Lawrence Berkeley National Laboratory is alive with electric vehicles.

Humming about on its hilltop campus are more than 60 colorful GEMs — battery-electric vehicles representing one-in-four of Berkeley Lab’s entire fleet of cars, trucks, and other wheeled vehicles. Drawing power from plug-in stations at their parking spots, the GEMs (Global Electric Motorcars) replace gasoline-powered sedans and also light duty pickup trucks used by the plumbers, carpenters, electricians, and other maintenance personnel who keep the Lab’s many facilities mission-ready and running smoothly.

With a top speed of 25 mph and a range of 30 miles, the GEMs are proving to be both versatile and convenient, efficiently transporting people and hauling equipment across the campus’ 5.6 miles of winding hillside roads. Some GEMs are outfitted with four seats; others are two-seaters with utility boxes or flat beds in the rear.

Compact and easy to park in tiny spaces, the GEMs are popular with facilities staff whose work spans the entire 200-acre campus and involves many trips from one job to the next during a typical day.

Not only are these electric vehicles quiet, but their efficient consumption of electric power equates to achieving almost 100 miles per gallon of gasoline, reducing fuel costs and greenhouse gas emissions.

Berkeley Lab’s steep hills proved challenging when the first GEMs arrived. With 5-horsepower motors and lead-acid batteries, they would strain uphill and run out of juice. But a switch to 7.5-horsepower motors and gel batteries — standard on the heavy-duty models — proved to be the right fit.