

(Commercial & Public Sector Customers)



(F

(a)

February 2024



# ABOUT THE NC CLEAN ENERGY TECHNOLOGY CENTER

The NC Clean Energy Technology Center, at NC State University, advances a sustainable energy economy by educating, demonstrating, and providing support for clean energy technologies, practices, and policies. It also administers the Database of Incentives for Renewables & Efficiency (DSIRE), a resource providing financial incentives and policies.

### **Program Areas:**

- Clean Transportation
- Policy & Markets
- Clean Power & Industrial Efficiency
- Renewable Energy
- Training
- Energy & Sustainability Services

### **Clean Transportation**

The Clean Transportation program propels the development, awareness and use of alternative fuels and advanced transportation technologies. Our education and outreach initiatives include workshops, meetings, conferences and communication campaigns highlighting the benefits of using clean transportation technologies. Our team provides technical assistance in the form of trainings and fleet assessments. Also included in our portfolio of work is the distribution of grant funding to help procure clean transportation vehicles and infrastructure.

### Services:

- Fleet Utilization Analysis
- Fleet Right-Sizing Analysis
- Alternative Fuels & Advanced Technology
- Eco-Driving
- Sustainable Fleet Management
- Alt Fuel Basics
- Webinars

Technologies:

- Advanced Tech
- Biodiesel
- Electric/Hybrid Vehicle
- Ethanol
- Natural Gas
- Propane

# **ELECTRIC VEHICLE INFRASTRUCTURE & RESILIENCY**

In the wake of increasing frequency and intensity of natural disasters, the vulnerability of EV charging infrastructure poses a significant challenge. It is essential for stakeholders across industries to collaboratively design and implement solutions that guarantee the continued functionality of EV infrastructure during adverse weather conditions.

In the pursuit of sustainable transportation, electric vehicles (EVs) have emerged as a transformative force, providing a cleaner alternative to traditional combustion-engine vehicles. As the global transition towards widespread EV adoption gains momentum, local governments must consider a critical aspect often overlooked in the electrification revolution – the resilience and reliability of the infrastructure needed to support the use of these vehicles during and after natural disasters.

Contributors to this information compiled by Heather Brutz, Justin Lindemann, Brian Lips, Isaac Panzarella and Shelly Parker based off previous versions developed by Lisa Poger.

	Overview of Grants, Rebates & Tax Credits	Vehicles	Infrastructure	Microgrids	Workforce
	Clean School Bus Grant Program	$\checkmark$	$\checkmark$		
	Clean School Bus Rebate Program	$\checkmark$	$\checkmark$		$\checkmark$
	Clean Heavy-Duty Vehicle Program	$\checkmark$	$\checkmark$		$\checkmark$
	Environmental & Climate Justice Community Change Grants Program	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
	Diesel Emissions Reduction Act (DERA)	$\checkmark$	$\checkmark$		$\checkmark$
	Port Low- to Zero-Emission Technologies (expected future)	$\checkmark$	$\checkmark$		
Federa	Charging & Fueling Infrastructure (CFI) Discretionary Grant Program		$\checkmark$		
	Low or No Emission Grant Program	$\checkmark$	$\checkmark$		$\checkmark$
	Alternative Fuel Vehicle Refueling Property Credit		$\checkmark$	$\checkmark$	$\checkmark$
	Clean Electricity Investment Tax Credit (ITC) (expected future)		$\checkmark$	$\checkmark$	$\checkmark$
	Commercial Clean Vehicle Federal Tax Credits	$\checkmark$			
	Investment Tax Credit for Energy Property (ITC)		$\checkmark$	$\checkmark$	$\checkmark$
	Clean Electricity Production Tax Credit (PTC) (expected future)		$\checkmark$	$\checkmark$	$\checkmark$
	Rural Energy for America Program (REAP) Renewable Energy Systems & Energy Efficiency Improvement Loans & Grants			$\checkmark$	
	Diesel Emissions Reduction Act (DERA)	$\checkmark$	$\checkmark$		
	Surface Transportation Block Grant Program		$\checkmark$		
Ð	Carbon Reduction Program	N	Not Yet Launched		∍d
t	National Electric Vehicle Infrastructure Program (NEVI)		$\checkmark$	$\checkmark$	
ta	Congestion Mitigation & Air Quality Improvement Program (CMAQ)	$\checkmark$	$\checkmark$		
S	Clean Fuel Advanced Technology (CFAT)	$\checkmark$	$\checkmark$		
	Resilient Renewable Energy to Diminish Disaster Impacts on Communities Project			$\checkmark$	$\checkmark$
	State Technical Assistance & Match Program (STAMP)	Supports Other Programs			
	Commercial EV Charger Prep Credit		$\checkmark$		
	Home Builder EV Charger Prep Credit (Contractor Credit)		$\checkmark$		
	Park & Plug Fast Charging Station Program		$\checkmark$		
Ç	Park & Plug Public Level 2 Charging Program		$\checkmark$		
	Charger Solution Rental Program		$\checkmark$		

## NC STATE UNIVERSITY



# Federal Incentives, Grants & Credits



Clean School Bus Grant Program US Environmental Protection Agency	<ul> <li>School Bus (CSB) includes</li> <li>two programs, CSB Grants and CSB Rebates, that will award \$5</li> <li>billion from FY2022 through FY2026 to replace existing school buses</li> <li>with zero-emission and low-emission models to deliver cleaner air to communities across the country. CSB Grant eligible activities include the replacement of existing internal-combustion engine school buses with electric, propane, or compressed natural gas school buses, as well as the purchase of electric vehicle supply equipment (EVSE) infrastructure and EVSE installations.</li> <li>Eligibility: State and local government entities, non-profit School Transportation Associations, Tribal organizations, and eligible contractors.</li> <li>Application: The US EPA CSB Grant program application is closed. The 2024 process will begin in spring 2024. The program offers annual awards through 2026.</li> </ul>
LEARN MORE	epa.gov/cleanschoolbus/clean-school-bus-program-grants

**Description:** EPA's Clean

## Clean School Bus Rebate Program

US Environmental Protection Agency **Description:** The Bipartisan Infrastructure Law of 2021 authorizes EPA to offer rebates to replace existing school buses with clean and zero-emission (ZE) models. The program guidance and application process differ from prior EPA school bus rebate programs. Funding can be used for vehicle replacement, infrastructure, and workforce development. The program is a lottery; interested districts submit an application to be considered for the lottery.

**<u>Eligibility:</u>** State and local government entities, non-profit School Transportation Associations, Tribal organizations, and eligible contractors. Applicants who applied for previous CSB funding opportunities are able to apply for future CSB funding opportunities.

**Application:** The US EPA CSB Rebates program application opened fall 2023, was extended and closed Feb. 14, 2024. The program offers annual awards through 2026. The 2024 process will begin in fall 2024.

**LEARN MORE** 

epa.gov/cleanschoolbus/clean-school-bus-program-rebates



Clean Heavy-Duty Vehicle Program US Environmental Protection Agency	<ul> <li>Description: The Heavy-Duty Vehicle Program will distribute \$1 billion in funding for clean heavy-duty vehicles between now and 2031 to replace existing heavy-duty vehicles with clean, zero-emission vehicles; includes vehicles, fueling infrastructure, workforce development and training, and planning and technical activities.</li> <li>Eligibility: Commercial and public entities for the replacement of Class 6 &amp; 7 heavy-duty vehicles. \$400 million of the funding reserved for communities in the EPA air-quality nonattainment areas. (See CMAQ map for EPA air quality nonattainment and maintenance areas.)</li> <li>Application: The application period for the Clean Heavy-Duty Vehicle Program has not opened. Annual application process through FY2031. EPA anticipates this new funding opportunity will become available for application through a notice of funding opportunity (NOFO) released in early spring 2024.</li> </ul>
LEARN MORE	epa.gov/inflation-reduction-act/clean-heavy-duty-vehicle-program
Environmental & Climate Justice Community Change Grants ProgramUS Environmental Protection Agency	<ul> <li>Description: Environmental and Climate Justice Community Change Grants (Community Change Grants) will invest approximately \$2 billion dollars in Inflation Reduction Act funds in environmental and climate justice activities to benefit disadvantaged communities to support community-driven projects that build capacity for communities to tackle environmental and climate justice challenges, strengthen their climate resilience, and advance clean energy.</li> <li>Awards will be between \$10-20 million for multi-faceted projects addressing a range of pollution, climate change, and other priority issues, and a limited number of \$1-3 million awards focused on the engagement of disadvantaged communities in governmental processes. Eligible activities include investments in low- and zero-emission and resilient technologies and related infrastructure, and workforce development that supports the reduction of greenhouse gas emissions and other air pollutants.</li> <li>Eligibility: A partnership between two community-based non-profit organizations (CBOs), or a partnership between a CBO and one of the following: a Federally-Recognized Tribe, a local government, or an institution of higher education, and eligible contractors. Eligible entities can receive TA in all stages of the Community Change Grants. This includes application support, capacity building, project planning, and more.</li> <li>Application: Rolling applications for three-year awards. Respond to Requests for Applications as posted. The 2024 funding opportunity closes November 2024.</li> </ul>
LEARN MORE	epa.gov/inflation-reduction-act/inflation-reduction-act-community-change- grants-program



Diesel Emissions Reduction Act (DERA) US Environmental Protection Agency	<ul> <li>Description: EPA's DERA program awards funds to eligible projects for the establishment of diesel emissions reduction programs for diesel vehicles, engines and equipment. Grants fund diesel projects that use: (1) EPA-verified retrofit technologies or certified engine configurations, (2) California Air Resources Board (CARB) verified retrofit technologies or certified engine configurations, (3) Idle-reduction technologies that are EPA verified, (4) Aerodynamic technologies and low rolling resistance tires that are EPA verified, or (5) Early engine, vehicle, or equipment replacements with certified engine configurations.</li> <li>Eligibility: School Buses, transit buses, medium-duty or heavy-duty trucks, marine engines, locomotives and non-road engines, equipment or vehicles used for cargo handling, agriculture, mining or energy production.</li> <li>Application: Annual funding opportunity allocated to projects on a competitive basis. The 2024 process will open in summer 2024.</li> </ul>
LEARN MORE	epa.gov/dera
Port Low- to Zero- Emission Technologies US Environmental Protection Agency	<b>Description:</b> EPA is funding zero-emission (ZE) port equipment and infrastructure to reduce greenhouse gases and air pollutants at ports. The Inflation Reduction Act of 2022 provides EPA with \$3 billion to fund zero-emission port equipment and infrastructure, as well as climate and air quality planning at US ports. This new funding program will build on EPA's Ports Initiative and will help address public health and environmental impacts on port-adjacent communities. EPA anticipates this new funding opportunity will become available for application through a February 2024 NOFO. Visit the Clean Ports Program Funding Website.

**Eligibility:** EPA is currently designing the program but anticipates funding for planning (related to climate and air quality), infrastructure (including shore power for ocean-going vessels), vehicles and equipment (including cargo-handling equipment, dray trucks, locomotives, and harbor craft). Anticipated eligible applicants include port authorities; state, regional, local, or Tribal agency that has jurisdiction over a port authority or port; air pollution control agency; private entities that applies in partnership with an eligible entity above, and owns, operates, or uses facilities, cargo-handling equipment, transportation equipment, or related technology of a port.

**Application:** A notice of funding opportunity (NOFO) of up to \$3 billion is expected to open in the first quarter 2024. Monitor the Federal Funding Opportunities for Port Low- to Zero-Emission Technologies webpage for updates.

**LEARN MORE** 

energy.gov/eere/federal-funding-opportunities-port-low-zero-emissiontechnologies



Charging & Fueling Infrastructure (CFI) Discretionary Grant programUS Department of Transportation Federal Highway Administration	<ul> <li>Description: Discretionary Grant Program for Charging and Fueling Infrastructure (\$2.5 billion). Competitive grant program seeks to strategically deploy publicly accessible electric vehicle charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure along designated alternative fuel corridors or in other publicly accessible locations. The federal program is complementary to state-managed programs under the National Electric Vehicle Infrastructure program (See NEVI/N.C. DOT below)</li> <li>Eligibility: State governments, metropolitan planning organizations, local governments, political subdivisions, and tribal governments. 50% or more of funding to be used for community grant programs where priority is given to projects that expand access to EV charging and alternative fueling infrastructure within rural areas, low- and moderate- income neighborhoods, and communities with a low ratio of private parking spaces.</li> <li>Application: Annual funding opportunity allocated to projects on a competitive basis. Minimum award amount of \$500,000. Applications may be submitted as part of a consolidated proposal. Proposals submitted to DOT following Notice of Funding Opportunity (NOFO). CFI Program updates and future available CFI funding will be announced at www.fhwa.dot.gov/environment/cfi.</li> </ul>
LEARN MORE	fhwa.dot.gov/environment/cfi/
Low or No Emission Grant Program	<ul> <li>Description: The Low or No Emission competitive program provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities. Includes workforce development requirement. The Bipartisan Infrastructure Law provides nearly \$2 billion through FY2026 for the program.</li> <li>Eligibility: Direct or designated recipients of FTA grants, states, local government authorities, and Indian Tribes. Projects in rural (non-urbanized) areas must be submitted as part of a consolidated state proposal.</li> <li>Application: Annual funding opportunity allocated to projects on a competitive basis. Proposals submitted to DOT following Notice of Funding Opportunity (NOFO).</li> </ul>
LEARN MORE	transit.dot.gov/lowno



Alternative Fuel Vehicle Refueling Property Credit US Internal Revenue Service	<ul> <li>Description: EV charging infrastructure and bidirectional charging equipment installed between Jan. 1, 2023, and Dec. 31, 2032, is eligible for a tax credit. The credit for qualified refueling property has a maximum tax credit of \$100,000 for each single item of property. Businesses meeting prevailing wage and apprenticeship requirements may be eligible for a 30% credit with the same \$100,000 limit. Non-tax-paying entities will receive the credit in the form of a Direct Pay rebate.</li> <li>Eligibility: Businesses and applicable entities including state, local, tribal, rural energy cooperatives and other qualifying tax-exempt organizations; starting in 2023, qualifying property will be limited to property placed in service within low-income communities or non-urban census tracts.</li> <li>Application: Internal Revenue Codes Section 30C.</li> </ul>
LEARN MORE	irs.gov/credits-deductions/alternative-fuel-vehicle-refueling-property-credit

Clean Electricity Investment Tax Credit (ITC) US Internal Revenue Service	<ul> <li>Description: The Clean Electricity Investment Tax Credit is to replace the traditional ITC for systems placed in service on or after January 1, 2025. It is a technology-neutral tax credit for investment in facilities that generate clean electricity and qualified energy storage technologies. Credit amount is 6% of qualified investment (basis); 30% if prevailing wage and apprenticeships (PWA) requirements met. The tax credit is functionally similar to the ITC but is not technology-specific. It applies to all generation facilities and energy storage systems that have an anticipated greenhouse gas emissions rate of zero. (Reference <i>Federal Solar Tax Credit Chart</i> in More Information &amp; Resources pages.)</li> <li>Eligibility: Tax credit is applicable to commercial, industrial, investorowned utility, cooperative utilities, and agricultural businesses. Organizations that don't pay federal taxes, like non-profits or local governments, can take advantage of the tax credits through either direct pay or a transfer of credit.</li> <li>Application: Program does not begin until after 2024, then Internal Revenue Code 48E. Complete and attach IRS Form 3468 to the tax return.</li> </ul>
LEARN MORE	irs.gov/pub/irs-pdf/p5886.pdf



Commercial Clean Vehicle Federal Tax Credits US Internal Revenue Service	<ul> <li>Description: Businesses and tax-exempt organizations that buy a qualified commercial clean vehicle or mobile machinery may qualify for a maximum clean vehicle tax credit of \$7,500 for qualified light-duty vehicles and \$40,000 for all other vehicles under Internal Revenue Code Section 30D. There are manufacturing requirements for vehicles and batteries and an index of vehicle manufacturers on the IRS webpage. For a business, there is no limit on the number of credits a business can claim; credits are nonrefundable, amount not to exceed taxes owed. Non-tax-paying entities will receive the credit in the form of a Direct Pay rebate.</li> <li>Eligibility: Businesses and tax-exempt organizations qualify for the credit.</li> <li>Application: IRS is finalizing the form to claim credit.</li> </ul>
LEARN MORE	irs.gov/credits-deductions/alternative-fuel-vehicle-refueling-property-credit

Investment Tax Credit (ITC) for Energy Property US Internal Revenue Service	<b>Description:</b> The Investment Tax Credit for Energy Property (ITC), is for investment in renewable energy projects including fuel cell, solar, geothermal, small wind, energy storage, biogas, microgrid controllers, and combined heat and power properties. Base credit for systems is 30% if <1 MW. Base credit for systems >1 MW is 6%. Can get up to 50% tax credit if meet multiple bonus requirements such as Domestic Content Bonus, Energy Communities Bonus, and labor requirements of Prevailing Wage and Apprenticeships (PWA), Low to Moderate Income (LMI) Communities or Indian Land and Qualified LMI building or economic benefit. (Reference <i>Federal Solar Tax Credit Chart</i> in More Information & Resources pages.)
Revenue Service	<b>Eligibility:</b> Tax credit is applicable to commercial, industrial, investor- owned utility, cooperative utilities, and agricultural businesses. Non- tax-paying entities will receive the credit in the form of a Direct Pay or elective pay rebate. Construction must have begun by Jan. 1, 2025. Organizations that don't pay federal taxes, like non-profits or local governments, can take advantage of the tax credits through either direct pay or a transfer of credit. <b>Application:</b> Internal Revenue Code 48. IRS is creating the form to claim credit.
LEARN MORE	irs.gov/pub/irs-pdf/p5886.pdf



## Clean Electricity Production Tax Credit (PTC)

US Internal Revenue Service **Description:** The production tax credit (PTC) is a per kilowatt-hour (kWh) tax credit for electricity generated by qualifying technologies for the first 10 years of a system's operation and sold by the taxpayer to an unrelated person during the taxable year. PTC reduces the federal income tax liability, and tax credits are earned over time, and are adjusted annually for inflation. Qualifying technologies include geothermal electric, solar thermal electric, solar photovoltaics, wind (all), biomass, hydroelectric, municipal solid waste, landfill gas, tidal, wave, ocean thermal, wind (small), hydroelectric (small), offshore wind. Only available to projects placed in service after Dec. 31, 2024. (Reference *Federal Solar Tax Credit Chart* in More Information & Resources pages.)

**Eligibility:** Available for businesses and other entities like nonprofits and local and tribal governments that purchase or own solar energy systems, including both photovoltaic (PV) and concentrating solar-thermal power (CSP) energy generation technologies. Organizations that don't pay federal taxes, like non-profits or local governments, can take advantage of the tax credits through either direct pay or a transfer of credit.

**Application:** Complete and attach IRS Form 8962 to their tax return. Additional information can be found online in the Database of State Incentives for Renewables & Efficiency (DSIRE) at https://programs. dsireusa.org/system/program/detail/734.

**LEARN MORE** 

energy.gov/eere/solar/federal-solar-tax-credits-businesses



Rural Energy for America Program (REAP) Renewable Energy Systems & Energy Efficiency Improvement Loans &	<ul> <li>Description: The program provides guaranteed loan financing and grant funding to agricultural producers and rural small businesses for renewable energy systems or to make energy efficiency improvements. Agricultural producers can also apply for new energy-efficient equipment and new system loans for agricultural production and processing. Loan guarantees on loans up to 75% of total eligible project costs. Grants for up to 50% of total eligible project costs. Combined grant and loan guarantee funding up to 75% of total eligible project costs.</li> <li>Eligibility: Agricultural producers in rural or non-rural areas with at least 50 percent of their gross income coming from agricultural operations, and small businesses must be located in rural areas with populations of 50,000 or fewer. Renewable Energy System Grants have a \$2,500 minimum and \$1 million maximum. Energy Efficiency Grants have a \$1,500 minimum and \$500,000 maximum. Grant-only applicants require cost match of 25-50%.</li> </ul>
<b>Grants</b> US Department of Agriculture	The North Carolina Clean Energy Technology Center (NCCETC) is now accepting applications for renewable energy development assistance (REDA). Through funds provided by the US REAP funds, NCCETC will provide free renewable energy assessments and related technical assistance to eligible facilities over the next two years. Contact Art Samberg at 919-515-5959 or via email at asamber@ncsu. edu for assistance. Application: Applications are excepted year-round in your local USDA Rural Development office. A list of state offices is available at this link: https://go.usa.gov/xJnHR.
LEARN MORE	rd.usda.gov/programs-services/energy-programs/rural-energy-america- program-renewable-energy-systems-energy-efficiency-improvement- guaranteed-loans



# North Carolina Incentives, Grants & Credits

Diesel Emissions Reduction Act (DERA) NC Department of Environmental Quality	<ul> <li>Description: In addition to the Federal EPA funding opportunity, EPA allocates DERA funds to eligible US states and territories for the establishment of diesel emissions reduction programs. States and territories may use their grants to fund diesel emissions reduction projects that use: (1) EPA verified retrofit technologies or certified engine configurations, (2) California Air Resources Board (CARB) verified retrofit technologies or certified engine configurations, (3) Idle-reduction technologies that are EPA verified, (4) Aerodynamic technologies and low rolling resistance tires that are EPA verified, or (5) Early engine, vehicle, or equipment replacements with certified engine configurations.</li> <li>Eligibility: Vehicle replacements only; diesel vehicles require documented destruction/decommissioning and not resold. School buses, transit buses, medium-duty or heavy-duty trucks, marine engines, locomotives and non-road engines, equipment or vehicles.</li> <li>Application: State-level DERA funding is allocated annually to eligible projects on a competitive basis. Proposals submitted to NC DEQ following Notice of Funding Opportunity (NOFO).</li> </ul>
LEARN MORE	deq.nc.gov/about/divisions/air-quality/motor-vehicles-and-air-quality/mobile- sources-emissions-reductions-grant
Surface Transportation Block Grant Program	<ul> <li><u>Description</u>: The Surface Transportation Block Grant Program is a federal Flexible Funding Program that may be used by states and localities for a wide range of projects to preserve and improve the conditions and performance of surface transportation, including highway, transit, intercity bus, bicycle and pedestrian projects.</li> <li><u>Eligibility</u>: State, local government authorities and Indian Tribes.</li> </ul>
NC Department of Transportation	<b>Application:</b> Rolling applications. Respond to Requests for Applications as posted. Contact local MPO, RPO or local Council of Governments for more information.
LEARN MORE	transit.dot.gov/funding/grants/flexible-funding-programs-surface- transportation-block-grant-program-23-usc-133



Carbon Reduction Program NC Department of Transportation	<ul> <li>Description: The 2021 Bipartisan Infrastructure Law established the Carbon Reduction Program (CRP), which provides funds for projects designed to reduce transportation emissions, defined as greenhouse gas emissions from on-road highway sources.</li> <li>Eligibility: Eligible projects include but are not limited to: (1) advanced truck stop electrification (2) reduction of environmental and community impacts of freight movement, and/or (3) support for deployment of alternative fuel vehicles, including purchase or lease of zero-emission equipment and fueling infrastructure.</li> <li>Application: Program application not yet launched. Coordinate applications through Regional Planning Organization (RPO) or Municipal Planning Organization (MPO). Program will run through FY 2026.</li> </ul>
LEARN MORE	ncdot.gov/initiatives-policies/environmental/climate-change/Pages/electric- vehicles.aspx#:~:text=vehicles.,Carbon%20Reduction%20Program

National Electric Vehicle Infrastructure Program (NEVI) NC Department of Transportation	<ul> <li>Description: The National Electric Vehicle Infrastructure Program provides nearly \$5 billion from July 2022-June 2027 to help states create a network of 500,000 publicly accessible electric vehicle-charging stations along designated alternative fuel corridors. North Carolina expects to receive up to \$109 million to build out EV infrastructure along its approved corridors. The first round of funding will be spent building DC fast chargers along major corridors in North Carolina. Future rounds will likely focus on Level 2 chargers in communities.</li> <li>Eligibility: Funds may be used for the acquisition and installation of electrical vehicle charging infrastructure along approved alternative fuel corridors. Funding can be used both to construct new EV charging infrastructure and upgrade existing charging infrastructure.</li> <li>Application: RFP for North Carolina set to release early 2024 for first round of funding.</li> </ul>
LEARN MORE	deq.nc.gov/about/divisions/air-quality/motor-vehicles-and-air-quality/mobile- sources-emissions-reductions-grant



Congestion Mitigation & Air Quality Improvement Program (CMAQ) NC Department of Transportation	<ul> <li>Description: The Bipartisan Infrastructure Law 2021 continued the Congestion Mitigation and Air Quality Improvement Program (CMAQ) which provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available to reduce congestion and improve air quality for areas that do not meet the National Ambient Air Quality Standards for ozone, carbon monoxide, or particulate matter (nonattainment areas) and for former nonattainment areas that are now in compliance (maintenance areas). EVSE can be funded statewide.</li> <li>Eligibility: State and local government transportation projects are eligible and public-private partnerships may qualify.</li> <li>Application: Annual funding opportunity allocated to projects on a competitive basis. Proposals submitted to NC DOT following Notice of Funding Opportunity (NOFO). Contact local MPO, RPO or Council of Government for more information on how to apply.</li> </ul>					
LEARN MORE	connect.ncdot.gov/projects/planning/Pages/ CongestionMitigationAirQualityNC.aspx					
	Descriptions EDA funds fodered and state OMAO projects. Otate					
Clean Fuel	<b>Description:</b> EPA funds federal and state CMAQ projects. State					

## Clean Fuel Advanced Technology (CFAT)

NC Clean Energy Technology Center Description: EPA funds federal and state CMAQ projects. State CMAQ funds are further allocated to the Clean Fuel Advanced Technology (CFAT) program, administered by the North Carolina Clean Energy Technology Center (NCCETC). The CFAT program provides annual funding for clean transportation technologies in eligible counties in North Carolina (\$3 million). Funds help private and public fleets purchase clean transportation technologies to improve North Carolina's air quality based on locations identified below. Available funds can be used for alternative-fuel vehicle (AFV) purchase or lease, AFV conversions, idle reduction technologies, diesel retrofits, and AFV fueling infrastructure. AFV requires Buy America Certifications or waivers, and cost match is required.
 Eligibility: 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). Project proposals for electric vehicle charging stations (EVSE) accepted within all 100 counties.

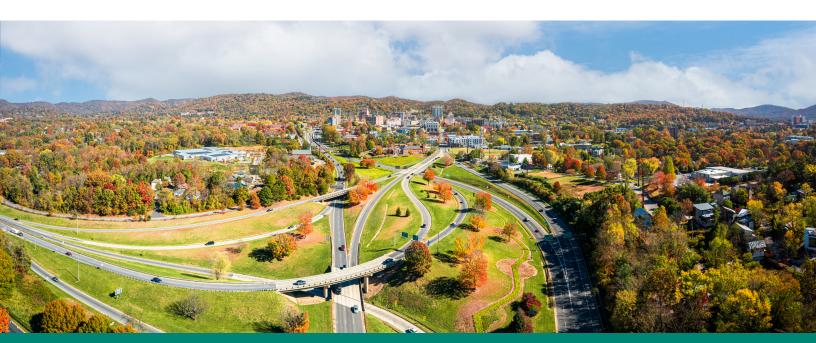
**<u>Application</u>**: Annual funding opportunity allocated to projects on a competitive basis. Proposals submitted to NCCETC following Request for Proposals (RFP). Expected Spring 2024.

**LEARN MORE** 

nccleantech.ncsu.edu/our-work/center-projects/cfat-project-request-forproposals-information/



Resilient Renewable Energy to Diminish Disaster Impacts on Communities ProjectNC Clean Energy Technology Center	<ul> <li>Description: NCCETC received Renewables Advancing Community Energy Resilience (RACER) funds from the US Department of Energy to conduct The Resilient Renewable Energy to Diminish Disaster Impacts on Communities (Resilient REDDI Communities) project. The goal of the Resilient REDDI Communities project is to create a resiliency playbook which will enable local emergency management agencies to make informed decisions for the deployment of resilient solar PV and energy storage projects where they will have the greatest impact on improving community disaster resilience.</li> <li>It will include developing metrics regarding resiliency in emergency management, developing a playbook for emergency managers for energy resiliency in disaster planning response, and working with cohort communities to provide technical assistance to model scenarios, identify cost-effective solutions, and identify potential funding opportunities. To validate and disseminate the results, the team will support a cohort of 12 North Carolina communities in developing ready-to-implement resilient solar PV and energy storage projects to validate the new resilient community metrics and framework.</li> <li>Eligibility: Cohort communities interested in implementing community resiliency projects will be required to attend workshops, participate in surveys regarding EV station and microgrid site suitability, and provide feedback on network modeling, resiliency needs, and system design.</li> <li>Application: Cohort communities will be selected spring 2024 and assisted through 2025. If your community is interested in participating in the cohort, contact Vincent Potter, Policy Analyst, via email at vmpotter@ncsu.edu or call 919-513-4790.</li> </ul>
LEARN MORE	nccleantech.ncsu.edu/2023/06/22/resilient-reddi-communities-project-kicks- off/





### **NC STATE** UNIVERSITY



NC Office of State Budget and Management (OSBM) **Description:** OSBM's State Technical Assistance and Match Program (STAMP) is an initiative which enables state agencies to apply for funding through STAMP – State Matching Funds (STAMP-SMF) and for STAMP-Technical Assistance (STAMP-TA) to aid state agencies in applying for Federal grants, including time-limited positions or third-party contractors/consultants, and for state matching funds associated with funding opportunities made possible by the Infrastructure Investment and Jobs Act (IIJA) - also known as the Bipartisan Infrastructure Law (BIL) - the Chips and Science Act of 2022 (CHIPS), and the Inflation Reduction Act of 2022 (IRA). The goal of the STAMP program is to maximize federal funding awards to North Carolina.

**Eligibility:** State agencies, including universities and colleges in the UNC System, and local governments working with North Carolina state agencies applying for BIL, CHIPS, and IRA funding opportunities are eligible to apply for STAMP-SMF funding. Agencies that have already applied for these for BIL, CHIPS, and IRA funding opportunities and have either been awarded funds or are awaiting award notification may also apply for STAMP-SMF. To be eligible for this funding, an Applicant's request(s) must clearly demonstrate how matching funds will enable specific BIL, CHIPS, or IRA funding opportunities and why STAMP-SMF funds are needed.

**Application:** OSBM will review applications for OSBM-provided Support on a weekly cadence. The weekly submission deadline for OSBM-provided Support is 5 p.m., every Friday. OSBM will review applications for In-house Support on a monthly cadence. The monthly submission deadline for In-house Support is 5 p.m. on the 15th of the month. Contact OSBM at FederalFundsNC@osbm.nc.gov for more assistance.

LEARN MORE

osbm.nc.gov/stewardship-services/federal-funding-opportunities

### **NC STATE** UNIVERSITY



# Utility Incentives, Grants & Credits

Description: The



Commercial EV Charger Prep Credit Duke Energy	Commercial EV Charger Prep Credit program provides a one-time credit to business customers to cover the cost of preparing a site for an EV charger. The credit amount is based on charger type, total kW, and service upgrade requirements. Acceptable upgrades include electrical wiring and other required electrical upgrades to support Level 2 or higher EV chargers. The credit applies only to work including underground boring, electric panel work, and installing conduits. It does not cover the cost of permitting, EV charger installation or the EV charging equipment itself. <b>Eligibility:</b> The credit can be applied to workplaces, businesses, multifamily dwellings, transit stations and schools. Eligible customers include those that had a contractor install an EV charger after May 19, 2022, and within 120 days of the final invoice or approved permit date. <b>Application:</b> Eligible Duke Energy customers must submit an application with proper documentation online. Click here to access the application. Applications accepted on a rolling basis for the duration of the Program.
LEARN MORE	duke-energy.com/business/products/ev-complete/charger-prep-credit
Home Builder EV Charger Prep Credit	<ul> <li>Description: Duke Energy provides a Home Builder Charger Prep Credit of \$150 for commercial home- builders to install or up fit-homes with EV-ready charging infrastructure during the construction process.</li> <li>Eligibility: Home builders constructing single-family or townhomes with an address inside Duke Energy's N.C. service territory. Builders must demonstrate that the EV charging infrastructure was installed by a licensed electrician. For more terms and conditions, click here.</li> </ul>

 (Contractor Credit)
 Duke Energy
 a licensed electrician. For more terms and conditions, click here.
 Application: Application must be submitted during home construction and at least 30 days before a homeowner takes possession. Each new home has to have its own application and documentation. To access the application, which is accepted on a rolling basis, click here.

**LEARN MORE** 

duke-energy.com/business/products/ev-complete/homebuilder-prep-credit



Park & Plug Fast Charging Station programDuke Energy	<ul> <li>Description: Duke Energy's Park &amp; Plug EV Fast Charger program is offering customers a chance to host charging station locations alongside major highway corridors located within the company's N.C. service territory. The pilot program requires a two station minimum, each with the capability of charging individual EVs at a minimum of 100 kW, for each location. Duke Energy will provide a turn-key DC fast charge solution, which will include equipment, warranties, installation, maintenance and network connection service; free of charge, for what would normally cost more than \$200,000.</li> <li>Eligibility: Potential participants must be located within Duke Energy's North Carolina service territory and sign a five-year contract for program participation. Site requirements must be met, including adequate ingress/egress; highway access within a mile; three-phase power availability; proximity to retail, restaurants, and other places of interest; Americans with Disabilities Act (ADA) compliance; snow removal, 24/7 access, and a safe, clean, and well-lit site. Those with a closer proximity to EV driver amenities are given preference, as well as sites that have a higher use potential.</li> <li>Application: The initial application window for Park &amp; Plug North Carolina is now closed; however interested participants are encouraged to click here to join a waitlist. It is not yet determined if the program will be extended by the N.C. Public Utilities Commission.</li> </ul>
LEARN MORE	duke-energy.com/business/products/park-and-plug/ev-fast-charging- stations



North Carolina State University | College of Engineering | 2024 | nccleantech.ncsu.edu



i.

Park & Plug Public Level 2 Charging programDuke Energy	<ul> <li>Description: Duke Energy's Park &amp; Plug Public Level 2 Charging program offers free Level 2 charging stations near businesses, retail locations, and municipalities throughout the company's N.C. service area, with a minimum of two stations per site. Each charging station is capable of charging a vehicle at up to 10 kW. Duke Energy will provide a turn-key charging station solution, including equipment, warranties, installation, maintenance, and network connection service; free of charge, for what would normally cost around \$20,000.</li> <li>Eligibility: Participants must be located within Duke Energy's North Carolina service territory. Site requirements include adequate ingress/egress; proximity to retail, restaurants, and other places of interest; Americans with Disabilities Act (ADA) compliance, and a safe, clean, and well-lit site. Sites with close proximity to EV driver amenities are given preference, as well as sites that have a higher use potential.</li> <li>Application: The initial application window for Park &amp; Plug North Carolina is now closed; however interested participants are encouraged to click here to join a waitlist. It is not yet determined if the program will be extended by the N.C. Public Utilities Commission.</li> </ul>
LEARN MORE	duke-energy.com/business/products/park-and-plug/public-level-2-chargers

Charger Solution Rental Program Duke Energy	<ul> <li>Description: Duke Energy offers customers a 3-year rental of residential Level 2 EV charging equipment for their home, which includes the cost of installation, warranty &amp; maintenance. Any work needed to prepare the home for the charger (such as conduit, wiring, or increased capacity) is an additional expense, not covered under the rental program.</li> <li>Eligibility: To be eligible for this rental program, you must be a Duke Energy customer in North Carolina, must agree to terms &amp; conditions, must own the property or have landlord approval (documentation required in the application), the home must be EV-charger-ready with adequate infrastructure and space to support an EV charger, must provide internet access in the charger location, must have HOA approval (if needed), you must select your charger from the list of available options, and your application form must be complete in order to qualify.</li> <li>Application: There is an online application for interested participants. To access the application, click here.</li> </ul>
LEARN MORE	duke-energy.com/home/products/ev-complete/charger-solution



# **MORE INFORMATION & RESOURCES**

### **Application Processes**

Some Federal grants mandate the Grants.gov registration process, which requires that your organization have a Unique Entity Identifier (previously known as the DUNS number) and a current registration with the System for Award Management (SAM.gov); the process of obtaining both could take a month or more for new registrants. The registration process is free.

### **Clean Energy Tax Incentives for Business Publication 5886**

Publication 5886 is a list of clean energy tax incentives for businesses. The Inflation Reduction Act of 2022 ("IRA") makes several clean energy tax credits available to businesses. The information in this document may be subject to change as guidance is issued or finalized. For all IRA clean energy tax credits, please see IRS.gov/CleanEnergy for further details and eligibility requirements. PDF of the public cation is available at irs.gov/pub/irs-pdf/p5886.pdf.

### **U.S. Climate Resilience Toolkit**

The Climate and Economic Justice Screening Tool (CEJST) is a geospatial mapping tool that identifies areas across the nation where communities are faced with significant burdens. These burdens are organized into eight categories: climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. The toolkit is available at toolkit.climate.gov/tool/climate-and-economic-justice-screening-tool.

### **US Department of Transportation Rural EV Toolkit**

The US Department of Transportation Rural EV Toolkit focuses on infrastructure for light-duty electric passenger vehicles (such as sedans, sport utility vehicles, and pickup trucks), but also addresses funding opportunities and planning considerations for other types of electric vehicles and devices, including micromobility, transit and school buses, medium- and heavy-duty vehicles, and agricultural equipment. The toolkit is available at transportation.gov/rural/ev/toolkit.

### **Energy Funds for All**

Energy Funds for All is a resource guide to help NC and SC residents access support for home and community energy projects. Learn more at energyfundsforall.org.

### NC Office of State Budget and Management Federal Funding Opportunities

Overview webpage of federal investments in infrastructure, research and innovation, climate initiatives, reshoring manufacturing, and STEM education available at osbm.nc.gov/stewardship-services/federal-funding-opportunities. STAMP-SMF and STAMP-TA are managed by NC OSBM.

This webpage provides resources to help North Carolina entities make the most of federal funding available under Bipartisan Infrastructure Law (BIL), also known as the Infrastructure Investment and Jobs Act (IIJA), the Creating Helpful Incentives to Produce Semiconductors (CHIPS) and Science Act, and the Inflation Reduction Act (IRA).



### **Federal Solar Tax Credits for Business**

The chart below reviews the Solar Tax Credit options. Investment Tax Credit for Energy Property is the ITC for construction begun by Jan. 1, 2025. The Clean Electricity Investment Tax Credit is the ITC replacing the original ITC, and projects must be placed in service on or after Jan. 1, 2025.

The Clean Electricity Production Tax Credit (PTC) is only available for projects placed in service after Dec. 31, 2024.

### Summary of Investment Tax Credit (ITC) and Production Tax Credit (PTC) Values Over Time

				Start of Construction					
			2006 to 2019	2020 to 2021	2022	2023 to 2033	The later of 2034 (or two years after applicable year <sup>a</sup> )	The later of 2035 (or three years after applicable year <sup>a</sup> )	The later of 2036 (or four years after applicable year <sup>a</sup> )
	ts <sup>b</sup> )	Base Credit	30%	26%	30%	30%	22.5%	15%	O%
	Full rate (if project meets labor requirements <sup>b</sup> )	Domestic Content Bonus				10%	7.5%	5%	0%
	Ledui Tedui	Energy Community Bonus				10%	7.5%	5%	0%
	does does nts <sup>b</sup> )	Base Credit	30%	26%	6%	6%	4.5%	3%	O%
ІТС	Base rate (if project does not meet labor requirements <sup>b</sup> )	Domestic Content Bonus				2%	1.5%	1%	0%
	(if pr not i requ	Energy Community Bonus				2%	1.5%	1%	0%
	e <b>bonus</b> r cap)	<5 MW projects in LMI communities or Indian land				10%	10%	10%	10%
	Low-income bonus (1.8 GW/yr cap)	Qualified low-income residential building project / Qualified low-income economic benefit project				20%	20%	20%	20%
	Full rate (if project meets labor requirements <sup>b</sup> )	Base Credit			2.75¢	2.75 ¢	2.0 ¢	1.3 ¢	0.0 ¢
		Domestic Content Bonus				0.3¢	0.2 ¢	0.1 ¢	0.0 ¢
PTC for 10 years	(if me requi	Energy Community Bonus				0.3¢	0.2 ¢	0.1 ¢	0.0 ¢
(\$2022)	Base rate (if project does not meet labor requirements <sup>b</sup> )	Base Credit			0.55 ¢	0.55 ¢	0.4 ¢	0.3¢	0.0 ¢
		Domestic Content Bonus				0.1¢	0.0 ¢	0.0 ¢	0.0 ¢
		Energy Community Bonus				0.1¢	0.0 ¢	0.1 ¢	0.0 ¢

a "Applicable year" is defined as the later of (i) 2032 or (ii) the year the Treasury Secretary determines that there has been a 75% or more reduction in annual greenhouse gas emissions from the production of electricity in the United States as compared to the calendar year 2022.
 b "Labor requirements" entail certain prevailing wage and apprenticeship conditions being met.

#### Source: energy.gov/eere/solar/federal-solar-tax-credits-businesses



### Database of State Incentives for Renewables and Energy Efficiency (DSIRE)

DSIRE is the most comprehensive source of information on incentives and policies that support renewables and energy efficiency in the United States. Established in 1995, DSIRE is operated by the NC Clean Energy Technology Center at NC State University and receives support from EnergySage. Customers can learn more about federal, state and utility policies and incentives by visiting dsireusa.org.

### **Piedmont and Coastal NC Clean Communities Coalition**

NCCETC is leading the new Piedmont and Coastal North Carolina Clean Communities as part of the US Department of Energy's Clean Cities and Communities program. This apprentice coalition is a state-designated lead regional organization in North Caorlina that presently serves 57 counties across the state. Learn more and get involved at fuelwhatmatters.org.

### **Questions?**

Contact Clean Transportation Program Director: Heather Brutz | hmbrutz@ncsu.edu