



FUNDING AND FINANCING OPTIONS FOR ZERO EMISSION BUSES

Zero emission buses are cheaper to own and maintain over the lifetime of the vehicle (lower maintenance, operation, and fuel costs). The hurdle to overcome the higher upfront costs can be a challenge for cash strapped transit and governmental agencies, but fortunately, there are numerous public and private financing and funding options that are designed to assist agencies with the purchase or lease and deployment of zero emission buses.

FUNDING

The Federal Low or No Emission Vehicle Program

[The Low or No Emission Vehicle Program](#)¹ is competitive federal funding that can be awarded to state and local governments for the purchase or lease of zero-emission and low-emission transit buses as well as the acquisition, construction, and leasing of required supporting facilities (i.e. electric bus chargers). Under the Fixing America's Surface Transportation or FAST Act, \$55 million is dedicated to this program per year until fiscal year 2020. Eligible applicants include direct recipients of Federal Transit Authority (FTA) grants under the [Section 5307 Urbanized Area Formula program](#),² states, and Indian Tribes.³

Eligible projects include: purchase or lease of low- or no-emission buses, acquisition of low- or no-emission buses with a leased power source, construction or lease of facilities and related equipment (including intelligent technology and software) for low- or no-emission buses, construction of new public transportation facilities to accommodate low- or no-emission buses,

and rehabilitation or improvement of existing public transportation facilities to accommodate low- or no-emission buses.

The Volkswagen Mitigation Settlement

As a part of the Volkswagen diesel settlement, a \$2.7 billion trust was established to support state programs to reduce transportation emissions. States and transit organizations can allocate money toward the purchase of electric buses and charging equipment. For more information on the settlement as well as specific state mitigation plans click [here](#) or visit <https://content.sierraclub.org/evguide/volkswagen-settlement>.

Electric Utility Infrastructure Programs

Investments to support the deployment of electric vehicle charging infrastructure are of increasing interest to electric utilities. In California, the state's three largest electric utilities have proposed a combined \$900M+ in infrastructure investments to support charging of medium- and heavy-duty vehicles, including zero emission buses. Those programs are likely to be approved during 2018,

and we expect more to follow in other states. For more information on California's programs or utility interest in other states, contact your local utility.

FINANCING/LEASING

Financing or leasing is an option that is available to help offset the upfront costs of electric buses. Some utilities are using tariffs and other agreements to help transit companies overcome the initial costs of chargers and buses. Many manufacturers ([Proterra](#), [BYD](#), [New Flyer](#) and others) offer electric bus rental programs and/or financing that may be of interest to governments and transit organizations. For more information, contact your utility or manufacturer directly to learn more about their programs.

Utility Company Tariffed On-Bill Financing

Utility companies can use opt-in utility tariffs to invest in the upfront cost premium for electric buses, removing the upfront cost barrier for transit agencies. This model is often used to invest in the upfront cost of cost-effective upgrades for energy efficiency upgrades for buildings, like insulation, air sealing and HVAC upgrades. [Clean Energy Works](#)⁴ champions the [Pay As You Save \(PAYS\)](#)⁵ financing model to assist transit agencies pay for electric buses and charging stations by working with local utility companies to offer a PAYS-based program. Projects on the EV transit application of this financing model are now underway in Kentucky, North Carolina, Colorado, Hawaii, New Hampshire and Rhode Island. For more information about PAYS please visit www.cleanenergyworks.org.

Manufacturer Capital Financing Programs

Transit companies and governmental agencies can also explore capital financing or capital leasing. Capital leasing is similar to a loan where the lessor (electric bus company or lending agency) agrees to allow the lessee (transit company or governmental agency) to use the asset, in this case an electric bus, for a set period of time. At the end of the contract the lessee has the option to purchase the bus

or return the bus to the lessor. Benefits of capital financing can include: improved agency cash flows through spreading payments over time, a reduction in agency maintenance and replacement costs, competitive pricing, and cost savings for removable power sources (batteries and fuel cells). For more information on manufacturer capital financing programs please reach out to a reputable electric bus manufacturer.

Manufacturer Battery/Power Source Financing Programs

A battery/power source financing program allows transit companies and governmental agencies the ability to lease the power source for a bus, in this case the batteries. The lessee has a contract that guarantees a certain amount of power from the batteries for the life of the contract. A bus manufacturer or other leasing company will take on all the risks and maintenance associated with the batteries including battery failure, battery performance, and midlife replacement costs. Battery leases save transit companies and governmental agencies money because costs are removed from the overall bus price, so the cost for the bus is close to parity with a traditional diesel bus. Savings from lower fuel and operating costs will offset the battery lease payments. For more information on manufacturer battery and power source financing programs please reach out to a reputable electric bus manufacturer.

Manufacturer Bus Rental Programs

If transit companies aren't sure about the purchase of an electric bus, some electric bus companies offer a bus rental program. This program allows fleet operators to rent or "test drive" a bus for up to 12 months before making a purchasing decision. This program allows transit companies to experience an electric bus without a long term commitment.

For more information on rental programs contact the bus manufacturers for their programs and policies.

ENDNOTES

1 <https://www.transit.dot.gov/funding/grants/lowno>

2 <https://www.transit.dot.gov/funding/grants/urbanized-area-formula-grants-5307>

3 Except for projects proposed by Indian Tribes, proposals for funding eligible projects in rural (non-urbanized) areas must be submitted as part of a consolidated state proposal. States and other eligible applicants also may submit consolidated proposals for projects in urbanized areas.

4 <http://cleanenergyworks.org/>

5 <http://cleanenergyworks.org/blog/pays-financing/>