



Background

According to the California Air Resources Board (CARB), in 2018 the transportation sector accounted for the largest portion of total statewide greenhouse gas (GHG) emissions (39 percent), and the medium- and heavy-duty truck and bus sector accounted for 23 percent of those emissions.¹

Organizations that rely on shuttle bus services to transport people to and from various destinations, such as airports, car parks, corporate campuses, universities, and more, are well positioned to benefit from significant total cost of ownership savings by electrifying their fleet.

Shuttle bus fleet operators are well-suited for electric vehicles (EVs) because they operate on short, fixed routes with low average speeds. In this duty cycle, EVs have an advantage over internal combustion vehicles in terms of energy and fuel efficiency, as well as maintenance costs. Furthermore, shuttle fleets can get ahead of looming regulations, such as California's zero emission airport shuttle rule, which will require compliance by 2035.

¹California Greenhouse Gas Emission Inventory—2018 edition, California Air Resources Board: <https://ww2.arb.ca.gov/ghg-inventory-data>

Genentech improves employee commuter program with electric buses

Genentech, a biotechnology company dedicated to developing medicines for serious and life-threatening diseases, sees more than 14,000 people commute daily to and from its South San Francisco campus. About 2,500 of those rely on the company commuter program, gRide. With more than 60 buses, the commuter program provides a better travel experience and reduced commute times to employees.

In 2018, when Genentech needed to replace aging diesel buses, the company used the opportunity to transition to electric vehicles (EVs). The decision was driven both by Genentech's company-wide commitment to sustainability, and the desire to drive the industry forward. Currently, Genentech has deployed 21 electric buses, with plans to fully electrify their fleet by 2025.

“The incentives, resources and planning assistance available through PG&E's EV Fleet program made it much easier, more cost-effective, and quicker for Genentech to scale up its deployment of electric shuttle buses.”

Jerry Meek
Energy and Sustainability Manager
Genentech

EVs surpass expectation, see 230-mile range

Genentech launched its EV program with four double-decker electric coach buses custom made by BYD. Over the last two years, the buses were used on typical routes—testing performance and regularly providing feedback to the OEM. Overall, the results surpassed expectations, typically seeing over 230 miles on a charge with no drivetrain issues to-date.

Seeing positive results, the company added six more single deck BYD buses, which are shorter and meet city regulations necessary for specific routes. The buses also help mitigate common issues with city shuttle programs, including criticisms about noise and pollution.

¹PG&E" refers to Pacific Gas and Electric company, a subsidiary of PG&E Corporation.
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EVs improve employee satisfaction

An important part of the gRide program is to provide employees with a comfortable commuting experience. The new electric buses provide significant benefits to improve rider experience, including reliable WiFi, heating and cooling, and they are much quieter and smoother than their diesel counterparts.

Genentech aims to reduce commute time to under an hour for up to 90% of its employees. The shuttle program plays a big part in reaching that goal as employees enjoy the reliability, comfort, and sustainability of the new electric shuttles.

Scaling up with PG&E's EV Fleet program

Genentech worked with PG&E to install its first bus parking lot with 22 chargers. The chargers link the buses into a system that informs the driver and fleet manager of real-time charging and maintenance needs.

To scale the program to 80 electric shuttles, Genentech is now working with PG&E's EV Fleet program to build a second charging lot. The lot will include 50 chargers using two 2500 kW transformers. Using the new EV Business Rate will help Genentech plan for energy needs while reducing fuel costs by up to 1/3 of the diesel equivalent.



Prepare your fleet for electrification with the help of PG&E's EV Fleet program
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