The North Carolina Clean Energy Technology Center (NCCETC) at North Carolina State University announces the following request for proposal (RFP) through the 2016-2017 Clean Fuel Advanced Technology (CFAT) project. The CFAT project is supported with federal Congestion Mitigation Air Quality (CMAQ) funds provided by the NC Department of Transportation (NC DOT). The primary purpose of the CFAT project is to reduce transportation related emissions in 24 eligible North Carolina counties.

*Available funds: $1,500,000  
  Maximum per project award: $250,000  
  Minimum per project award: $30,000  
  Application deadline: March 1, 2016  
  Project period: April 15, 2016 – March 15, 2018

Section One: Eligibility

1.0 Available Funds
The North Carolina Clean Energy Technology Center (NCCETC) reserves the right to fund all or none of available funds subject to NC Department of Transportation, NC State University and CFAT grant review committee approval and/or review.

1.1 Project Location
The North Carolina Clean Energy Technology Center is seeking proposals from both public and private entities for transportation related projects that reduce emissions in North Carolina’s non-attainment and maintenance counties for National Ambient Air Quality Standards.

Projects located in the following counties are eligible for CFAT funding: Cabarrus, Catawba, *Chatham, Davidson, Davie, Durham, Edgecombe, Forsyth, Franklin, Gaston, Granville, Guilford, *Haywood, *Iredell, Johnston, Lincoln, Mecklenburg, Nash, Orange, Person, Rowan, *Swain, Union, Wake, (*Represents partial counties). The non-attainment portion of Swain and Haywood Counties is the Great Smoky Mountains National Park boundary. The non-attainment portion of both Chatham and Iredell are defined by townships from the Census. In Chatham the eligible townships are Baldwin, Williams, New Hope and Center. In Iredell County the non-attainment portions are Davidson and Coddle Creek.

Projects that are located adjacent to eligible areas that result in reduced emissions in the eligible area may apply for funds in proportion to the percent of emission reduction that takes place in the eligible area.
Note: EVSE (electric vehicle service equipment, e.g. recharging stations) and natural gas vehicle refueling infrastructure need only be located in the State of North Carolina and are not required to be located in an eligible county.

1.2. Eligible Technologies
The CFAT project is designed to be as flexible and accommodating as possible to reach public and private sector applicants that have an interest in and commitment to mobile-related emission reduction technologies. The basic criteria for eligibility are that the project:

- is transportation related - including on-road projects, rail and off-road construction equipment used in transportation projects,
- reduces criteria pollutant emissions - including nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOCs)/hydrocarbons (HC) and/or particulate matter (PM), AND
- is located within OR benefits a non-attainment or maintenance area.

A minimum 20% cost share of total project cost is required for all applicants. The specific transportation related technologies eligible for CFAT project reimbursement include:

1.2.1 Alternative Fuel & Advanced Technology Vehicles (AFVs)
Alternative fuel and advanced technology vehicles include new OEM dedicated and bi-fuel propane and natural gas vehicles, electric vehicles (EVs), and hybrid electric vehicles with or without plug-in capability (HEVs and PHEVs). E85 compatible “flex fuel” and diesel vehicles are not eligible.

Eligible costs include the incremental cost between an alternative fuel or advanced technology vehicle and its conventionally powered counterpart (for example, price differential between a natural gas Ford F150 and a gasoline F150). For vehicles where no conventionally powered counterpart exists, incremental cost will be calculated based on the cost differential of similarly sized and equipped vehicle in the brand’s lineup or that would be purchased instead with similar features, equipment and duty requirements. For example a Nissan LEAF could be compared to a Nissan Versa to determine the incremental costs, or a Ford C-MAX Hybrid could be compared to a Ford Focus 5-door to determine incremental costs.

Per Federal Highway Administration “Buy America” exemption requirements, only vehicles whose final assembly occurs in the United States are eligible. Examples of eligible vehicles include, but are not limited to: the CNG Chevrolet Silverado and Nissan LEAF. Vehicles whose final assembly occurs outside of the United States are not eligible, such as the Toyota Prius, Honda Insight or CNG Ram 2500. Refer to CFAT RFP FAQs document available at [http://nccleantech.ncsu.edu/clean-transportation/for-]
fleets/#funding for more information. The NCCETC will apply for exemption on behalf of RFP applicants for FY 2016 AFV and advanced technology vehicle projects.

1.2.2 Alternative Fuel & Advanced Technology Vehicle (AFV) Conversions

AFV conversions are defined as equipment and labor costs required to convert existing vehicles or upfit new vehicles to operate on an alternative fuel or use advanced technology. Examples of eligible AFV conversions and upfits include:

- Compressed Natural Gas (CNG) – dedicated and bi-fuel
- Liquefied Petroleum Gas (LPG) / propane / Autogas – dedicated and bi-fuel
- Electric hybridization - with or without plug-in capability
- Hydraulic hybridization

Bi-fuel vehicle conversions and upfits - those that allow operation on CNG or LPG in addition to gasoline or diesel - are eligible only for the percentage of estimated miles operated on the alternative fuel. For example, if a bi-fuel, CNG vehicle is estimated to operate 60% of its miles on CNG. The proposed project would be eligible for reimbursement of 48% of the plus cost (60% of the eligible 80%). Operators of bi-fuel vehicles will be required to report on gasoline/diesel versus alternative fuel use.

Only EPA or California Air Resources Board (CARB) certified alternative fuel vehicle conversions and upfits are eligible. Note: EPA certification is not required/not applicable to advanced technology conversions and upfits that operate on conventional fuels, such as XL Hybrids hybrid conversions and Parker Hannifin hydraulic hybrid upfits, since existing emissions control equipment will not be modified during the conversion or upfit.

For more information on AFV conversions, including a list of EPA certifications, visit:

http://www.afdc.energy.gov/vehicles/conversions.html
http://www.epa.gov/oms/consumer/fuels/altfuels/altfuels.htm
http://www.arb.ca.gov/msprog/aftermkt/altfuel/altfuel.htm

1.2.3 Refueling & Recharging Infrastructure

Infrastructure to dispense and store alternative fuels, and to dispense electricity into electric vehicles, is eligible for CFAT funding. This infrastructure includes tanks, dispensers, hoses and related equipment for refueling and recharging on-road vehicles. Eligible fuels include:

- Biodiesel (B20 and greater)
- Ethanol (E85)
- Natural Gas - compressed (CNG) and liquefied (LNG)
- Liquefied Petroleum Gas (LPG / propane /Autogas)
- Electricity – Level 1, 2 and DC “fast charging” (CHAdeMO, SAE J1772 “combo connector,” and other) electric vehicle service equipment (EVSE)

All applicable local, state and federal permits/assessments/zoning requirements must be obtained and are the responsibility of CFAT funding recipients. Infrastructure funding recipients will agree that only alternative fuel will be dispensed or sold from the equipment in a North Carolina non-attainment or maintenance area for a minimum of 36 months after installation. Refueling and EVSE stations that are convenient and open to the motoring public are favored over infrastructure that is limited to private or government fleets.

Note: EVSE and natural gas refueling infrastructure projects need only be located in the State of North Carolina and are not required to be located in an eligible county.

Ineligible costs include, but may not be limited to:
- Fuel production
- Acquisition of property
- Construction of canopies
- Retail operating expenses and fuel costs, including the incremental cost of fuels
- Cost of electricity (for EVSE)
- Project management and staff time

1.2.4 Idle Reduction Technologies

Idle reduction technologies fall into two general categories: mobile and stationary. Mobile idle reduction technologies (MIRTs) include: advanced batteries to reduce idling by powering on-board equipment while an on-road vehicle is stopped; direct-fired heaters; auxiliary power units (APUs); and automatic engine idle reduction systems. On-road vehicles that may idle when stopped for extended periods, such as delivery trucks, school buses, police and other emergency vehicles are targeted project applications. MIRTs must be used in an eligible area, and reimbursement for MIRTs will be based on the percentage of time, based on mileage, the vehicle spends in the eligible area. For example, if a truck is based in or adjacent to an eligible area and 50% of the annual mileage is conducted in the eligible area, the project is eligible to be reimbursed for up to 40% of the project cost (50% of the eligible 80%). A log of MIRT use to document fuel savings will be required.

Fleets applying for funding through this category are strongly encouraged to implement and enforce an idle reduction policy and will be looked at more favorably for adopted idle reduction policies during the proposal evaluation process.
Stationary idle reduction technologies include truck stop electrification (TSE) and must be located in CFAT eligible counties. TSE refers to a system that operates independently of the truck’s engine and allows the truck engine to be turned off as the TSE system supplies heating, cooling, and electrical power. The TSE system provides off-board electrical power to operate an independent heating, cooling, and electrical power system or a vehicle-integrated heating and cooling system.

For a list of idle reduction technologies visit:

http://www.epa.gov/otaq/smartway/forpartners/technology.htm

**1.2.5 Diesel Retrofits**

Diesel retrofit technologies that have been verified or certified by the U.S. EPA, the California Air Resources Board (CARB) or other such boards/agencies are eligible for funding. Diesel retrofits include: engine re-powering and after-burn technologies to reduce emissions of existing diesel engines, but do not include fuel additives. Examples of eligible retrofit technologies include, but are not limited to: diesel oxidation catalysts (DOCs), catalytic exhaust mufflers, catalytic converters, closed crankcase ventilation/filtration systems, active- or passive-regeneration diesel particulate filters (DPFs), and selective catalyst reduction technology (SCRT); see the below links to the EPA and CARB websites for complete listings. Level 2 and Level 3 retrofit technology applications (i.e., those that reduce PM emissions by 50% or more) are encouraged. **Applicants are expected to have pre-identified appropriate vehicles for the technologies they have selected.** Both on-road and off-road retrofit projects are eligible for funding. On-road applications include buses, trucks, service and utility vehicles. Off-road applications are limited to transportation related construction equipment and locomotives.

Learn more about diesel retrofit technologies and verified technologies at:

www.epa.gov/cleandiesel/verification/verif-list.htm
www.arb.ca.gov/diesel/verdev/verdev.htm
www.arb.ca.gov/diesel/verdev/vt/cvt.htm

**1.2.6 Vehicle and Fleet Telematics**

Up to 80% of the cost of purchase and installation of vehicle telematics/data collection and analysis technology are eligible for CFAT funding. Telematics systems can monitor miles driven, fuel economy, idle time, and driver behavior that can affect fuel usage, and status of onboard vehicle systems that can lead to improvements in fleet efficiency. Eligible telematics systems are those aimed primarily at a reduction of vehicle emissions via an increase in fuel efficiency, reduction in vehicle miles travelled (VMT), reduction in idling, and/or other influences on operator behavior that result in fuel
savings. Telematics systems designed primarily for communication (e.g. mobile broadband or cell phone, “infotainment”) or other systems are not eligible. Service charges (e.g., monthly subscription or service fees) are only eligible for funding for the first 12 months of service. Applicants will be asked to provide a per vehicle baseline of fuel consumption before telematics installations and will be required to document fuel savings after installation. As with other technologies, for vehicles that also operate outside of CFAT eligible areas only the percent of miles driven in eligible counties are eligible for funding.

Section Two: Project Purpose, Priorities and Requirements

2.1 Purpose and Priorities

The primary purpose of CFAT funding is to reduce regulated transportation related emissions in North Carolina counties that are in non-attainment or maintenance status for National Ambient Air Quality Standards. Regulated emissions include carbon monoxide (CO), oxides of nitrogen (NOx), volatile organic compounds (VOCs) and particulate matter (PM). Reducing greenhouse gas emissions and other pollutants besides the above listed criteria emissions is not the purpose of this federal funding, though the use of alternative fuels and advanced transportation technologies can reduce those emissions as well.

In addition to reducing transportation related emissions and demonstrating the potential for more widespread use of alternative fuels and efficiency technologies, priorities of the CFAT program include:

- developing deeper relations to fleets and organizations committed to decreasing transportation related emissions in North Carolina
- funding a diversity of project technologies
- having projects in a wide range of eligible counties
- serving a variety of applicant types
- insuring that projects are completed in a timely manner

2.2 Project Requirements

There are several requirements that must be met by applicants:

1) COST SHARE- Applicants must provide a minimum of 20% cost share on proposed projects. Cost share funds must be non-federal dollars and directly related to the project.

For example, if the total cost of a Nissan Leaf is $30,000, and a comparably equipped, similarly sized conventional vehicle of the same make (Nissan Versa) costs $18,000, the incremental cost of the Leaf is $12,000. In this case an applicant must demonstrate a minimum contribution of $2,400 and can request up
to $9,600 in grant funds. In other words, the 20% cost share contribution is based on the total project cost, not the amount being requested, nor the total cost of the vehicle. (Only the incremental costs are part of the total project cost).

As another example, if the cost of a new Ford Super Duty F-250 is $32,000, and the cost of the LPG bi-fuel upfit is an additional $11,000, an applicant must demonstrate a minimum contribution of $2,200 and request up to $8,800 in grant funds. In other words, the 20% cost share contribution is based on the total project cost of the upfit.

The same is applicable for determining the cost of retrofitting an existing vehicle. The total project cost is the cost of the conversion (not including the residual value of the vehicle) and up to 80% of the total project of the conversion is eligible for funding including installation and parts.

Applicants must clearly state their cost-share contribution and will be granted a specific, not-to-exceed amount of funding based on their proposal and cost share contribution. Any expenses exceeding the proposed project costs will be the applicant’s responsibility. Cost share contributions will be reviewed on a case-by-case manner. A cost share letter of commitment must accompany the application.

2) **BUY AMERICA REQUIREMENT**- CFAT program funds originate from federal construction sources thus this program is subject to Federal Highway Administration (FHWA) “Buy America” content requirements. The FHWA considers manufactured products consisting of at least 90% steel or iron content to be “manufactured predominantly of steel or iron.” Such products manufactured predominantly of steel or iron are subject to the requirement that the steel or iron comes entirely from domestic (U.S.) sources. Applicants will be required to state that their product is not subject to Buy America based on the definition of manufactured products or that if they are subject to Buy America that they meet the requirements. Applicants will also be required to attest to their understanding of these requirements and that failure to abide by them may result in revocation of any awarded funding. More information about Buy America requirements can be found at: [www.fhwa.dot.gov/construction/cqit/buyam.cfm](http://www.fhwa.dot.gov/construction/cqit/buyam.cfm).

Vehicle purchases are subject to Buy America requirements. The NCCETC will submit a Buy America 2016 waiver request to FHWA for the purchase of alternative fuel and advanced technology vehicles (AFVs) and equipment through the CFAT project, with the condition that all vehicles and equipment funded under section 1.2.1 must have their final assembly occur in the United States.

3) **REBATE PROGRAM**- Successful applicants will be required to expend funds first and will then be reimbursed upon receipt of previously agreed upon proof of expenditures and documented cost share contributions.

4) **LOCATION**- With the exception of EVSE and natural gas refueling infrastructure, projects must be located in or directly benefit (reduce emissions in) CFAT eligible counties. Refer to Section 1.1 for eligible locations.
5) **EMISSIONS REDUCTION**- Projects must result in emission reductions in eligible areas and applicants must be willing to track vehicle and/or fuel use so that the NCCETC can calculate actual emission reductions after project implementation. For the application evaluation process, the NCCETC will conduct emissions benefits calculations based on information provided by the applicant. Applicants may provide emissions benefit estimates that they have calculated (along with an explanation of methodology or tool used), but are also required to provide information critical for NCCETC evaluation. This information includes, but may not be limited to: estimated number of miles to be driven; vehicle year/make/model to be replaced and/or converted to operate on natural gas or propane (or repowered in case of diesel retrofits); vehicle(s) and emissions certification and/or other relevant emission testing data; number of gallons of fuel, gasoline gallon equivalents, or kWh estimated to be dispensed into vehicles driving in eligible areas (for refueling / recharging infrastructure applications).

6) **PROJECT APPLICANTS**- Applicants may not use project funds to meet federal alternative fuel, advanced transportation, or petroleum displacement requirements, such as U.S. Energy Policy Act requirements and federal executive orders. Federal, state, and local government entities, businesses, and non-profits are all eligible to apply. **The CFAT project is not able to fund individuals.**

7) **REPORTING**- Brief quarterly and final reports that capture key applicable project implementation milestones and data on fuel usage, idling reduction, emission reductions, etc., will be required of successful applicants. The final report should include a minimum of **12 months of actual data** and an estimate of the following months data to yield a total of 36 months. Reporting templates will be provided by the NC Clean Energy Technology Center. The NCCETC requests that after contractual period expires CFAT grant recipients continue to voluntarily report fuel and mileage usage data to accrue 36 months of actual usage.

8) **SIGNAGE**- CFAT project vehicle and infrastructure decals and/or project signage provided by or approved by the NC Clean Energy Technology Center will be required to be utilized by all successful applicants.

9) **NC SMART FLEET & NC CLEAN TRANSPORTATION COORDINATING COMMITTEE**- Awardees are required to participate in the **NC Smart Fleet Initiative** if grant funding is being used for purchasing technologies or vehicles to be utilized by their fleet or the **NC Clean Transportation Coordinating Committee** for organizations that have less than five vehicles or do not have NC based fleets. Costs associated with participating will go to support education and outreach activities associated with overall CFAT goals of reducing transportation related emissions. Refer to Question 7 in RFP FAQ document for more information **https://nccleantech.ncsu.edu/wp-content/uploads/CFAT_RFP-FAQs.pdf**
Section Three: Evaluation Criteria

3.1 A CFAT evaluation committee will review all proposals.

3.2 The following criteria will be used to select project applicants. Applicants should consider all aspects of the criteria below. Note that the evaluation criteria are not ordered in any specific rank. The project evaluators understand that applicants will not be calculating emission reductions. Thus, applicants will not be able to address the cost versus emission reduction except by providing greater cost share.

1) **Cost versus regulated emission reductions**: CFAT program organizers seek the greatest reduction of regulated emissions for the least cost. Regulated emissions include carbon monoxide (CO), oxides of nitrogen (NOx), volatile organic compounds (VOCs) and particulate matter (PM).

2) **Cost-share contribution**: CFAT program organizers seek partnerships with grant recipients that demonstrate strong project commitment through cost share contributions that exceed the set minimum requirements. Cost share is defined as the funds and resources that an applicant directly contributes to a project. A minimum cost share requirement of 20% of total project costs applies to all applicants; cost share in excess of 20% is favored. It is important to reiterate that in the cases of AFVs and AFV conversions and upfits, total project costs do not include baseline vehicle costs. In the case of telematics, total project costs include hardware/equipment costs as well as monthly service charges or fees for twelve months; however, monthly service charges or fees beyond twelve months are not included in total project costs and cannot be counted toward cost share.

Any applicant that provides for a higher percentage cost share contribution will be given more weight in the review process. Cash contributions include out-of-pocket expenses needed to cover the incremental cost of an AFV or AFV conversion, and the actual cost of purchasing and installing refueling equipment, vehicle telematics, diesel retrofits, and idle reduction technologies. The value of the existing vehicle that will utilize diesel retrofits, telematics, and/or mobile idle reduction technologies will not be considered as part of the required 20% cost share. Cost share contributions must be clearly explained in the applicant’s proposal. Staff time to manage and administer the project are not eligible as cost share.

3) **Project feasibility/likelihood of success**: It is important for applicants to demonstrate their experience and qualifications to implement the project proposal. The project’s complexity, applicant organization, project partner support, and ability to complete the project within proposed time frame will all be taken into consideration and evaluated. **Applicants should plan for project start of April 15, 2016 with completion by March 15, 2018.** A clear timeline
documenting implementation ability within first six months with remainder of time for usage data is important.

4) **Public awareness/education:** Expanding awareness about the benefits of alternative fuels and advanced transportation technologies is an important component of increasing use across the state. Evaluators will weight proposals that reflect a strategy to raise awareness (through the media, signage, public speaking engagements and other methods) more favorably than proposals that do not incorporate any strategy or commitment to raising awareness. **Active participation in the NC Smart Fleet or NC Clean Transportation Coordinating Committee is an important public awareness/education activity. Willingness to work with project partners to provide ongoing data and develop case studies is important.**

5) **Impact:** Program administrators seek projects that will have the most lasting impact on emissions. Applicants that have policies and plans that assure related and continued emission reductions will be ranked higher than an applicant that does not have such organizational policies and/or an explanation of how current proposed project fits into potential on-going and future efforts.

6) **Diversity of projects:** Program administrators seek proposals for all eligible types of projects that are located throughout the 24 eligible counties. Evaluators also want to encourage new, “first time” users. The CFAT program recognizes that the majority of projects will be located in the eligible counties with the greatest population, but is interested in funding projects in all eligible counties and particularly encourages project applicants located in areas that have not previously received CFAT funding. Businesses, non-profits, local, state, and federal government operations located in CFAT eligible areas are encouraged to apply. Propane and natural gas project applications are encouraged as a portion of the eligible funding is targeted for natural gas and propane conversions and refueling infrastructure.

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**Section Four: Application Procedures**

4.1 A cover letter must accompany all applications. The letter should include a statement about your organization’s cost share contribution, commitment to using the proposed emission reduction technology for a minimum of 3 years, and the acceptance of responsibility for meeting all relevant state and federal permitting/purchasing requirements including Buy America requirements.

4.2 Use of the Clean Fuel Advanced Technology Proposal Application (posted at [http://nccleantech.ncsu.edu/clean-transportation/for-fleets/#funding](http://nccleantech.ncsu.edu/clean-transportation/for-fleets/#funding)) is required. Application instructions are included as part of the RFP. Applicants are encouraged to carefully follow instructions and to contact the resources listed below with any questions. **It is strongly recommended that the budget be supported by firm price quotes for proposed equipment purchases, and that applicants speak in detail**
with vendors regarding suitability of quoted equipment for the proposed project and the ability to place product in service within stated timeline. For vehicle conversions and upfits, a price quote is required with system costs invoiced separately from any vehicle costs. For AFV purchases, documentation of the cost of comparable conventional vehicles must accompany the application to determine the incremental cost of the eligible vehicle(s). Plan to secure approval from your organization’s governing body in advance of grant award announcements so as not to delay project implementation. Be aware of the potential for long lead times for vehicles and equipment and plan appropriately to meet the project timeline.

4.3 List and then attach equipment quotes, commitment letter and letters of intent.

4.4 Applications must be received by the NC Clean Energy Technology Center by 4:00 PM March 1, 2016. Upon initial review applicants may be asked to submit more detailed information. Awards will be announced in mid-April 2016. Recipients will be awarded a specific not-to-exceed dollar amount based on estimated costs. Awards are for a fixed amount. Vehicle, infrastructure, and equipment prices may change over time thereby changing incremental cost estimates. Funding recipients may have to adjust their purchases accordingly, as the awarded amount will not change. Applicants should consider the above stated dates when developing a procedural plan. The NC Clean Energy Technology Center reserves the right to extend the application deadline and accept rolling applications based on availability of funds.

4.5 Electronic applications using the Word application form are required and will be accepted at resapienza@ncsu.edu. A return email acknowledging receipt will be provided. The NCCETC is not responsible for project applications without an email acknowledgement of receipt. Questions regarding this RFP should be directed to (919) 515-2788 or emailed to resapienza@ncsu.edu.

Staff at the NC Clean Energy Technology Center’s Clean Transportation Program, Triangle Clean Cities Coalition, and Centralina Clean Fuels Coalition can help you with your proposal. They can assist with assessing project feasibility, getting vendor quotes, and ensuring that the application is completed properly before being submitted, and that all supporting documentation is included.

**Technical assistance contacts:**

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<tr>
<th>Triangle Clean Cities Coalition</th>
<th>Centralina Clean Fuels Coalition</th>
<th>NC Clean Energy Technology Center</th>
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<tbody>
<tr>
<td>Mary Sell</td>
<td>Erika Ruane</td>
<td>Rick Sapienza</td>
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<tr>
<td>919-558-9400</td>
<td>704) 688-6508</td>
<td>(919) 515-2788</td>
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<td><a href="mailto:msell@tjcog.org">msell@tjcog.org</a></td>
<td><a href="mailto:eruane@centralina.org">eruane@centralina.org</a></td>
<td><a href="mailto:resapienza@ncsu.edu">resapienza@ncsu.edu</a></td>
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Section Five: Application Instructions

All applications must use 2016 Clean Fuel Advanced Technology Proposal Application located at http://nccleantech.ncsu.edu/clean-transportation/for-fleets/#funding

If you have trouble opening the document from the website, email Rick Sapienza at resapien@ncsu.edu and he will send you the application directly.

Overview

Include the requested information on your organization, as well as the financial information from the Budget.

1-6 - Project type/specifics: Include information only for the project type applicable and delete project types that do not apply to your application. For multiple project sub-types (ex. AFVs and refueling infrastructure), include requested specifics for each project sub-type and delete the project types that are not applicable to your project. Copy and paste the type/specifics if your organization is requesting support for different types within the same category. For example if your organization wants to purchase both electric vehicles and natural gas vehicles provide the information requested in 1. Alternative Fuel and Advanced Technology Vehicles section for each type.

Emission Reductions: These fields are optional. If desired, include annual emissions reduction figures for projects and include reference to how emissions were calculated. NCCETC will perform emission reduction calculations for all proposals and may request additional information from applicants as needed.

“Buy America” Compliance: Check the applicable box indicating whether the project is in compliance with Buy America or whether that requirement does not apply. For more information on Buy America, see: http://www.fhwa.dot.gov/construction/contracts/buyam_qa.cfm.

For AFV purchases, also check the box certifying the vehicle(s) have final assembly in the United States.

NC Smart Fleet /NC Coordinating Committee Participation:

Select the appropriate box to participate in either the NC Smart Fleet (NCSF) Initiative or the NC Clean Transportation Coordinating Committee. Note participation in NCSF will likely be the choice for most applicants.

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The remainder of the application comprises the Project Description and the Statement of Work (which includes the Timeline, and Budget).
**Follow all instructions carefully.** All information must be contained within the application; the only permissible attachments are: letter of cost share commitment, project related quotes and optional emission calculations. **The Project Description and Statement of Work cannot exceed 5 pages.**

**Submit application as a word document.** Signed letter of commitment and project related quotes may be submitted as PDFs

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**Project Description**

Insert a brief project description: the “who, what, where, when and why” of the project. Address evaluation criteria as related in Section Three of the RFP. Be sure to include discussion of near term expansion of emission reduction plans to be pursued along with or after the proposed project and how your organization will insure implementation during project period (evaluation criteria 3 and 5).

**Statement of Work**

Provide the requested details and deliverables on the noted tasks as they relate to your proposed project. *If awarded funding, the Statement of Work will become part of the contract with NCSU, so include sufficient details to communicate the key information outlined.* In Project Description and Statement of Work delete italicized instructional text and replace with your project details.

**Project Summary:** Provide a *one- or two-sentence* summary of the project, focused on the “who” is doing “what.”

**Task #1: Acquisition and Installation of Equipment or Infrastructure.**

In narrative form insert details of equipment to be purchased.

- Alternative fuel vehicles (AFVs) and hybrid electric vehicles: Include make/model and number of each AFV type to be purchased. Provide explanation of incremental cost determination. If requesting replacement vehicle provide make and model AFV will replace. Indicate if the grant will be expanding the fleet or implementing a new application. Provide an estimate of, and justification for, annual miles/gallons of fuel use for vehicle(s). For bi-fuel vehicles include the percentage of mileage the vehicle(s) will be utilizing the alternative fuel. Provide anticipated miles per gallon for all vehicle(s) requested. Include procedures for acquiring vehicles. Insert statement of assurance that final assembly of vehicle(s) is in U.S.

- AFVs and AVF conversions: Provide an estimate of, and justification for, annual miles/gallons of fuel use for vehicle(s) and the percentage of time/mileage the vehicle(s) will be utilizing the alternative fuel as well as average anticipated per vehicle miles per gallon. For existing vehicles, provide current number of miles on vehicle(s) to be converted. Include make, model, and gross vehicle weight (GVW)
for all vehicles. Include procedures for acquiring/implementing conversions or upfits into existing or new vehicles.

- Infrastructure projects: Provide an estimate of, and justification for, number of gallons of fuel or kWh to be dispensed annually. Describe who and what vehicles will utilize this station and provide what assurance you have of this anticipated use. Do not overestimate usage. Provide address/location of infrastructure

- Diesel Retrofit and Repower projects: Include estimated annual miles per vehicle and expected number of years before vehicle retirement, including type of equipment to be installed and vehicle make, model and year.

- Idle Reduction projects: Provide an estimate of, and justification for, annual per vehicle hourly usage of technologies and estimated per vehicle number of gallons of fuel used per hour of idling, along with technology type and vehicle make, model and year and number of units to be purchased.

- Telematics projects: Provide telematics equipment, service and types of vehicle(s) for installation, average per vehicle annual vehicle mileage, average per vehicle miles per gallon, a detailed list of parameters to be monitored and evaluated, and an estimate of annual gallons to be saved, along with justification for this estimate. Include information on baseline fuel use before telematics equipment is to be installed on proposed project vehicles along with information on how fuel use was calculated.

**Task #2: Usage tracking of project technology/fuel.**
Insert statement regarding agreement to utilize quarterly tracking form provided by NCCETC and/or mutually agreed upon format to track quarterly technology usage with vehicle miles driven and/or gallons of fuel utilized or saved.

**Task #3: Public Awareness and Education.**
Insert brief description of public awareness/education and outreach plans. Include statement agreeing to use vehicle decals and/or project signage provided by NCCETC or mutually agreed upon alternative. For fleet applications include agreement to participate in NC Smart Fleet initiative developed by NCCETC to plan, recognize, track and account for progress in reducing emissions through conservation, efficiency and alternative fuels use.

**Task #4: Reporting.**
Insert description of your reporting efforts that include the following reporting requirements: Reports documenting achieved deliverables must accompany all itemized paid invoice reimbursement requests. Cost-share will be documented along with reimbursement requests. A final cost share letter providing a cost share description and stating total cost share contribution will be submitted on letterhead with final invoice. A quarterly schedule established by the NCCETC will be used to submit progress reports, technology use tracking forms, invoices and cost share documentation. A brief final report summarizing the accomplishments of Tasks 1-3 must be compiled and submitted no later than fifteen (15) days following the completion of the project.

**Timeline**
Adjust timeline specifics to your project plans. Examples of tasks for each quarter are provided below. **Note:** It is preferred that all expenses are invoiced as soon as possible but no later than 6-12 months depending on project complexity and completed by June 15. For usage reporting, 12 months minimum is preferred with estimates thereafter for a total of 36 months.

**Plan for project start of April 1, 2016 and completion by February 28, 2018.**

**Quarters 1 & 2: April 1, 2016 – June 30, 2016**

*Examples:*
- Obtain all necessary site plans, permits and permissions
- Verify vendor qualifications and that all purchases meet relevant standards/codes
- Develop and submit project equipment to bid process (as required)
- Order equipment or supplies
- Install equipment or infrastructure

**Quarters 3 & 4: July 1 2016 – December 31, 2016**

*Examples:*
- Receive vehicles; test and confirm that equipment is operating correctly
- Put vehicle/ equipment in service—vehicle deployment date to be reported in quarterly report of quarter deployed.
- Develop and distribute press release
- Usage monitoring and recording (12 months actual preferred and estimate for remaining months to give 36 months of reporting)

**Quarters 5 - 9: January 1, 2017 – *February 28, 2018**

*Examples:*
- Organize and conduct ribbon cutting
- Usage monitoring and recording (12 months actual preferred and estimate for remaining months to give 36 months of reporting)
- Public Awareness and Education Activities

*Indicates elongated or shortened quarters due to overall project period.

Applicants may use their own timeline template but must provide as much detail and accuracy as possible within quarters to insure feasibility within the project period.

**Budget**

*Embedded in Application*

*Note: Minimum project awards are $30,000 and maximum are $250,000*

**Instructions:** Left double-click the table to begin entering values for your budget, including Quantity, Per Item Cost, CFAT Funds being requested, and Cash Match funds being contributed. **The values for “Total” on the right, and “% of project total” on the bottom will auto-populate based on values entered.** Additional lines can be added by right-clicking and selecting “Insert.” All cells will round to the nearest dollar. Total cost...
share must be a minimum of 20% of total project costs and each budget line item should include a minimum of 20% cost share. In kind contributions may be described in narrative – do not include in total cost and budget template provided in application. *In kind contributions, such as staff and project management hours should not be included in total project costs.* Provide actual name of equipment to be purchased.

When finished, click outside of the box to stop editing.