environmentfriendly transportation services plan in line with the country's vision for 2030. As part of this plan, Karwa, a taxi and bus service in the country, launched a micro-mobility initiative by introducing app-enabled, eco-friendly electric scooter services in various transportation hubs of Doha. After downloading the Falcon Ride app, users can locate electric scooters nearby using the app's map feature, pay QAR 2 to unlock a scooter and then QAR 0.75 for each minute they ride.

"We have partnered this great sustainable initiative as part of our strategy of connecting people with convenient transport solutions throughout Qatar," Khalid Kafoud, media & government relations manager of Mowasalat (Karwa), said in an <u>interview</u> with The Peninsula in December 2020.

These scooter services were first launched at The Pearl, one of Doha's most upscale communities, in December 2020 and were later extended to other areas including West Bay, Katara and Legtaifiya. The trend has become so popular that there is a <u>Facebook group</u> called "Electric Scooters Qatar" with over 4,200 members.

In September 2021, Karwa introduced e-scooters to Education City, just as the Qatar Foundation was implementing more sustainability-oriented initiatives such as car-free days.

"Education City has always aspired to minimize the campus carbon footprint by investing in building technologies and alternative transportations as well as awareness campaigns and education," QF announced in October 2021 before the first car-free day was held. "One of our fundamental aspirations has been to turn the campus into a car-free zone," it said. Car-free days have also motivated members of the community to commute around Education City using scooters.

"The [electric scooters] can be helpful when you're in a rush," said Nurmukhammad Mukhammadiev, a sophomore at Georgetown University in Qatar.

Haleema Khan, a sophomore at Northwestern University (NU-Q), said she uses the scooters as a means to relax. "Whenever I want to get out of the dorms or out of NU-Q for a change of environment, especially when the weather is nice, I hop onto a scooter [and play] good music," she said.

However, not all students are in favor of this new trend.

"I have used the scooters once – only once – and it was not a pleasant experience," said Amani Azhar, another freshman at VCU, who was encouraged to try the scooters by Elfahail. "I slammed into a light post because I didn't know how to control it, and I banged my face," she said.

Hind AlMohammadi, a freshman at Georgetown, said, "I believe they have the potential to decrease our carbon footprint, but we still need some time to fully adjust to this new thing."

The lack of safety is not the only concern expressed by students, many of whom find electric scooters to be an inconvenient mode of transportation.

"I don't find them to be very convenient because I find scooters by luck," said AlMohammadi. Her criticism was echoed by Azhar, who said the scooters are not found everywhere in EC. "They're just stationed at specific spots. So,_they're not the best replacement for the shuttle [bus] service," she said.

One factor that motivates many students to use the scooters is that they're eco-friendly. "They're sustainable and they're fun," Elfahail_said.

However, according to Dr. Anto Mohsin, associate professor in residence at Northwestern University and an expert in sustainability, energy and electricity, scooters "are a good effort, although their impact is very small".

"Electric scooters use electricity, so they do not emit greenhouse gasses, but where does the electricity come from?" Mohsin said. "It comes from power plants that in Qatar use natural gas, which is a form of fossil fuel and contributes to global climate change," he added.

In fact, each electric scooter emits 202 grams of carbon dioxide per kilometer and per passenger over their entire life cycle, almost as much as a conventional car and three to five times more than an electric car, according to a 2021 <u>study</u> conducted by North Carolina State University.

50 percent of the carbon footprint of e-scooters is linked to their manufacturing phase, particularly the production of their batteries. Since scooters need to be recharged, the use of fuelpowered trucks to transport them to charging stations contributes a further 43 percent to their carbon footprint. Ultimately, the "production of energy represents a little less than five percent of the GHG (greenhouse gas) balance of electric scooters" according to this study.

Even so, scooting as a form of micro-mobility is here to stay. "I don't know much about the carbon footprint of electric scooters, but I enjoy them," Elfahail_said.