

GAZETTE

DRIVING THE WAY TOWARD
ENERGY INDEPENDENCE

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The Municipal Electric Vehicle (EV) Education program offered by the Pennsylvania Department of Environmental Protection's Energy Programs Office is currently accepting registrations for several free education sessions.

THE BENEFITS OF SUSTAINABILITY PLANNING FOR MUNICIPALITIES

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One of the most important considerations when it comes to creating municipal policy is having a plan. This seems intuitive and simple but can be deceptively complex when getting into the weeds of exactly where

-when-how-and-why to implement policy goals. A good plan lays the foundation for effective decision-making, resource allocation, and implementation of policies that can positively impact your community's development and well-being.

In this brief article, I'm going to highlight several free resources you can use to help with your planning and offer three considerations to keep in mind as you approach your plan.

If you are overwhelmed with the thought of planning, or don't know where to begin, that's okay! Free resources exist to coach your local municipality through policy planning.

One such resource is the [Municipal Assistance Program \(MAP\)](#) offered by the Pennsylvania Department of Community. MAP provides funding, and accompaniment, to assist local governments to plan for and efficiently implement a variety of services and improvements, and soundly manage development with an emphasis on intergovernmental approaches. Experts can help you throughout the whole process from forming an idea to execution.

Funding is available for both 1) Shared Service Activities (consolidating or regionalizing services among multiple counties and municipalities, boundary change studies, and shared personnel. New or expanded intergovernmental

initiatives that promote local government efficiencies and effectiveness) and 2) Community Planning (comprehensive plans and parts thereof, land use ordinances, Transit Revitalization Investment District planning studies and entrepreneurial/innovative plans that support community and economic development improvements. Emphasis on multi-municipal plans.)

If you are more of the do-it-yourself type, another invaluable resource is the [Pennsylvania Municipalities Planning Code \(MPC\)](#). The MPC originates from an Act passed in 1968 and elaborates in explicit detail the rules, regulations, and considerations in municipalities planning and land use. The key to highlight relates to grant applications, funding, and permitting. According to Section 619.2.(a) Effect of Comprehensive Plans and Zoning Ordinances, "Commonwealth agencies shall consider and may rely upon comprehensive plans and zoning ordinances when reviewing applications for the funding or permitting of infrastructure or facilities." This means that agencies pay special attention to and prioritize applications which utilize comprehensive plans! Having a plan can save you time and get you money.

In 2021, McKinsey Study published an article, [Organizing for sustainability success: Where, and how, leaders can start](#). The focus of the article is

baking sustainability into an organization's strategic and operational initiatives. Here, I'm going to touch on three of the four pillars McKinsey offers in considering sustainability plans but broaden the scope to apply to any planning goal a municipality wants to follow-through on.

When developing your plan:

First, design according to more specific topics, rather than your goal overall. Developing a short list of priority topics makes it easier to monitor, and to make better decisions, versus navigating a long laundry-list of nebulous goals. This topic-focus also allows for modularity. Small initiatives chained together can be more easily removed or added depending on successes or improvement areas that emerge.

Second, give your planning team the decision rights to execute the change needed. I'm sure we're all familiar with the headaches of wanting to get something done, and becoming slowed down, or even trapped, by lengthy checking and approval processes.

Those processes are necessary to assure positive change and to prevent errors, however, it can be helpful to plan with those checks and balances in mind. If your planning team has designated change authority and accountability, even at a small scope, or a fast-track to decision makers, slow-

downs are less likely.

Third, find the structure that best fits your goals, as well as your organization as a whole. There is no one-size-fits-all approach to creating the most effective change. It's important to realistically consider one's own environment and stakeholders. Try asking yourself these six questions:

- 1) Who is coming up with the plan?
- 2) Who has the resources necessary to implement the change?
- 3) Who is being affected by the change?
- 4) Who has decision-making authority?
- 5) Who should report to whom?
- 6) Who should be a part of the conversation?

Overall, planning offers great benefits. Through planning, municipalities can conduct thorough assessments to identify the specific needs and priorities of their communities. These assessments include analyzing demographic data, conducting surveys, and engaging with residents to understand their concerns and aspirations. Understanding one's local needs and capabilities provides the necessary first step in creating clear and achievable goals and objectives. Setting specific, measurable, achievable, relevant, and time-bound (SMART) objectives leads to policies that are purpose-driven and focused. Those policies are more likely to gain public support and have a meaningful impact! Happy planning!

BIDEN-HARRIS ADMINISTRATION LAUNCHES HISTORIC \$20 BILLION IN GRANT COMPETITIONS TO CREATE NATIONAL CLEAN FINANCING NETWORK AS PART OF INVESTING IN AMERICA AGENDA

EPA seeking applications to two Greenhouse Gas Reduction Fund competitions to advance clean technology projects in communities across the country

The U.S. Environmental Protection Agency (EPA) launched two Notices of Funding Opportunity (NOFOs) for \$20 billion across two grant competitions under the historic \$27 billion Greenhouse Gas Reduction Fund, an Inflation Reduction Act program central to President Biden's Investing in America Agenda and environmental justice goals. Together, these competitive grant opportunities will mobilize private capital into clean technology projects to create good-paying jobs and lower energy costs for American families, especially in low-income and disadvantaged communities, while cutting harmful pollution to protect people's health and tackle the climate crisis.

"The President and I set ambitious goals to cut our greenhouse gas emissions by half by 2030 and reach net-zero emissions by 2050—these investments move our nation towards achieving these goals and a cleaner, healthier future for generations to come," said

Vice President Kamala Harris. "Students, small business owners and community leaders with innovative ideas to reduce our emissions and accelerate our clean energy transition will now see their projects become reality, all while creating good-paying jobs and a clean energy economy that works for all."

"Communities on the front lines of the climate crisis will be the first to reap the benefits of President Biden's historic investments in the clean economy," said EPA Administrator Michael S. Regan. "The Greenhouse Gas Reduction Fund will spur private investment into clean technology projects and expand economic opportunity for communities that have been left behind, for families that want lower energy costs, and for workers who need good-paying jobs. This is what President Biden's Investing in America agenda is all about."

"It's been over a decade since we first put the idea of creating a national climate bank on paper. Today, that idea is becoming a reality. With the launch of the Greenhouse Gas Reduction Fund, we are deploying powerful tools to help us address climate change through innovative new solutions while creating jobs and growing our economy. These

funds will serve as a force multiplier for private investment in clean energy projects to cut emissions and promote environmental justice in underserved communities across the country. This is a win for workers, our economy, and our fight to confront the climate crisis," said Senator Chris Van Hollen (MD).

"Communities around the country are getting a green light for a new historic era of green financing," said Senator Edward J. Markey (MA), Chairman of the Senate Environment and Public Works Subcommittee on Clean Air, Climate, and Nuclear Safety. "As the lead sponsor of the National Climate Bank Act, I am thrilled to celebrate the hard work of Administrator Regan and the Biden-Harris administration and herald the start of a national clean financing network, funded by the landmark investments of the Inflation Reduction Act. From clean transit to healthy housing, applicants to this program will bring life-changing projects to environmental justice and frontline communities around the country, delivering on the promise of a livable future for all."

"The Greenhouse Gas Reduction Fund is a historic program that will help us attack the climate crisis head on," said Congresswoman Debbie Dingell (MI-06). "The announcement of these remaining grant competitions is critical to swiftly distributing these investments to meaningful projects and communities in most urgent need, moving us closer

to an equitable clean-energy economy. I applaud this announcement and look forward to continuing to work with the EPA, my colleagues in Congress, and all our partners to create good paying jobs, bring down energy costs, and reduce our carbon emissions with these investments."

"The Inflation Reduction Act is government-enabled, but private sector-led. The Greenhouse Gas Reduction Fund will ensure that businesses, nonprofits, and community lenders can spread the benefits of the Inflation Reduction Act to underserved communities," said John Podesta, Senior Advisor to the President for Clean Energy Innovation and Implementation. "The announcement from the EPA marks a big milestone in President Biden's mission to expand clean energy for all Americans."

The \$14 billion National Clean Investment Fund will provide grants to support two-to-three national clean financing institutions, enabling them to partner with the private sector to provide accessible, affordable financing for tens of thousands of clean technology projects nationwide. These national nonprofits will enable individuals, families, nonprofits, governments, small businesses, and others to access the capital they need to deploy a diverse suite of clean technology projects in their homes, businesses and communities, which will reduce pollution while creating jobs,

accelerating progress toward energy security, and lowering energy costs. And by mobilizing significant amounts of private capital, these national nonprofits will ensure that every dollar of public funds generates several times more in private investment. At least 40% of the funds from the National Clean Investment Fund will be dedicated to low-income and disadvantaged communities, including those that are rural communities, Tribal communities, communities with environmental justice concerns, energy communities, and persistent poverty counties.

The \$6 billion Clean Communities Investment Accelerator will provide grants to support two-to-seven hub nonprofit organizations, enabling them to provide funding and technical assistance to public, quasi-public, not-for-profit, and non-profit community lenders working in low-income and disadvantaged communities—supporting the goal that every community in the country has access to the capital they need to deploy clean technology projects. These hub nonprofits will enable hundreds of community lenders—such as community development financial institutions (including Native CDFIs), credit unions, green banks, housing finance agencies, and minority depository institutions—to finance clean technology projects in low-income and disadvantaged communities while also mobilizing private capital and build

ing the enduring capacity of community lenders to finance these projects for years to come. 100% of the funds from the Clean Communities Investment Accelerator will be dedicated to low-income and disadvantaged communities.

"By funding a national network of non-profit financing institutions that will deliver capital to tens of thousands of clean technology projects in local communities across the country, the Greenhouse Gas Reduction Fund will transform local economies and help us meet our climate goals," said Senior Advisor and Acting Director of the Greenhouse Gas Reduction Fund Jahi Wise. "Investments like this one will expand opportunities for the communities that have too often been left out and left behind."

The announcement builds on the \$7 billion [Solar for All](#) competition EPA Administrator Regan launched on June 28, 2023 with Senator Bernie Sanders at an event in Vermont. That competition, also under the Inflation Reduction Act's Greenhouse Gas Reduction Fund, will expand the number of low-income and disadvantaged communities primed for residential solar investment. Through Solar for All, EPA will award up to 60 grants to states, territories, Tribal governments, municipalities, and eligible nonprofits to create and expand low-income solar programs that provide financial and technical assistance, such as workforce development, to enable

low-income and disadvantaged communities to deploy and benefit from residential solar. The announcements—culminating in the President’s Investing in America tour—mark the remaining two NOFO announcements for this historic program.

Together, these three competitions under the Greenhouse Gas Reduction Fund will help meet the President’s climate goals of reducing greenhouse gas emissions 50-52 percent below 2005 levels in 2030—and achieving net zero emissions by no later than 2050. They also help advance the President’s commitment to environmental justice and the [Justice40 Initiative](#), which sets the goal that 40% of the overall benefits of certain Federal investments in climate, clean energy, and other areas flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution—with at least \$18.6 billion of the \$27 billion across the Greenhouse Gas Reduction Fund dedicated to low-income and disadvantaged communities.

This investment was made possible by President Biden’s Investing in America agenda, which is growing the American economy from the middle out and the bottom up – from rebuilding our nation’s infrastructure, to driving over \$500 billion in private sector manufacturing and clean energy investments in the United States, to creating good-paying jobs and building

a clean-energy economy that will combat climate change and make our communities more resilient.

National Clean Investment Fund Eligibility & Application Information

The deadline to apply to this grant competition is October 12, 2023. EPA intends to make two-to-three awards under this competition. Applicants must be eligible nonprofits as defined in Section 134(c)(1) of the Clean Air Act and as further explained in the NOFO. Coalitions, led by an eligible nonprofit, are also eligible to apply to this competition. Additional details on eligibility can be found in Section III of the [NOFO](#). EPA has published the NOFO for this grant competition on [grants.gov](#).

Clean Communities Investment Accelerator Eligibility & Application Information

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Informational Webinars

EPA hosted public informational webinars for each competition to provide information on the grant competitions and the application processes. The webinars were recorded and posted on EPA's [GGRF webpage](#) along with tools, resources and helpful templates for prospective applicants.

Additional Background

The President's Inflation Reduction Act authorized the EPA to create and implement the Greenhouse Gas Reduction Fund, a historic \$27 billion investment to combat the climate crisis by mobilizing financing and private capital for greenhouse gas- and air pollution-reducing projects in communities across the country. Together, the Greenhouse Gas Reduction Fund's National Clean Investment Fund, the Clean Communities Investment Accelerator, and the Solar for All competitions will finance clean technology deployment nationally, finance clean technology deployment in low-income and disadvantaged communities while simultaneously building the capacity of community lenders that serve those communities, and spur adoption of clean distributed solar energy that lowers energy bills for millions of Americans in low-income and disadvantaged communities. Each of these competitions advances President Biden's Justice40 Initiative while expanding good-paying job opportunities in domestic industries.

INTEGRATING GHG ASSESSMENT AND REDUCTION TARGETS IN TRANSPORTATION PLANNING

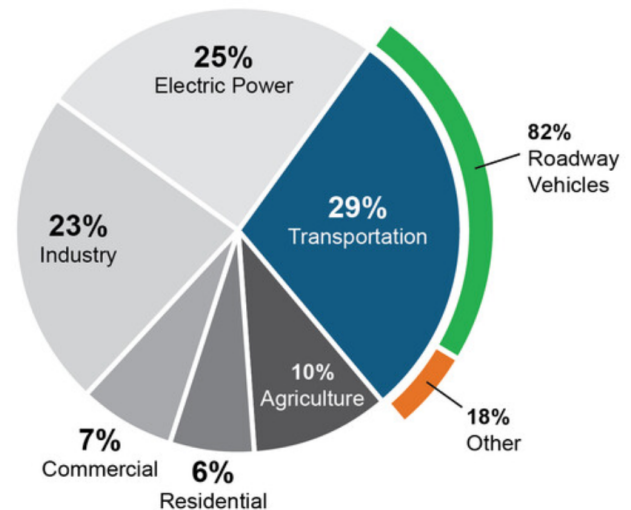
Transportation is the largest emitter of greenhouse gas (GHG) emissions in the United States —as well as one of the fastest growing sources. [National inventories](#) suggest the transportation sector generates approximately 29 percent of our nation's GHG emissions, and roadway vehicles account for about 82 percent of that amount.

State departments of transportation (DOTs) and metropolitan planning organizations (MPOs) play essential roles in implementing policies, programs, and projects that can reduce GHG emissions. These agencies influence the pipeline of projects that impact emissions not only directly from motor vehicle tailpipes, but also life-cycle emissions from construction and embodied carbon of materials. Life-cycle emissions represent carbon emissions released during the lifecycle of building materials, including mineral extraction, manufacturing, transportation, construction, and disposal. Establishing targets and including GHG emissions analysis in the transportation planning process is a critical step that agencies can take toward meeting national reduction

goals and reducing their climate impact. Integrating the consideration of GHG emissions into agency procedures and decision-making can lead to better transportation program and project decisions.

Oregon is one State leading the way with work in this area. In 2020, a State executive order directed the Oregon Department of Transportation (ODOT) to develop and apply a process for evaluating GHG implications of transportation projects in the Oregon statewide transportation improvement plan (STIP) [ODOT's climate office](#) developed an analysis process for multiple phases of STIP decision-making across the transportation system lifecycle, which carries out the direction of the State executive order.

The [Oregon STIP](#) looks at State-led and -administered projects for user emissions (from drivers), embodied emissions (generated during construction), and funding impacts (tracking expenditures on STIP projects that affected GHG emissions reduction goals). Quantifying these emissions enables the Department to influence discretionary funding decisions early on, influence project selection, and establish benchmarks to measure progress towards its emissions goals. ODOT recognized that implementing GHG assessment earlier in the planning process made it more likely for those goals to be achievable. The Department focused on policy-level



Transportation accounts for 29 percent of GHG emissions, and 82 percent of that is from roadway vehicles (Source: 2021 EPA GHG Inventory Report)

actions that would establish consistency and a framework for future success in emissions reductions. According to ODOT, the process resulted in more funding for active transportation priorities.

To make the information more relatable to the public, ODOT reports on the actions and behaviors that increase or decrease emissions in the portfolio of STIP projects in construction. In addition, [Oregon's Transportation Emissions website](#) helps explain and track progress from state and local efforts, and market trends on the various actions that make up Oregon's Transportation GHG reduction roadmap.

FAA INVESTS NEARLY \$92 MILLION TO HELP AIRPORTS REACH PRESIDENT'S GOAL OF NET ZERO-EMISSIONS BY 2050

Airports across the country are more sustainable thanks to funding from the Federal Aviation Administration. As part of nearly \$268 million in grants, about \$92 million will go to 21 airports for solar panels, electric buses, charging stations and electrification studies; investments that support good-paying jobs and their local communities. Also, as a part of this sustainability effort, the agency is providing funding to help general aviation airports safely transition to unleaded fuel for piston-engine aircraft.

"We need to help airports transition their operations as quickly as possible to renewable power. Our investments keeps us on track for the net-zero goal," said Shannetta R. Griffin, P.E., Associate Administrator for Airports.

Solar Power

Of today's funding \$46.8 million will go to key sustainability projects, including energy saving solar power equipment and infrastructure:

- \$22.58 million to Indianapolis International Airport in Indiana to construct energy efficient infrastructure and install solar panels.
- \$20 million to Phoenix Sky Harbor International Airport in Arizona to design and construct solar parking structures.

- \$3 million to El Paso International Airport in Texas to install solar panels.
- \$600,000 to Southeast Iowa Regional Airport in Burlington to install solar panels.
- \$333,450 to La Porte Municipal Airport in Indiana to install solar panels.
- \$150,000 to Centerville Municipal Airport in Iowa to install solar panels.
- \$150,000 Decorah Municipal Airport in Iowa to install solar panels.

Electrification

An additional \$44.5 million has been awarded to airports to plan for and purchase electric vehicles and electric transportation infrastructure:

- \$16 million to Portland International Airport in Oregon to construct zero emissions vehicle infrastructure.
- \$4.8 million to Harry Reid International Airport in Las Vegas to purchase electric buses and charging stations.
- \$3.4 million to Raleigh-Durham International Airport in North Carolina to purchase zero emissions vehicles and charging stations.
- \$3.2 million to Sacramento International Airport in California to purchase electric buses.
- \$3.1 million to Salt Lake City International Airport in Utah to purchase electric buses and charging stations.

- \$5.1 million to San Francisco International Airport in California to purchase electric buses and charging stations.
- \$3 million to Pittsburgh International Airport in Pennsylvania to purchase zero emissions vehicles and associated infrastructure.
- \$2 million to McGhee Tyson Airport in Tennessee to purchase zero emissions vehicles and charging stations.
- \$1.5 million to Kansas City International Airport in Missouri to purchase electric buses.
- \$1.1 million to San Diego International Airport in California to construct electric vehicle charging infrastructure.
- \$300,000 to Gerald R. Ford International Airport in Grand Rapids, Michigan to purchase zero emissions vehicles and charging stations.
- \$590,000 to Bill and Hillary Clinton Airport in Little Rock to purchase electric buses with chargers.
- \$154,000 to Bert Mooney Airport in Butte, Montana to purchase electric vehicles with chargers.

Unleaded Fuel

To safely eliminate leaded aviation fuels in piston-engine aircraft by the end of 2030, Prescott Regional Airport in Arizona will receive \$243,000 to develop a plan to safely transition to unleaded fuel.

View the complete list of grants being announced [here](#).

In its [Aviation Climate Action Plan](#), the United States set a goal to achieve net-zero greenhouse gas emissions in the aviation sector by 2050. To help to achieve this goal, the FAA has awarded:

- \$100 million to research and scale fuel-saving technologies and noise reductions;
- \$327 million to [electrify airport](#) gate equipment and vehicles; and
- \$35 million for universities to help build sustainable aviation fuel supply chains and develop new software capability to [reduce fuel burn and taxi time](#).

You can find more information about the FAA and its environmental efforts at its [Sustainability page](#) and its list of accomplishments for 2022 [here](#).

This funding is part of the [Airport Improvement Program \(AIP\)](#) Supplemental Grant Program.



Airports across the country are receiving funding for Solar Power and Transportation Electrification Projects.

UPCOMING EVENTS:

BOARD OF DIRECTORS MEETING SCHEDULE FOR 2023:

The PRCC Board of Directors meeting schedule is as follows:

September 6, 2023

November 1, 2023

10:00 a.m. - 11:30 a.m.

OTHER UPCOMING EVENTS:

Webinar: Medium-Duty Electric Trucks with Bollinger Motors

August 17, 2023

11 a.m. - 12 p.m.

In-Person Workshop: PA-DEP's Municipal Electric Vehicle Education Program

CCAC West Hills Center

August 23, 2023

10 a.m. - 12 p.m.

Virtual Workshop: PA-DEP's Municipal Electric Vehicle Education Program

August 29, 2023

10 a.m. - 12 p.m.

Stakeholder Listening Session #3 - Coalition Building

TBA

National Drive Electric Week (NDEW)

September 22 - October 1, 2023

Odyssey Day

October 6, 2023



TRAINING COURSES:

PRCC joins the National Alternative Fuels Training Consortium and the Community College of Allegheny County - West Hills Center in offering training classes.

This year, we are expanding our curriculum offerings focused on alternative fuels and we'd love to hear from you!

Please join us for our upcoming course offerings:

Hands-On Workshop: Propane Vehicles

TBA

Hands-On Workshop: Natural Gas Vehicles

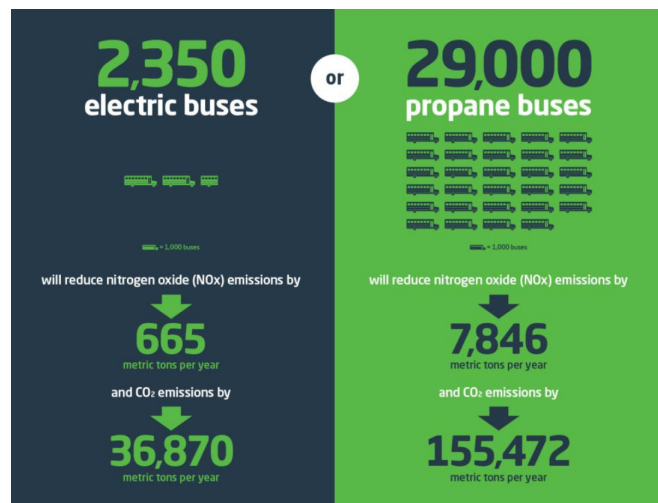
TBA

To register for these classes, contact Bob Koch at 412-788-7378 or rkoch@ccac.edu.

AUTOGAS SCHOOL BUSES A KEY SOLUTION IN NEW ROUND OF CLEAN SCHOOL BUS FUNDING

In the latest round of [Clean School Bus funding](#) announced by the Environmental Protection Agency (EPA), school transportation directors once again have the power to take advantage of propane's clean and reliable benefits through dedicated propane autogas school buses or propane-powered recharging infrastructure. For every propane autogas bus purchased through the program, the EPA will provide transportation directors with up to \$35,000. The program prioritizes high-need local educational agencies, rural, and tribal school districts. As an affordable, portable, and available energy source, propane is an ideal solution for these prioritized categories.

"Every child deserves to have a safe, clean, healthy ride to school. If we keep pouring money only into expensive electric buses—even with rebates or grants—only a select number of students will be able to see that reality. We need to face facts that it will take a mix of energy sources to achieve that goal," said Steve Whaley, director of autogas business development with the [Propane Education & Research](#)



Environmental Benefits of Propane School Buses

[Council.](#)

In 2022, the EPA solicited applications for \$1 billion for zero-emission and low-emission school bus rebates. The \$1 billion from this first round of funding paid for 2,350 electric school buses. The funding also awarded 109 low-emissions propane buses. The same amount of money distributed for electric buses could have helped fund as many as 29,000 propane buses, assuming each bus received the \$30,000 incentive from the program.

When considering well-to-wheel emissions, the 2,350 diesel buses the grant replaced with electric will reduce nitrogen oxide (NOx) emissions by just 665 metric tons per year and carbon dioxide emissions by only 36,870 metric tons. If the funds had gone toward the 29,000 propane buses to replace diesel, it would have reduced nearly 10 times the amount of NOx emissions and three times the amount of carbon dioxide emissions.

“The true energy mix lies somewhere between all propane autogas or all electric buses,” Whaley said. “To further lower the cost for school districts applying for electric buses, the propane industry is now providing propane-powered recharging systems as an affordable and resilient infrastructure solution.”

Propane-powered charging infrastructure uses microgrid technology powered by renewable energy sources like solar, wind, and a propane generator to reliably recharge school buses independent of the grid, providing a portable option that can be installed in as little as 24 hours. With the grant, school districts can apply for up to \$395,000 that can be split between an electric bus and its charging infrastructure, including propane-powered options.

Applications must be submitted electronically through [Grants.gov](https://www.grants.gov) no later than 11:59 p.m. EST on Tuesday, August 22, 2023.

For more information on propane autogas school buses, visit [BetterOurBuses.com](https://www.betterourbuses.com).

PERC is a nonprofit that provides leading propane safety and training programs and invests in research and development of new propane-powered technologies. PERC is operated and funded by the propane industry. For more information, visit [Propane.com](https://www.propane.com).



Pennsylvania's Clean Cities Coalitions have worked with 20 school districts throughout the State to deploy approximately 1,000 propane school buses, making the state third in the nation for the number of alternative fuel school buses on the road

PROPANE SCHOOL BUS DEPLOYMENT IN PENNSYLVANIA SHOWCASES ENVIRONMENTAL AND ECONOMIC BENEFITS

Read a [new case study](#) on the AFDC featuring the successful efforts to deploy propane school buses throughout Pennsylvania by Pittsburgh Region Clean Cities and Eastern Pennsylvania Alliance for Clean Transportation.

Propane buses offer many advantages, from reduced noise pollution and lower greenhouse gas emissions to cold weather usability and more readily available infrastructure. Propane buses can have financial benefits to school districts as well, often having a lower total cost of ownership compared to diesel.

WE'RE ON THIS CLEAN FUEL BUS JOURNEY TOGETHER

We can all agree that our children deserve clean air on the ride to school. That's one of the main reasons we do what we do at ROUSH CleanTech.

Every leader I know in the clean energy movement wants what's best for students, but here's where organizations like World Resources Institute continue to get it wrong: WRI claims that electric school buses are the only option to achieve our shared goal of clean rides to school for children.

It's simply unfair and unsustainable to force school districts to choose only one path to clean air.

It's clear WRI has high standards for our children, and so does ROUSH CleanTech. That's why we're constantly innovating to build cleaner engines at a price point districts can afford so that taxpayer money can stay where it belongs: in the classroom.

At ROUSH CleanTech, we're looking at the big picture. Let me go upstream a bit to show all of the factors that impact schools and their students, including budget considerations (which cannot be overstated), current availability and how the energy is being produced. Here are three simple



truths:

Today's propane technology is affordable and sustainable.

In their messaging, WRI does not address two huge factors that school districts must consider: financial viability and sustainability. Not every school district can afford an electric fleet. Both upfront and ongoing costs put EVs out of reach for a majority of districts, even with funding incentives. Technology for commercial EVs has come a long way, but there's still more ground to cover. Consider the following:

Propane buses cost one-third the price of EVs. Right now, our goal should be to get as many diesel buses off the roads as quickly as possible. With the current price point of EVs, we won't get very far.

EVs don't operate well in cold weather. Propane bus operators love that their vehicles perform well in sub-zero cold weather, with no cold-start issues.

EVs do not have the range that everyone needs. Propane buses can travel 400 miles on a single fueling.

Infrastructure requirements for EVs are costly and inflexible. Propane infra-

structure offers the most flexibility of any clean alternative fuel, and it can cost as low as \$0 with a fuel contract. School districts will pay up to \$480,000 for EV infrastructure installation.

Cleaner buses are ready now.

Propane buses are ready today. It's common knowledge that EVs still have challenges to overcome before being widely available and sustainable in every market.

WRI rightly has a grand vision for our future. At ROUSH CleanTech, our sights have been set high, too. That's why in [my reflection](#) on the most recent round of Clean School Bus awards, I shared my disappointment about how the \$1 billion that was spent on 2,350 electric school buses will reduce nitrogen oxide emissions by just 665 metric tons per year and reduce carbon dioxide emissions by only 36,870 metric tons per year, considering the average output of the U.S. electrical grid. By comparison, that \$1 billion could have gone toward replacing 29,000 diesel buses with clean propane buses. Those 29,000 propane buses would have not only saved taxpayers money over the lifecycle of the bus, but would have also reduced NOx emissions by 7,846 metric tons per year and reduced carbon dioxide emissions by a whopping 155,472 metric tons per year.

Electric is a great option but not the only option. As any educator or parent can attest: one size rarely ever fits all. Right now EVs don't make sense for every school district. Propane is readily available today and makes a lot of sense for many fleets. We want everyone to have access to clean alternatives — today and in the future.

Propane emissions are near-zero.

There is no such thing as a "zero-emissions" vehicle. In most of the United States, propane produces fewer emissions than electric vehicles when all factors are considered, such as components needed for batteries and the current source of U.S. electricity. Electric vehicles require energy-heavy processes to develop lithium-ion batteries; will use millions of tons of oil and coal in mining to fabricate materials; and, place a heavy burden on the electrical grid, which is mostly powered by coal, natural gas and nuclear energy.

Today's propane technology is so advanced that emissions are near-zero. A ROUSH CleanTech propane engine is 90% cleaner than the strictest EPA standard and 66% more effective at reducing nitrogen oxides compared to EVs. And, propane buses don't have the cost and complications that diesel buses have to achieve the same results.

Although EVs don't produce direct

vehicle emissions, they do produce lifecycle emissions related to fuel production, processing, distribution, disposal and usage. According to the U.S. Energy Information Administration, 63% of electricity generation comes from fossil fuels. At least 100 pounds of materials are mined, moved and processed for every pound of battery fabricated for electric vehicles. The manufacturing, transportation and recharging of batteries for EVs — combined with the losses in transmission and distribution of electricity — still have a significant impact on the environment.

And, renewable propane is on the horizon and soon will be widely available. Renewable propane has the same chemical structure as traditional propane, but comes from non-fossil fuel sources like plants, cooking oil and feedstock. At the point of combustion, renewable propane is carbon neutral, meaning no new carbon is added to the atmosphere.

Propane is an ideal option, especially for the thousands of districts that will not receive grant funding from the Clean School Bus program and cannot afford EVs on their own. Propane offers a readily available, economical and uncomplicated solution to eliminate emissions. It doesn't put the burden back on schools and taxpayers — and ultimately, students. We are on this journey together. Let's work together to achieve it.

DOT TOOLKIT SUPPORTS PROJECT PLANNING FOR PORTS

The [Maritime Administration \(MARAD\) Port Planning and Investment Toolkit](#) is an online resource that provides analytical tools and guidance to aid ports in developing "investment-grade" project plans and to obtain capital for their projects in a variety of ways, including: (1) improve the chances of getting port infrastructure projects into transportation plans developed by metropolitan and regional planning organizations and state agencies to qualify for formula funding; (2) better position port projects for federal aid; and (3) assist ports in obtaining private sector investment.



Propane School Buses are an economically viable option if a transition to Electric is too costly.

OPTIMUS TECHNOLOGIES INC. SECURES 3RD CALIFORNIA AIR RESOURCES BOARD EXECUTIVE ORDER

Optimus Technologies, a diesel engine decarbonization company focused on the largest and most challenging sectors of the transportation industry, announced that the California Air Resources Board (CARB) recently issued a new executive order permitting the use of it's Vector System and B100 in on-road diesel engines through the 2023 model year.

Optimus Technologies is the global leader enabling heavy-duty diesel engines to run on 100% biogenic fuel. "We are delighted that B100 has again been recognized in California – a state that leads the nation in emissions control – as a viable solution to immediately help reduce carbon emissions" said Colin Huwyler, Founder and CEO of Optimus Technologies.

The patented, exhaustively proven, bolt-on, advanced fuel system from Optimus Technologies, enables B100 powered medium and heavy-duty diesel vehicles to reliably operate at full efficiency in any weather condition. Unlike BEV and FCEV solutions, Optimus Technologies and B100 are already in use at scale in leading pri-

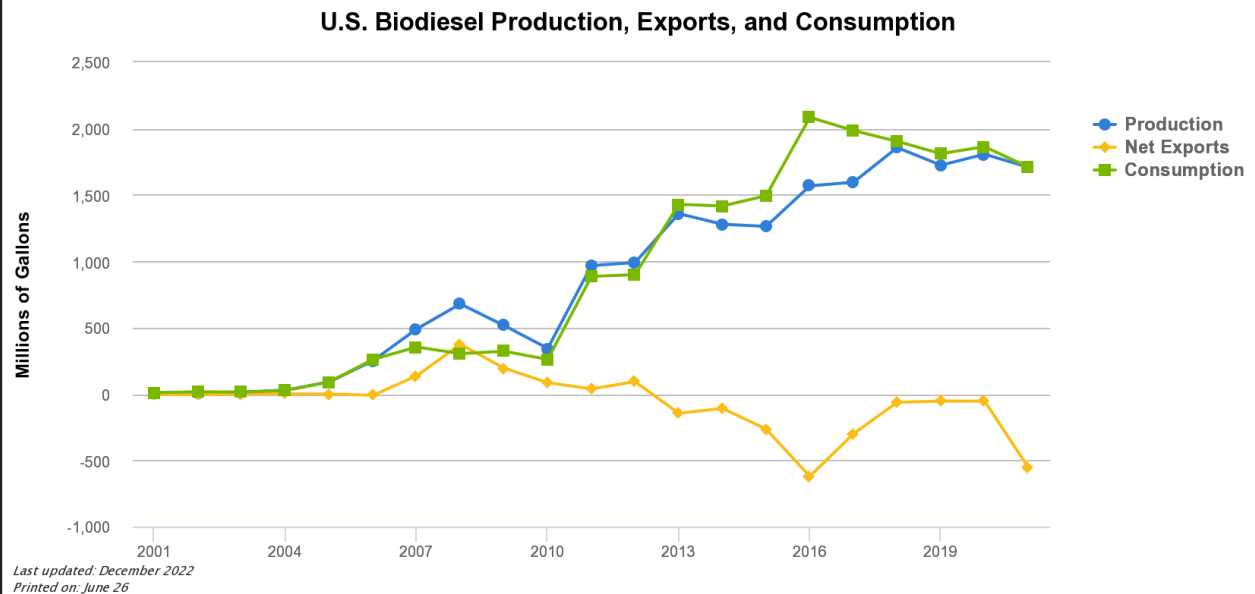
vate and municipal fleets. These operational assets are currently exceeding their 2030 CO2 emission targets.

According to the National Renewable Energy Laboratory, vehicles using B100 instead of petroleum diesel can reduce carbon dioxide emissions by over 95%. Furthermore, data published by the DOE's Argonne National Laboratory indicates that total lifecycle carbon emissions from B100 powered vehicles are considerably less than BEV and FCEV solutions.

CARB aims to fight climate change and protect the public from the harmful impacts of air pollution. The organization sets emissions standards for all vehicles in California and evaluates the emission control systems of all new engines/vehicles that will operate in California. This Executive Order issued by CARB means the Vector System can be used to upgrade existing vehicles and be applied to engines that operate in California without reducing the effectiveness of CARB's required emission control systems.



Optimus Technologies' Advanced Fuel System



OPTIMUS TECHNOLOGIES, B100 CONTINUE HELPING DC WATER REDUCE EMISSIONS

DC Water (District of Columbia Water Authority) recently took delivery of their first off-the assembly-line Optimus Technologies/B100 powered vehicle and the first-ever Optimus Technologies/B100 powered air and water vacuum excavation truck.

This vehicle is one of twelve new B100 vehicles purchased by DC Water through a DERA (Diesel Emissions

Reductions Act) grant. Optimus Technologies has upgraded ten existing DC Water vehicles to run on carbon-reducing B100.

Optimus Technologies' dual-fuel system enables diesel engines to operate on 100% biodiesel reliably and dependably, even in cold temperatures. B100 is an affordable alternative fuel available across the country today. It provides an immediate solution to lowering emissions in sectors such as transportation and construction without large infrastructure investments.

These 12 B100 vehicles will reduce



DC Water & Optimus Technologies' B100 Truck



DC Water & Optimus Technologies' B100 Air and Water Vacuum Excavation Truck

greenhouse gas emissions by 76%, or 98.3 metric tons, according to DC Water. The emissions of particulate matter, which are known to cause asthma, cancer, and other lung issues, are lowered by 97% when switching from diesel to B100.

Why B100 Today?

Switching from petroleum-based diesel to B100 is a cost-effective way to lower carbon emissions today and lowers America's dependence on imported oil. Other low-carbon alternatives such as hydrogen and electric vehicles are either not ready for deployment in the heavy-diesel industry, not supported by a reliable fuel or charging station network, or not affordable for fleets.

Optimus Technologies' Vector System allows diesel engines to run on B100 without requiring massive upfront capital investments.

THE 10,000 COMMUNITIES INITIATIVE

The [10,000 Communities Initiative](#) is supported by the Milken Institute with other private and public organizations to provide technical assistance designed to help interested communities access the expertise, training, capital and partnerships needed to advance infrastructure projects.

The 10,000 Communities Initiative invites community-based organizations, utilities, cities, counties, states and project developers to submit local community projects to its [Community Infrastructure Center \(CIC\)](#) platform designed to connect under-served community projects to a range of resources available at no cost.

EPA RELEASES MEMO & FAQs ON HAZARDOUS WASTE REGULATIONS FOR LITHIUM-ION BATTERIES POWERING E-BICYCLES AND E-SCOOTERS

The U.S. Environmental Protection Agency (EPA) released a [memorandum](#) to clarify how hazardous waste regulations and management apply to lithium-ion batteries used in e-bicycles and e-scooters, electric cars, and other technologies. The memorandum provides background information on lithium-ion batteries, safe and compliant recycling processes, and recycling innovations. The memorandum highlights additional recycling benefits such as reduced energy required to produce new batteries and prevention of critical minerals and resources from being wasted. Attached to the memorandum are frequently asked questions (FAQs) to address a range of common inquiries.



JOURNAL EDITORIAL PRESENTS EMERGING PERSPECTIVES AND RESEARCH ON MOBILITY JUSTICE

Transportation Research Part D: Transport and Environment published an editorial titled, "[Emerging Perspectives on Transportation Justice](#)." The editorial assembles research articles that provide a range of new insights of mobility justice from different geographical settings, methods, and conceptions of justice.

The featured articles explore topics such as disparities in cycling safety, public transit accessibility, and the impact of transportation on climate change, among others. A key emphasis suggested for future work is the need to challenge existing power dynamics and structural barriers, and for disadvantaged communities to co-produce solutions for transportation justice.

U.S. DEPARTMENT OF TRANSPORTATION ANNOUNCES TECHNICAL ASSISTANCE GRANTS FOR TRANSPORTATION PROJECTS IN RURAL AND TRIBAL COMMUNITIES

*Grants Do Not Require a Local Match!
Applications can be submitted starting
2:00 PM ET on Monday, August 14, 2023*

The [Notice of Funding Opportunity](#) for a new pilot program for technical assistance has opened. The [Rural and Tribal Assistance Pilot Program](#) offers technical assistance grants to rural and tribal communities. The NOFO combines two years of funding (Fiscal Years 2022 and 2023), \$3.4 million in total, to eligible applicants on a first-come, first-served basis. Individual awards will range in value up to the statutory limit of \$360,000. There is no local funding match required to participate in this program. The grants may be used to hire staff or advisors to assist with early development-phase activities including, but not limited to, feasibility studies; preliminary engineering and design; environmental review; revenue forecasting; financial

feasibility analysis; statutory and regulatory analysis and drafting and negotiation of agreements.

Eligible applicants include local governments or political subdivisions with projects located outside of an urbanized area with a population of more than 150,000 residents as determined by the Census; state governments applying on behalf of a project in an area outside an urbanized area of more than 150,000 residents; federally recognized Indian Tribes; and the Department of Hawaiian Home Lands. As part of the Administration's commitment to advancing equity and opportunity for all American Indians and Alaska Natives, the Rural and Tribal Assistance Pilot Program will set aside up to \$800,000 for each fiscal year for Tribal applicants.

The Build America Bureau has created a simple, four-page funding application, available [here](#), and will begin accepting submissions at 2 PM ET on August 14, 2023. The Department of Transportation hosted a free informational webinar to provide more information for interested applicants and a recording of the webinar and a copy of the presentation will be made available [here](#). While participation in the webinar is not mandatory to receive funding, it is encouraged and provides an opportunity for potential applicants to learn about the application process

and what activities can be funded through this pilot program.

The Rural and Tribal Assistance Pilot Program joins the [Thriving Communities Program](#), the [Regional Infrastructure Accelerators](#) and other new technical assistance opportunities at DOT to ensure communities have the needed tools to access federal funding and financing for transformative infrastructure projects. Additional DOT technical assistance resources can be found on the [DOT Navigator](#).

WELCOME TO NEW PRCC MEMBERS:

PRCC Members are key stakeholders and collaborators on regional alternative fuel and alternative fuel vehicle projects in the Western PA Region. We want to extend a warm welcome to the following organizations who have joined PRCC in recent months: S&B USA, Bollinger Motors, CONNECT, IRT, and BYD. To learn more about our membership options, please contact Rick Price at coordinator@pgh-cleancities.org.



**Aug 22-24, 2023
Tacoma, WA**

The Green Transportation Summit & Expo (GTSE) is the West Coast's premier fleet modernization and sustainable transportation event. Get an inside look at the latest in fleet technologies and innovations; informative sessions feature a who's who of national and regional transportation leaders.

[Learn More](#)



**Sept 12-14, 2023
Nashville, TN**

RNG WORKS is the North American Renewable Natural Gas industry's annual Technical Workshop, Trade Expo & Golf Tournament. The event educates, demonstrates and promotes RNG industry best practices to realize sustainable development, deployment and utilization of renewable natural gas.

[Learn More](#)

SUSTAINING MEMBERS

PLATINUM LEVEL MEMBERS:



GOLD LEVEL MEMBERS:



SILVER LEVEL MEMBERS:





THANK YOU FOR YOUR SUPPORT!

The Pittsburgh Region Clean Cities Board of Directors would like to thank all our members and stakeholders for supporting our coalition and mission.

PRCC Membership Levels:

Individual -- \$150
Nonprofit -- \$300
Bronze -- \$500
Silver -- \$1000
Gold -- \$2000
Platinum -- \$4000+

Learn more about membership at:
www.pgh-cleancities.org/membership/



CONTRIBUTE YOUR NEWS:

Help us share success stories about the projects in our region!

Please feel free to contact:

Rick Price,

Executive Director/Coordinator

412-735-4114

coordinator@pgh-cleancities.org

LEARN MORE:

Learn more about Clean Cities at:

www.cleancities.energy.gov

Or get involved with the Pittsburgh Region Clean Cities coalition at:

www.pgh-cleancities.org



UNITED WE STAND:
REMEMBERING SEPTEMBER 11, 2001