



TOWN OF CARRBORO
REQUEST TO APPLY FOR GRANT FUNDS

Department: PZICAT Staff Contact: Wendy Welsh and Laura Janway

Project Name:

Carrboro's Green Future: Advancing Zero Emission Vocational Vehicles

Funding Source:

Environmental Protection Agency's Clean Heavy Duty Vehicle Grant (EPA- CHDV)

Total Project Costs: \$1,800,000

Application Due Date: 07/25/2024 Amount of Request: \$ \$800,000.00

Anticipated Award Notification Date: January 2025

New (N) or Recurring (R) Grant: N

Will the program require funding after the grant expires? X Yes No

If so, how much and how will it be funded?

Standard operational cost for maintenance and repair

Does this grant have a match requirement? X Yes No

Total Amount of Match Required: \$ \$800,000.00

Cash Match Amount: \$ \$800,000.00 In-Kind Match Amount: \$

If the match is cash, are the funds budgeted? Yes X No

(If so, provide account number)

FY25-26 capital project

If match is In-Kind, please describe the services.

Hope to find some In-Kind match with community partners

Has the department received funding from this agency/organization in the past?

If so, list project name(s), amount(s), and date(s).

Project Name(s):

Project Amount(s):

Project Date(s):

Project Summary:

Carrboro's green future starts with bold initiatives and this project aims to replace three Class 6 & 7 internal combustion engine (ICE) vehicles with three comparable zero-emission (ZE) heavy duty vehicles. Funding will be used to purchase three battery-electric heavy duty vehicles, a level three charging station and facilitate a workforce development program to educate and certify drivers and mechanics who work with these vehicles daily. Replacing heavy duty ICE vehicles will make a substantial contribution to achieving the town's climate action goals. By adopting zero-emission technology for heavy-duty vehicles, Carrboro will affirm its pledge to a sustainable future.

Grant funds will be used for the following: (check all that apply)

☒ Equipment

☒ Supplies

Program Expenses (specify)

Printing

Personnel: Current Staff. No. of Staff _____ No. of Hours _____

☒ Personnel: Hire additional staff No of Positions 1

☒ Capital (land, building, vehicles, etc.)

☒ Contracted Services: Workforce Development/EV installation/vehicle purchases

Other _____

Describe the need that gave rise to the request. Provide quantitative data to justify need (workload data, ratio, etc.).

The Town of Carrboro has a long-standing commitment to climate action. Carrboro's Energy and Climate Protection Plan outlines a goal of reducing 2010 levels of municipal emissions 80% by 2030. The plan recommends that the Town convert trucks and larger vehicles to electric vehicles when appropriate models are available. As, the Town's fleet is responsible for producing 50% of the Town's total emissions, converting heavy-duty vehicles to alternative fuels will have a large impact on the Town's overall emissions. This project will contribute to local air quality improvement which can have an overall impact on health.

Describe how the grant will address the need identified.

The Town will be utilizing grant funds to purchase a battery electric (BEV) refuse hauler, dump truck, and boom truck as well as associated charging infrastructure and workforce development training. The grant will significantly reduce the cost to the Town to replace these three vehicles, as it will provide 65% of the funding needed for boom truck and 50% of the funding needed for the refuse hauler and dump truck. Charging infrastructure will be included in the truck funding. The grant will also cover 100% of the costs of the project implementation and workforce development.

Describe return on investment and the benefit(s) of this grant. Provide, to the extent that you can, cost data that shows our return on investment.


ZE BEV vocational vehicles will boost operational efficiency. Three heavy duty EVs will contribute to the reduction in the operating cost of the municipal. In 2023, the annual cost of fueling the current three ICE vehicles and associated maintenance cost was \$173,539.30 and \$239,716 respectively. Switching to EV vehicles will ultimately lead to an estimated annual savings of \$413,255.32. Overall, the return on investment of this grant over a 10-year period is estimated at 78%. The EV vehicles will also offer some environmental benefit through GHG emission reduction. This will assist in meeting with the town's 2030 goal of 80% greenhouse gas emission reduction. With an estimated annual reduction of 38.5 MTCO_{2e} which will yield 385 MTCO_{2e} in 10 years.

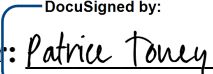
Describe how the grant supports Town Council's strategic priorities and identify the specific initiative(s).

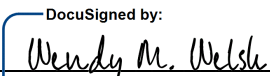
Strategic priorities: (1)Comprehensive Plan Implementation & (2)Implement Community Action Climate Plan with funding. The Carrboro Connects Comprehensive Plan was developed with the foundational themes of race and equity and climate action. Chapter 10 recommends reducing greenhouse gas emissions due to municipal fleet operations. One strategy mentioned is to replace internal combustion vehicles with electric vehicles and/or alternative fuel vehicles, as the market continues to improve. This grant will support implementation of the Energy and Climate Protection Plan (ECP). It shares a similar goal (reducing 2010 emissions 80% by 2030), and focuses on the Town's municipal carbon footprint.

Will this project duplicate or compete with another service or program provided by the Town of Carrboro or other local agency?

This project will not duplicate or compete with any other service or program provided by the Town of Carrboro or other local agency.

Approved by Finance Officer:  DocuSigned by:
889107C7CD534A4... Date: 6/14/2024

Approved by Town Manger:  DocuSigned by:
88F3EAF610BB482... Date: 6/14/2024

Prepared by:  DocuSigned by:
8AD0DD303C1D488... Date: 6/14/2024