

Philadelphia's maiden electric bus



Photo: An electric battery-powered bus.

Courtesy of

Proterra

Philadelphia is set to make a big step in cutting down on environmental pollution when they get a grant to acquire 25 zero-emissions electric buses which will roll out along the 29 and 79 bus routes in South Philly.

The grant – approximately \$2.5 million – will go toward 25 new electric buses as part of a pilot program to see how the technology fares in Philly.

South Eastern Pennsylvania Transport Authority (SEPTA) will be buying 40-foot Proterra Catalysts, which can carry 77 passengers, similar to current buses.

Two canopy-style charging stations will be installed along the routes. Some retraining for SEPTA operators and mechanics is anticipated.

As lithium battery technology evolves driven by demand for personal electric cars, costs are dropping. A feasibility study by SEPTA found that electric buses would cost just \$0.27 per mile in electric power to operate. When Tesla's Giga factory in Nevada reaches full capacity in 2020, it is projected to produce more lithium ion batteries per year than were produced worldwide in 2013.

Costs for the technology are steadily dropping as electric vehicle battery technology becomes more efficient. Electric bus prices have dropped by more than \$500,000 in the last five years.