

## **Funding Opportunities, Training, and Resources Relevant to Advance Program Efforts<sup>1</sup>**

### **Table of Contents**

- Upcoming Funding and Assistance Opportunities
- Currently Open Opportunities That May Relate to Advance Areas' Work
- Recently Awarded Funds/Technical Support/Recognition
- Training and Resources
  - General
  - Mobile Sources
  - Energy Efficiency, Renewable Energy
  - Green Infrastructure, Heat Island
  - Wood Smoke
  - Environmental Justice
  - Outreach, Education

### **Upcoming Funding and Assistance Opportunities – Stay Tuned!**

#### **Dept. of Education**

##### **2020 Green Ribbon Schools (South Carolina)**

The Green Ribbon Schools program recognizes schools, districts and postsecondary institutions making progress in school sustainability (school facilities, health, environmental learning). Each state designs its own application process and sets its deadlines. Generally, states open their application period in the summer, with deadlines to submit applications in the winter, and then state education agencies make their nominations to the Dept. of Education early in the New Year. Honorees from among the 2019 nominees were announced May 22<sup>nd</sup>, 2019. South Carolina received its first Green Ribbon School, [Dutch Fork Elementary in Irmo](#).

**More information:** <https://www.scdhec.gov/environment/k-12-schools-students-teachers/south-carolina-green-ribbon-schools-program>

**Press releases for Green Ribbon in SC:** <https://www.scdhec.gov/news-releases/first-sc-school-honored-us-department-education-green-ribbon-school-environmental>

<https://www.ed.sc.gov/newsroom/news-releases/dutch-fork-elementary-recognized-by-u-s-department-of-education-as-s-c-s-first-green-ribbon-school/>

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<sup>1</sup> These announcements include information from third parties not associated with the Environmental Protection Agency (EPA). The information, including web links, does not constitute an endorsement of these organizations or their programs by EPA and is provided solely as a service to our Advance Program partners and others who are interested in reducing ozone and/or PM2.5. The information is provided for your reference only. In doing so, EPA does not endorse any non-government websites, companies, or applications. EPA is not responsible for the content of the individual organization web pages found at the links provided in this document.

For additional information about SC Green Ribbon Schools, please contact Adam Ereth at (803) 898-3261 or [scgreenribbonschools@dhec.sc.gov](mailto:scgreenribbonschools@dhec.sc.gov).

## **Environmental Protection Agency**

### **Volkswagen Mitigation Trust**

The U.S. government and VW resolved allegations that VW violated the Clean Air Act by selling approximately 590,000 vehicles equipped with defeat devices. As part of this settlement, VW is required to provide approximately \$2.7 billion for the 2.0 liter violating vehicles and \$225 million for the 3.0 liter violating vehicles into an Environmental Mitigation Trust to fully remediate the amount of excess NOx from the illegal vehicles.

- All states certified as beneficiaries and will have until October 2027 to request their allocation and implement mitigation actions.
- Tribes may file beneficiary certification forms within 90 days of the Trust Effective Date or by September 1 of each year of the trust until September 1, 2022. The amount allocated to tribes is \$55 million, and the Institute for Tribal Environmental Professionals (ITEP) will offer technical assistance.
- Eligible Mitigation Actions focus on reducing NOx from older, dirtier diesel engines, vehicles, equipment, and vessels. Appendix D-2 to the consent decree details the Eligible Mitigation Actions.
- In addition to the Environmental Mitigation Trust, VW will also buy back or modify the violating vehicles and will invest \$2 billion in zero emission vehicle (ZEV) charging infrastructure and in the promotion of ZEVs. See <https://www.epa.gov/enforcement/frequently-asked-questions-zero-emission-vehicle-investment> for FAQs about the Zero Emission Vehicle Investment.
- See <https://www.epa.gov/vw> or <https://www.epa.gov/enforcement/volkswagen-clean-air-act-civil-settlement#violations> for more information about the violations and settlement. Official trust website: <https://www.vwenvironmentalmitigationtrust.com/>
- VW Settlement website for South Carolina:
  - **South Carolina** - <http://doi.sc.gov/889/Volkswagen-Settlement> [The State expects to announce the awardees of the first round of grant funding (up to \$10 million) by **August 16, 2019**. Round 1 will be limited to the replacement of Class 4-8 school, shuttle and transit buses with engine model years of 2009 or older, and only government entities were eligible to apply.]

**Currently Open Opportunities That May Relate to Advance Areas' Work -  
Apply Now!**

**People for Bikes**

**Community Grant Program**

This grant program supports bicycle infrastructure projects that make it easier and safer for people of all ages and abilities to ride.

Deadline for applications: **Ongoing** funding opportunity; 1-2 grants cycles are typically offered each year. The current cycle specifies that online letters of interest are due **July 26, 2019**; these grants will be dedicated to supporting bike park and pump track projects.

To apply: <https://peopleforbikes.org/apply-now/>

### **The Funders' Network (TFN) and Urban Sustainability Directors Network Partners for Places Grant Program**

This matching grant program builds partnerships between local government sustainability leaders and place-based foundations. National funders invest in local projects developed through these partnerships to promote a healthy environment, a strong economy and well-being for all residents. In addition to the general grant program, a portion of this year's funding is dedicated to green infrastructure projects. The program provides investments between \$25,000 - \$75,000 for one year projects, or between \$50,000 - \$100,000 for two year projects, with a 1:1 match required.

Deadline for proposals: **July 30, 2019** by 12pm (any time zone)

More information: <https://madmimi.com/p/51ed7e?pact=637988-151683342-11739948791-0066cd319cceb1e0822bf865d110b2a6a2213846>

### **Dept. of Transportation**

#### **America's Marine Highway Projects**

Grant funds totaling \$7 million are available to previously designated Marine Highway Projects that support the development and expansion of documented vessels, or port and landside infrastructure (including projects that reduce emissions and save energy). State and tribal governments, MPOs, and port authorities are among the entities that are eligible to apply.

Deadline for proposals: **August 15, 2019**

More information: <https://www.federalregister.gov/documents/2019/06/14/2019-12580/notice-of-funding-opportunity-for-americas-marine-highway-projects>

### **Dept. of Transportation, Maritime Administration**

#### **Port Infrastructure Development Program (PIDP)**

Almost \$293 million will be awarded for projects that will (among other things) advance technology-supported safety and design efficiency improvements or bring facilities to a state of good repair and improve resiliency. Individual awards will total at least \$10 million. Eligible entities include port authorities and state, local, and tribal governments, among others.

Deadline for applications: **September 16, 2019**

More information: <https://www.maritime.dot.gov/office-port-infrastructure-development/port-and-terminal-infrastructure-development/how-apply-port>

### **Patagonia**

### **Environmental Grants**

This grant opportunity is available to small organizations working to protect the environment. Projects must be action-oriented, build public involvement and support, be strategic, focus on root causes, accomplish specific goals and objectives. One proposal per group will be accepted each fiscal year (May 1-April 30), and the funding amount will range between \$5,000-\$20,000. Deadline for applications: **April 30, 2020** and each April 30 thereafter. More information: <http://www.patagonia.com/grant-guidelines.html>

### **Dept. of Transportation, Federal Highway Administration (FHWA) Accelerated Innovation Deployment (AID) Demonstration**

The FHWA AID Demonstration provides incentive funding for any project activities eligible for assistance under title 23, U.S.C. in any phase of a highway transportation project between project planning and project delivery including planning, financing, operation, structures, materials, pavements, environment, and construction that address the program goals. One of the goals is to improve highway efficiency, safety, mobility, reliability, service life, environmental protection, and sustainability. The notice of funding opportunity requests grant applications and provides selection criteria, application requirements, and technical assistance with Grants.gov during the grant solicitation period. Applications are accepted on a rolling basis. Estimated total funding is \$50 million, with individual awards ranging from \$50,000 to \$1 million.

Deadline for applications: **September 30, 2020**

More information: <http://www.grants.gov/web/grants/view-opportunity.html?oppld=288651> and <https://www.fhwa.dot.gov/innovation/grants/>. Examples of past projects across the country: <https://www.fhwa.dot.gov/innovation/grants/projects/> (includes dynamic signage for safety and congestion mitigation, geospatial data projects, energy efficient lighting, recycled road materials, etc.)

### **IC Bus**

#### **Grants Toward the Purchase of Propane School Buses**

This grant program offers qualifying school districts throughout the U.S. \$5,000 in grants per newly purchased propane-powered CE Series school buses.

**Ongoing** funding opportunity

More information: <http://hoglundcompanies.com/news/ic-bus-grant-program>

### **Dept. of Transportation, Build America Bureau Transportation Infrastructure Finance and Innovation Act (TIFIA)**

The Fixing America's Surface Transportation (FAST) Act authorizes \$1.435 billion in capital over five years for the TIFIA credit assistance program; assistance supports critical infrastructure projects with national or regional significance. Letters of interest may be submitted by states and cities for direct loans, loan guarantees, and standby lines of credit. Transit-oriented

development (including pedestrian and cycle facilities) and other projects may be eligible for assistance.

**Ongoing**, on a rolling basis.

Notice of funding availability: <https://www.transportation.gov/tifia/notice-funding-availability>  
<https://www.transportation.gov/buildamerica/programs-services/tifia/overview>

## **Dept. of Energy**

### **Property Assessed Clean Energy (PACE) Program**

PACE is an innovative mechanism for financing energy efficiency, solar, and related improvements on private property. PACE programs allow local and state governments and other inter-jurisdictional authorities, when authorized by state law, to fund the up-front cost of energy improvements on commercial and residential properties, which are paid back over time by the property owners. PACE financing for clean energy projects is generally based on an existing “land-secured financing district,” or assessment district, where the local government issues bonds to fund projects with a public purpose such as street lights, sewer systems, or underground utility lines. PACE was recently extended to energy efficiency and renewable energy, which allows property owners to implement improvements without a large up-front cash payment. Property owners who opt to participate in a PACE program can repay their improvement costs over a set time period (typically 10-20 years) through property assessments which are secured by the property itself and paid as an addition to the owners’ property tax bills. The repayment obligation may transfer with property ownership depending on state legislation. Residential PACE financing from 2009-May 2019 totalled \$5.2 billion for 220,000 home upgrades; commercial PACE financing totalled \$887 million for 1,938 projects.

More information: <http://energy.gov/eere/slsc/property-assessed-clean-energy-programs>

List of current PACE programs: <http://www.pacenation.us/resources/all-programs/>

Lessons in Commercial PACE Leadership: The Path From Legislation to Launch:

[https://www.energy.gov/sites/prod/files/2018/03/f49/Lessons\\_in\\_Commercial\\_PACE\\_Leadership\\_Final.pdf?utm\\_source=PACENation+newsletter&utm\\_campaign=530ca69c2d-Feb\\_newsletter&utm\\_medium=email&utm\\_term=0\\_834a7b4685-530ca69c2d-119370253&mc\\_cid=530ca69c2d&mc\\_eid=f0ae618b93](https://www.energy.gov/sites/prod/files/2018/03/f49/Lessons_in_Commercial_PACE_Leadership_Final.pdf?utm_source=PACENation+newsletter&utm_campaign=530ca69c2d-Feb_newsletter&utm_medium=email&utm_term=0_834a7b4685-530ca69c2d-119370253&mc_cid=530ca69c2d&mc_eid=f0ae618b93)

How-To Guide for Launching a Texas PACE project:

[https://gallery.mailchimp.com/e943d789e21ce7979cbeb8f0b/files/523974c6-8f0a-4be2-9563-8c0ae0ba351f/NCT\\_Energy\\_Forum\\_Invitation\\_KR.03.pdf](https://gallery.mailchimp.com/e943d789e21ce7979cbeb8f0b/files/523974c6-8f0a-4be2-9563-8c0ae0ba351f/NCT_Energy_Forum_Invitation_KR.03.pdf)

Texas PACE Energy & Emissions Tracker: tracks environmental benefits associated with PACE projects. <http://pace.harcresearch.org/>

## **Dept. of Transportation**

### **Congestion Mitigation and Air Quality Improvement Program**

Provides formula grant funding to nonattainment and maintenance areas for ozone, carbon monoxide, and/or particulate matter. States that have no nonattainment or maintenance areas

still receive a minimum amount of funding for air quality projects or other elements of flexible spending.

**Ongoing** funding opportunity.

More information: [https://www.fhwa.dot.gov/environment/air\\_quality/cmaq/](https://www.fhwa.dot.gov/environment/air_quality/cmaq/)

### **Dept. of Transportation**

#### **State of Good Repair Program**

Provides capital assistance for maintenance, replacement, and rehabilitation projects of high-intensity fixed guideway and bus systems to help transit agencies maintain assets in a state of good repair and to support the development and implementation of transit asset management plans. Eligible recipients are state and local governments in UZAs with fixed guideway and high intensity motorbus systems in revenue service for at least seven years.

**Ongoing** funding opportunity.

More information: <https://www.transit.dot.gov/funding/grants/state-good-repair-grants-5337>

### **Dept. of Energy, National Renewable Energy Laboratory (NREL)**

#### **Technical Assistance for State and Local Governments and Tribes**

Provides unbiased expertise and direct technical assistance on energy policies and issues for state, local, and tribal government decisionmakers. The Energy Efficiency Technical Assistance Team is a network of experts who assist state officials in making informed decisions about energy efficiency programs and policies. Solar Decision Support is available to state and local governments on matters that require solar market expertise to either answer a time-sensitive question or to provide expert testimony on policy best practices. Energy Decision Support is available to connect tribes with credible, timely, and actionable scientific information on which to base their energy decisions; includes programs related to (1) technology and market analytics, (2) direct technical assistance, (3) capacity building, and (4) resilience assessment and planning.

**Ongoing** technical assistance opportunity.

More information on state/local assistance: <https://www.nrel.gov/technical-assistance/states.html>

More information on tribal assistance: <https://www.nrel.gov/state-local-tribal/decision-support-tribes.html>

### **Dept. of Transportation**

#### **Railroad Rehabilitation & Improvement Finance (RRIF) Loans**

Program funds are used to acquire, improve, or rehabilitate intermodal facilities, refinance outstanding debt, and develop new intermodal facilities. Direct loans can fund up to 100% of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government. Priority is given to projects that provide public benefits, including benefits to public safety, the environment (including air quality), and economic development.

**Ongoing** funding opportunity

More information: <https://www.transportation.gov/buildamerica/programs-services/rrif> and <https://www.transportation.gov/buildamerica/programs-services/rrif/applicant-information>

**Propane Education & Research Council**

**Funds for Propane Mowers**

Launch your propane savings with \$1,000 per qualifying new mower purchase or \$500 per qualifying conversion.

**Ongoing** funding opportunity, while funds last.

More information: <http://www.propane.com/commercial-landscape/programs-and-incentives/propane-mower-incentive-program/>

**Dept. of Energy**

**Low Income Housing Energy Assistance Program (LIHEAP)**

Assuming funding is authorized, this opportunity may be of particular interest to Advance areas that are interested in energy efficiency programs and/or that have concerns about wood smoke. LIHEAP has provided assistance to families for costs associated with home energy bills, energy crises, and weatherization and energy-related minor home repairs. LIHEAP has provided, on average, more than \$3 billion a year to communities and includes a provision that allows grantees to access 15-25% of their annual funding for low cost weatherization and energy efficiency improvements. HHS and DOE have offered technical assistance to LIHEAP grantees to increase their ability to use their funding to support the deployment of renewable energy.

**Ongoing** funding opportunity.

<http://www.acf.hhs.gov/ocs/programs/liheap/about>

LIHEAP webinar recordings: <http://www.acf.hhs.gov/ocs/resource/liheap-trainings>

**Dept. of Energy**

**Clean Cities Coalition Network Technical Assistance**

Clean Cities connects transportation stakeholders with objective information and experts to assist with alternative fuels, fuel economy improvements, and emerging transportation technologies. Through these trusted, time-tested resources, Clean Cities has helped fleets and fuel providers deploy hundreds of thousands of alternative fuel vehicles and fueling stations that serve a growing market. Clean Cities continues to support the entry of new transportation technologies into the marketplace.

**Ongoing** technical assistance opportunity.

To apply: <https://cleancities.energy.gov/technical-assistance/>

**Dept. of Energy, Office of Indian Energy**

**On-Request Technical Assistance**

Federally recognized Indian tribes can receive technical assistance to advance tribal energy projects at no cost. Technical experts provide support to assist with energy planning, housing and building energy efficiency, project development, policy and regulation, resilience, and village power.

**Ongoing** technical assistance opportunity.

To apply: <https://www.energy.gov/indianenergy/technical-assistance/request-technical-assistance>

### **Dept. of Energy**

#### **SolSmart Technical Assistance – Nationally Distinguished, Locally Powered**

SolSmart is a national recognition and a no-cost solar technical assistance program for local governments. SolSmart experts will design personalized action plans for communities that outline a path to designation as a SolSmart community, along with a rough timeline.

Participating communities make changes to their local processes to reduce the time and money it takes to install a solar energy system. Several Advance areas have SolSmart designations, i.e.: **Oklahoma City OK** (bronze), **Duluth MN** (silver), **Minneapolis MN** (gold), **St. Paul MN** (gold), **Austin TX** (gold), **El Paso TX** (gold), **San Antonio TX** (bronze), **Charleston County SC** (gold), **Kansas City MO** (gold), **Louisville KY** (gold). Eight Minnesota and two Iowa communities were working together to achieve SolSmart designation by late 2017; a “fast track” to bronze process is now available as

described in this article: <http://www.cleanenergyresourcetteams.org/blog/reducing-barriers-solar-greater-minnesota-through-solmart>.

**Ongoing** technical assistance opportunity.

<http://www.gosparc.org/>

### **Recently Awarded Funds/Technical Support/Recognition – Advance Area Recipients**

#### **Dept. of Education**

##### **2019 Green Ribbon Schools**

The Green Ribbon Schools program recognizes schools, districts and postsecondary institutions making progress in school sustainability (school facilities, health, environmental learning). Each state designs its own application process and sets its deadlines. Generally, states open their application period in the summer, with deadlines to submit applications in the winter, and then state education agencies make their nominations to the Dept. of Education early in the New Year. **Dutch Fork Elementary School in Irmo, SC** was among the 53 schools honored in 2019.

More information: <https://www2.ed.gov/programs/green-ribbon-schools/highlights-2019.pdf> and <https://www2.ed.gov/programs/green-ribbon-schools/index.html>

For more information on South Carolina’s Green Ribbon Schools Program, please visit:

<https://www.scdhec.gov/environment/k-12-schools-students-teachers/south-carolina-green-ribbon-schools-program>



## **Dept. of Energy**

### **Better Buildings Challenge Participants**

Six Advance Program areas are among the public and private sector entities that are currently participating in the Dept. of Energy Better Buildings Challenge, i.e., **Delaware, Minnesota, North Carolina, Clark County NV, Reno NV, and Houston TX**. Partners in the Better Buildings Challenge commit to reducing the energy intensity of their building portfolio by 20% over 10 years.

<https://betterbuildingsolutioncenter.energy.gov/challenge/partner-list-state>

### **Smart Growth America, National Complete Streets Coalition**

**The Best Complete Streets Policies of 2018** (released May 2019) contains a helpful framework for assessing the relative strengths of local policies:

<https://smartgrowthamerica.org/app/uploads/2019/05/Best-Complete-Streets-Policies-of-2018.pdf>

## **Environmental Protection Agency**

### **2018 Diesel Emissions Reduction Act (DERA) School Bus Rebate Program Awardees**

Over \$9.3 million was awarded to public and private fleet owners for the replacement of old diesel school buses with new buses certified to EPA's cleanest emission standards. This year, the awardees included 14 projects in 8 Advance areas (**Delaware, Minnesota, North Carolina, South Carolina**, Yakima WA, Kansas City MO, Springfield MO and Southeast MO). Rebate funding through this program is expected to continue in 2019, and the application period typically opens in the fall.

<https://www.scdhec.gov/environment/businesses-and-communities-go-green/environmental-loans-grants-businesses-communities-0>

## **Dept. of Transportation, Federal Transit Administration**

### **Buses and Bus Facilities Infrastructure Investment Program**

A total of 107 projects in 50 states and territories will receive over \$366 million in grant funds to improve the safety and reliability of America's bus systems and enhance mobility for transit riders. The funding supports projects to replace, rehabilitate, and purchase buses, related equipment, and bus-related facilities. Eleven Advance areas will receive about \$59 million: **Greenville, SC Transit Authority (\$11 million for a new transit facility).**

<https://www.transit.dot.gov/about/news/us-department-transportation-announces-3662-million-grants-modernize-and-improve-america%20>

## **Electrification Coalition**

### **Mayors Electric Vehicle Purchasing Collaborative**

The collaborative continues to grow – as of July 2019, mayors from around 150 cities and counties have committed to buying over 2,100 electric vehicles before the end of 2020.

<https://www.electrificationcoalition.org/electrification-coalition/>

## **STAR Communities**

### **STAR Communities has become LEED for Cities and Communities**

The STAR Community Rating System was developed by local governments and is the nation's leading comprehensive framework and certification program for evaluating local sustainability, encompassing a variety of measures (economic, environmental, social). Local leaders used the rating system's evaluation measures to assess their current level of sustainability, set targets for moving ahead, and measure progress along the way. In November 2018, STAR Communities was integrated into USGBC's LEED Cities and Communities rating system. Any cities, communities, counties, schools and (potentially) regions that have a current STAR rating and are up for renewal, or cities that seek sustainability recognition should take note of these changes.

About 75 cities and communities have achieved STAR certification, including 14 Advance areas:

**Columbia SC (3-STAR Certified)**

More information: <http://www.starcommunities.org/about/framework/>

## **Dept. of Energy**

### **Property Assessed Clean Energy (PACE) Program**

PACE-enabling legislation is in place in 33 states, and 20 of these states now have operational PACE programs. From 2009-Sept. 2018, 1693 projects were financed via the commercial PACE program (\$715 million) and 220,000 home upgrades were financed via the residential PACE program (\$5.2 billion).

Dept. of Energy commercial PACE fact sheet for state and local governments:

[https://www.energy.gov/sites/prod/files/2017/10/f39/FL1710\\_WIP\\_CPACEv2.PDF](https://www.energy.gov/sites/prod/files/2017/10/f39/FL1710_WIP_CPACEv2.PDF)

Most states now have enabling legislation in place, and many now have active local programs.

## **Training and Resources**

### **(1) GENERAL**

#### **University of California Davis Air Quality Research Center**

#### **Air Sensors International Conference (ASIC), Pasadena, CA, May 12-15, 2020**

ASIC brings together government agencies, researchers, industry members, community scientists and educators to promote and advance air pollution sensors, improve the data quality from the sensors, expand the pollutants measures, and foster community involvement in monitoring air quality.

More information and to opt in to conference e-mails: <https://asic.aqrc.ucdavis.edu/>

#### **Environmental Protection Agency**

**Air Sensor Toolbox** – provides information for citizen scientists and others on how to select and use low-cost, portable air sensor technology and understand results from monitoring activities. The information can help the public learn more about air quality in their communities.

<https://www.epa.gov/air-sensor-toolbox>

### **Air Sensor Loan Programs for Communities**

<https://www.epa.gov/air-sensor-toolbox/air-sensor-loan-programs-communities>

### **Environmental Protection Agency**

#### **Updated BenMAP-CE**

The Environmental Benefits Mapping and Analysis Program – Community Edition is an open-source computer program that calculates the number and economic value of air pollution-related deaths and illnesses. The tool can help you answer two types of questions: (1) what is the burden to human health of total air pollution? and (2) what are the benefits of a strategy that would reduce air pollution by a certain amount?

More information about the tool: <https://www.epa.gov/benmap>

### **Environmental Protection Agency, Office of Grants and Debarment Grants Training**

A new process called “Workspace” is now used for the submission of grant applications through [www.grants.gov](http://www.grants.gov). Two webinar recordings are available for training on Workspace:

<https://www.epa.gov/grants/epa-grantsgov-workspace-training-grant-applicants-and-recipients>. In addition, OMB Federal Government Grants 101 training is available online in five modules: <https://blog.grants.gov/2018/02/01/omb-publishes-free-online-grants-management-training/#more-3511>.

Blog series covering topics such as how to start working on future funding opportunities, demystifying funding announcements, tips to avoid last minute problems, and making sure you are eligible before writing: <https://blog.grants.gov/category/learngrants/grant-writing-basics/>

### **Environmental Protection Agency**

#### **Interactive 2014 National Emissions Inventory Report (released July 2018)**

This new online report provides basic information about the national emissions inventory as well as dashboards that allow users to select specific area, pollutant, and source information and easily display that information via graphs and maps.

<https://gispub.epa.gov/neireport/2014/>

### **Environmental Protection Agency**

#### **Our Nation’s Air: Status and Trends**

Interactive online story map summarizing national air quality information (criteria pollutants and toxics). Advance areas may be especially interested in exploring the page titled “Criteria Pollutant Trends Show Clean Air Progress;” the reader can pick a criteria pollutant and zoom in on a map to see how a specific area fared over the years with respect to that pollutant.

<https://gispub.epa.gov/air/trendsreport/2017/#home>

## **Environmental Protection Agency**

### **Archived Webinars**

Advance Program Webinar Recordings: <https://www.epa.gov/advance/webinars-and-training>

Environmental Benefits Mapping and Analysis Program – Community Edition (BenMAP-CE)

Webinar Recordings: <https://www.epa.gov/benmap/benmap-ce-applications-articles-and-presentations#presentations>

Tools and Resources Webinar Recordings: <https://www.epa.gov/research/epa-tools-and-resources-webinar-series>

## **Federal Grants.gov System**

### **Free Online Resources for Federal Grant Applicants**

The Grants.gov system houses information on over 1,000 Federal grant programs. The Community Blog features resources that may be helpful as you navigate the process to apply for a grant. Resources available through the Community Blog include: where to find free online resources for Federal grant applicants, grant writing basics, #FundingFriday blog series, and grants learning center. In addition, the Introduction to Grants.gov Video Series covers the complete application process, from registering and creating a Grants.gov account to finding funding opportunities and completing an application package.

<https://blog.grants.gov>

To sort through the federal grant programs: <https://www.cfda.gov/>

To search, filter and apply for grants within Grants.gov:

<https://www.grants.gov/web/grants/search-grants.html>

### **Non-Federal Grant Programs – Examples**

The Foundation Center has a database of grant-makers and funding opportunities:

<http://foundationcenter.org/>.

The Funding Information Network facilitates access to grant resources and publications:

<http://foundationcenter.org/ask-us/funding-information-network>.

The Community Foundation Locator helps find grant-making foundations in your region:

<https://www.cof.org/community-foundation-locator>.

## **(2) MOBILE SOURCES**

### **Southeast Diesel Collaborative**

**14<sup>th</sup> Annual Conference, Chattanooga TN, September 24-26, 2019**

Sessions will include topics such as Creating a Cleaner Truck, Protecting Your Investment, Public Health and Communities, Alternative Fuel Vehicles, Mobile Source Technology Certification and

Enforcement, Beyond Diesel - Fuel the Future, State of the Union – Moving Cargo Through the U.S., Hauling Freight with Zero-Emissions Vehicles, and Freight Movement Solutions. More information and to register: <https://www.eventbrite.com/e/southeast-diesel-collaborative-14th-annual-partners-meeting-tickets-59012572192>

**North American Council for Freight Efficiency  
Run on Less Regional, October 8-27, 2019**

Run on Less Regional is a fuel efficiency road show focusing on trucks that operate 300 miles from base. Run on Less 2017 demonstrated that fleets operating in real world, long haul conditions can achieve 10.1 MPG on a consistent basis. This year, the program will focus on regional haul (rather than long haul) fleet efficiency. The Run will kick off on October 8 from various points across the U.S. and Canada and will conclude on October 27 at the North American Commercial Vehicle Truck show in Atlanta. NACFE is looking for fleets operating a wide variety of regional haul applications and duty cycles and that are also committed to achieving high MPG and reducing their emissions.

To apply: [www.runonless.com](http://www.runonless.com)

**U.S. Public Interest Research Group Education Fund  
Paying for Electric Buses: Financing Tools for Cities and Agencies to Ditch Diesel**

This report provides information for school districts and transit agencies regarding the cost savings and reduced emissions from switching from diesel buses to electric buses. A variety of funding options are available to support these switches.

More information: <https://uspig.org/sites/pirg/files/reports/National%20-%20Paying%20for%20Electric%20Buses.pdf>

**Internal Revenue Service  
Credit for Qualified Plug-in Electric Drive Motor Vehicles**

Credit applies to passenger vehicles and light duty trucks. For vehicles acquired after Dec. 31, 2009, the credit is equal to \$2,500 plus, for a vehicle which draws propulsion energy from a battery with at least 5 kilowatt hours of capacity, \$417, plus an additional \$417 for each kilowatt hour of battery capacity in excess of 5 kilowatt hours. The total amount of credit per vehicle is limited to \$7,500. The credit begins to phase out when at least 200,000 qualifying vehicles from a manufacturer have been sold for use in the U.S.

More information: <https://www.irs.gov/businesses/plug-in-electric-vehicle-credit-irc-30-and-irc-30d>

**Dept. of Energy and Environmental Protection Agency  
Model Year 2019 Fuel Economy Guide**

The guide is published annually with data on current model year vehicles. Find and compare cars from 1984 to the present. The guide helps car buyers choose the most fuel efficient vehicles that meet their needs.

<https://www.fueleconomy.gov/feg/printGuides.shtml>

**Dept. of Energy, Alternative Fuels Data Center**

**Alternative Fueling Station Locator**

This tool locates alternative fueling stations throughout the country.

[www.afdc.energy.gov](http://www.afdc.energy.gov)

**Dept. of Energy Argonne National Laboratory**

**Alternative Fuel Life-Cycle Environmental and Economic Transportation Tool (AFLEET)**

A newly updated version of the AFLEET tool is now available; AFLEET calculates and compares the costs and environmental benefits of a broad range of alternative fuel technologies. The tool aids those who make purchasing decisions for fleets as they compare vehicle technologies for emission reductions and air quality gains. New AFLEET features include an idle reduction calculator, low-NOx engine option for CNG and LNG heavy duty vehicles, renewable diesel vehicles, electric commercial trucks and more.

<https://greet.es.anl.gov/afleet>

**Sustainable America**

**Turn it Off Idling Reduction Campaign**

Includes resources for starting an idle-free campaign in your community, workplace or school (downloadable signs, fact sheets, guides).

<https://iturnitoff.com/#/savings>

<https://iturnitoff.com/resources.html>

**Dept. of Energy, National Renewable Energy Laboratory**

**Transportation Secure Data Center**

This resources provides detailed transportation data from travel surveys and studies conducted across the nation. Use of this information can reduce research costs and save public funds. The data can be used in a variety of applications, such as transit planning, travel demand modeling, congestion mitigation research, vehicle energy and power analysis, alternative fuel station planning, and more.

<https://www.nrel.gov/transportation/secure-transportation-data/index.html>

**Smart Growth America, National Complete Streets Coalition**

**Complete Streets Fact Sheet**

Complete Streets are streets that are designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. This new fact sheet lays out the 10 essential elements of a strong Complete Streets policy.

<https://smartgrowthamerica.org/resources/elements-complete-streets-policy/>

### **Federal Transit Administration**

#### **Funding Options for Bicycle-Related Programs**

<https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/livable-sustainable-communities/fta-program-bicycle>

### **Federal Highway Administration**

#### **Bicycle and Pedestrian Program - Guidance for State and Local Governments**

[https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/guidance/index.cfm](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/guidance/index.cfm)

### **Environmental Protection Agency, Office of Transportation and Air Quality**

#### **Resources for Ports and Surrounding Communities**

Ports Resources (including newsletter sign-up): <https://www.epa.gov/ports-initiative>

National Port Strategy Assessment: <https://www.epa.gov/ports-initiative/national-port-strategy-assessment>

Measuring and reducing emissions at ports: [http://aapa.files.cms-plus.com/2018Seminars/EnergyandEnvironment/Moltzen%20Sept%202018%20AAPA%20Env%20Seminar\\_1537464315190\\_1.pdf](http://aapa.files.cms-plus.com/2018Seminars/EnergyandEnvironment/Moltzen%20Sept%202018%20AAPA%20Env%20Seminar_1537464315190_1.pdf)

Shore Power Technology Assessment:

Includes an assessment of shore power at U.S. ports and a calculator for estimating emissions benefits: these resources can be used for DERA projects. Shore power typically produces zero onsite emissions and can be used by marine vessels to plug into the local grid and turn off auxiliary engines while at dock. [www.epa.gov/ports-initiative/shore-power-technology-assessment-us-ports](http://www.epa.gov/ports-initiative/shore-power-technology-assessment-us-ports)

Resources for near-port communities to help community members participate effectively in decision-making processes:

[https://www.epa.gov/ports-initiative/draft-ports-primer-communities-2?utm\\_source=Ports+Initiative+Newsletter+February+2017+Final&utm\\_campaign=Ports+Initiative+Newsletter+February+2017&utm\\_medium=email](https://www.epa.gov/ports-initiative/draft-ports-primer-communities-2?utm_source=Ports+Initiative+Newsletter+February+2017+Final&utm_campaign=Ports+Initiative+Newsletter+February+2017&utm_medium=email)

Ports-Related Funding Opportunities: <https://www.epa.gov/ports-initiative/funding-opportunities-ports-and-near-port-communities>

### **Environmental Protection Agency**

#### **SmartWay Program**

The SmartWay program is a public-private partnership that provides tools to assess freight activity and incentives to improve the efficiency and environmental performance of how your goods move. Participants include carriers, logistics and shipper companies, and affiliate organizations that share a goal for cleaner, more efficient freight. More information:

<https://www.epa.gov/smartway>

Information about becoming a partner or affiliate: <https://www.epa.gov/smartway/participate-smartway>

Upcoming and recorded webinars: <https://www.epa.gov/smartway/smartway-webinars-events>

Free posters - send an e-mail to [thornton.patrice@epa.gov](mailto:thornton.patrice@epa.gov) and indicate the quantity you would like.

New fact sheet with five easy steps companies can take to integrate sustainability into their freight procurement and management programs:

<https://www.epa.gov/sites/production/files/2018-08/documents/420f18005.pdf>

## **Dept. of Energy**

### **Vehicle Technologies Office**

Idle reduction resources, including a savings calculator, locations of electrified parking spaces, status of the weight exemption for idling reduction devices, back issues of the National Idling Reduction Network News, IdleBox (an electronic, modular toolkit to facilitate idling reduction outreach and implementation), IdleBase (a database of idling regulations for all classes of on-road vehicles), and the Alternative Fuels Data Center idle reduction page.

<https://energy.gov/eere/vehicles/vehicle-technologies-office-idle-reduction>

## **(3) ENERGY EFFICIENCY, RENEWABLE ENERGY**

### **Environmental Protection Agency Webinars**

**ENERGY STAR Portfolio Manager 101, 201, and 301-level Training, August 6, 2019 (101 level), August 13, 2019 (201 level), August 20, 2019 (301 level), 1pm ET**

Learn about the Portfolio Manager tool. The 101 level webinar will explain how to navigate Portfolio Manager, add a property and enter details about it, enter energy and water consumption data, and generate template performance reports to assess progress. The 201 level webinar will be a deeper dive into functionalities such as editing property data, correcting and updating property use details, using the data quality checker, and sharing property data. The 301 level webinar will describe advanced features such as using spreadsheet upload templates to update property data, setting goals and targets to plan energy improvements for properties, creating custom reports, and using the Sustainable Buildings Checklist.

To register: <https://esbuildings.webex.com/mw3300/mywebex/default.do?siteurl=esbuildings>

### **Environmental Protection Agency Webinars**

**ENERGY STAR Portfolio Manager Ask the Expert Sessions August 7, September 4, September 18, October 2, October 16, October 30, November 6, November 20, December 4, and December 18, 2019, 12pm ET**

Open Q&A sessions for questions about Portfolio Manager.

To register: <https://esbuildings.webex.com/mw3300/mywebex/default.do?siteurl=esbuildings>



**Dept. of Energy, Office of Indian Energy Policy and Programs Webinar  
Energy Considerations When Designing and Constructing New Tribal Buildings, July 31, 2019  
1-3pm ET**

The most cost-effective time to reduce a building's energy consumption is during the design phase. At this stage, energy-saving features can be integrated into the design in ways that are more economical than a post-construction retrofit/remodel. This webinar will discuss opportunities to reduce the thermal and electrical energy cost of operating a building, from passive solar design and energy efficient technologies to building materials and various types of certifications and building codes. Case studies will highlight successes and lessons learned from tribes that have recently built new commercial and residential buildings.

To register: <https://register.gotowebinar.com/register/8392838735194994701>

**American Council for an Energy-Efficient Economy (ACEEE)  
2019 Summer Study on Energy Efficiency in Industry, Portland OR, August 12-14, 2019**

This biennial event will include discussion on cutting-edge technologies, policies, and processes that can inspire action for a sustainable future.

<https://aceee.org/conferences/2019/ssi>

**National Conference on Energy Efficiency as a Resource, Minneapolis MN, October 15-17, 2019**

This biennial conference will explore topics such as electrification, technological advances, grid modernization, and low-income programs.

<https://aceee.org/conferences/2019/ee>

**Conference on Health, Environment, and Energy, New Orleans LA, January 21-23, 2020**

Explore how energy choices can affect our health and the environment.

<https://aceee.org/conferences/2020/chee>

**Rural Energy Conference, Chicago IL, February 25, 2020**

Explore the power and potential of energy efficiency and clean energy to lower energy bills and improve the everyday lives of rural residents.

<https://aceee.org/conferences/2020/rural>

**Energy Efficiency Finance Forum, White Plains NY, June 2-3, 2020**

Explore opportunities to finance projects that save energy, reduce costs, and create jobs.

Discuss ways to overcome barriers and scale the industry.

<https://aceee.org/conferences/2020/eeff>

**Environmental Protection Agency Webinar**

**Discovering Energy Savings with Treasure Hunts, September 12, 2019 1pm ET**

During an energy treasure hunt, groups of people walk around a building looking for opportunities to save energy. Treasure hunts focus on quick fixes with a short payback period, and they can result in facility energy use reduction of 7-15%.

<https://esbuildings.webex.com/mw3300/mywebex/default.do?siteurl=esbuildings>

### **Environmental Protection Agency Webinar**

#### **Success Stories on Holding ENERGY STAR Competitions, October 17, 2019 1pm ET**

Are you looking for a fun way to engage your building occupants? Join us to hear from an ENERGY STAR partner (Food Lion) that has successfully run an internal energy efficiency competition. We will also review off the shelf, co-brandable tools and resources to help you “Build Your Own Battle.”

<https://esbuildings.webex.com/mw3300/mywebex/default.do?siteurl=esbuildings>

### **Environmental Protection Agency Webinar**

#### **Recognizing Employee Participation in Energy Management Efforts, November 6, 2019 1pm ET**

Learn how three ENERGY STAR partners encouraged employees to pursue energy efficiency and recognized their participation and accomplishments.

<https://esbuildings.webex.com/mw3300/mywebex/default.do?siteurl=esbuildings>

### **Environmental Protection Agency Webinar**

#### **Engaging Commercial Tenants in Energy Efficiency, December 5, 2019 1pm ET**

This webinar will share ideas and case studies regarding how to engage tenants and occupants in energy saving efforts.

<https://esbuildings.webex.com/mw3300/mywebex/default.do?siteurl=esbuildings>

### **Environmental Protection Agency**

#### **New Tool Finder for Local Government Clean Energy Initiatives**

This tool will help you navigate the many freely-available tools and resources for measuring emissions, energy, and economic impacts of energy efficiency, renewable energy, transportation, and waste programs at both the government operations and community-wide scales. Based on your inputs, the Tool Finder provides a tailored list of tools and resources that may be appropriate for achieving your goals, and offers details so that you can quickly decide if it is relevant to your needs. Users may generate summaries on each tool/resource, including information level of detail, impact types covered, sectors covered, ease of use, and intended audience.

<https://www.epa.gov/statelocalenergy/tool-finder-local-government-clean-energy-initiatives>

### **Environmental Protection Agency**

#### **Guidebook for Energy Efficiency Evaluation, Measurement, and Verification (EM&V)**

This new guidebook (released in June 2019) draws from and builds on state, local and private-sector experience quantifying and verifying savings from energy efficiency projects and measures. The EM&V Guidebook is designed to help state, local and tribal air and energy officials – as well as key stakeholders such as utility energy efficiency implementers – learn about, establish, or refine their EM&V approaches.

[https://www.epa.gov/sites/production/files/2019-06/documents/guidebook\\_for\\_energy\\_efficiency\\_evaluation\\_measurement\\_verification.pdf](https://www.epa.gov/sites/production/files/2019-06/documents/guidebook_for_energy_efficiency_evaluation_measurement_verification.pdf)

### **City of St. Paul, MN**

#### **Race to Reduce**

The City of St. Paul, MN is inviting owners and managers of large commercial, multi-family and public buildings to join other leaders in St. Paul's Race to Reduce. Learn about benchmarking, save on utility spending, and be recognized as a leader. The program provides webinars, networking events, tips sheets, resources from partners, and newsletters – contact [molly.smith@ci.stpaul.mn.us](mailto:molly.smith@ci.stpaul.mn.us) with questions.

To register: [www.stpaul.gov/racetoreduce](http://www.stpaul.gov/racetoreduce)

### **Environmental Protection Agency**

#### **Clean Energy Finance: On-bill Programs for Local Governments**

This primer describes what on-bill programs are, how they work, and how local governments have supported them.

<https://www.epa.gov/statelocalenergy/clean-energy-finance-bill-programs-local-governments>

### **Environmental Protection Agency**

#### **Avoided Emissions and geneRation Tool (AVERT)**

The tool estimates the emissions benefits (NO<sub>x</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, CO<sub>2</sub>) of energy efficiency and renewable energy policies and programs.

<https://www.epa.gov/statelocalenergy/avoided-emissions-and-generation-tool-avert>

AVERT Web Edition – a simplified online version of AVERT (consult the Excel version of the tool for more options): <https://www.epa.gov/statelocalenergy/avert-web-edition>

Quantification Guide - Includes the latest information about methods and tools, clear graphics that explain the quantification process, and recent examples.

<https://www.epa.gov/statelocalenergy/quantifying-multiple-benefits-energy-efficiency-and-renewable-energy-guide-state>

### **Dept. of Energy, Better Buildings Program**

#### **Energy Savings Performance Contracting (ESPC) Toolkit**

ESPC is a contracting and financing method that provides upfront financing for energy efficiency projects that is repaid by the guaranteed savings on utility bills resulting from the upgrades. The mechanism can enable state and local energy efficiency projects to move forward that might not otherwise. ESPC has expanded in recent years, and public-sector projects have demonstrated average energy savings of 13% - 31%. The ESPC Toolkit includes best practices that states, cities, and K-12 schools have used to implement performance contracting.

<https://betterbuildingssolutioncenter.energy.gov/energy-savings-performance-contracting-espc-toolkit>

**American Council for an Energy-Efficient Economy (ACEEE)**

**Database of State Efficiency Screening Practices**

Provides information on state cost-effectiveness practices for ratepayer funded electric efficiency programs.

<https://nationalefficiencyscreening.org/state-database-dsesp/>

**Toolkit for Quantifying Energy Efficiency Benefits**

This toolkit helps states quantify the economic benefits of energy-saving programs. Many jurisdictions are increasingly interested in accounting for the broader economic development and job creation benefits from energy efficiency (and other clean energy) investments that use ratepayer funds. This toolkit provides guidance on methods that jurisdictions can use to estimate these economic impacts.

<https://aceee.org/blog/2019/03/jobs-jobs-jobs-new-toolkit-helps>

<https://aceee.org/sites/default/files/Jobs%20Toolkit%203-8-19.pdf>

**Environmental Protection Agency**

**On-Site Renewable Energy Generation**

On-site renewable energy generation at municipal facilities can provide multiple benefits. Learn about these strategies, funding opportunities and more in this guide.

<https://www.epa.gov/statelocalenergy/local-government-strategy-series>

**Environmental Protection Agency**

**Energy Efficiency in K-12 Schools**

Energy costs are second only to personnel costs as the leading draw on K-12 school district operating budgets. Use this guide to learn how to achieve energy savings in schools.

<https://www.epa.gov/statelocalenergy/energy-efficiency-k-12-schools>

**Environmental Protection Agency**

**Clean Energy Finance: Green Banking Strategies for Local Governments**

This webinar provides a basic explanation of green banks, their benefits, how to decide if a green bank is right for your community, and insights on what it takes to establish and run a green bank. This primer is intended for those with non-financial backgrounds who are interested in innovative strategies to fund clean energy projects and programs.

Webinar recording: <https://www.epa.gov/statelocalenergy/green-banking-strategies-local-governments>

**Environmental Protection Agency**

**Landfill Gas Energy Guide for Local Governments**

Many local governments are achieving energy, environmental, health, and economic benefits by capturing methane from landfills and using it to produce various forms of energy.

<https://www.epa.gov/statelocalenergy/landfill-gas-energy>

## **Clean Energy Resource Teams (CERTs)**

### **Solar Resources for States, Tribes, Local Governments and School Districts**

- Third-Party Solar Model Request for Proposals (RFP) for Local Governments and Schools: This model RFP enables local governments and school districts to more easily compare solar project proposals. <https://www.cleanenergyresourceteams.org/3rdpartyrfp>
- Steps to a Successful Solar Request for Proposal: <https://www.thesolarfoundation.org/steps-to-a-successful-solar-request-for-proposal/>
- Technical Assistance for States (Solar and Energy Efficiency): <https://www.nrel.gov/technical-assistance/states.html>
- Technical Assistance for Tribes (Energy): <https://www.nrel.gov/state-local-tribal/decision-support-tribes.html> Provides resources and direct assistance to support energy technology delivery and connect tribal governments with NREL’s science and analytics.
- Solar Power Purchase Agreements: A Toolkit for Local Governments (Interstate Renewable Energy Council): <https://irecusa.org/publications/solar-power-purchase-agreements-a-toolkit-for-local-governments/>

## **Clean Energy States Alliance (CESA)**

### **Distributed Wind Energy Zoning and Permitting: A Toolkit for Local Governments**

This toolkit is aimed at helping local governments and planning agencies facilitate the efficient and appropriate development of distributed wind in their communities. The kit covers the following topics: introduction to distributed wind, benefits and challenges, zoning and permitting considerations, how to permit a project that maintains the character of the community, case studies and best practices. The kit also includes a model zoning ordinance that can serve as a template. Although the toolkit focuses on examples from states in the Northeast, the information provided will be relevant to many communities across the country.

Download the toolkit: <https://www.cesa.org/resource-library/resource/distributed-wind-energy-zoning-and-permitting-a-toolkit-for-local-governments>

## **Dept. of Energy**

### **Better Buildings Initiative**

#### **Green Revolving Funds Toolkit**

Green Revolving Funds are an innovative financing model that allow organizations – such as those in higher education and healthcare – to establish long-term funding for energy efficiency and renewable energy projects that generate cost savings. A portion of the savings are then used to replenish the fund; this establishes an ongoing funding vehicle. The toolkit provides guidance on establishing funds along with case studies and other resources.

<https://betterbuildingsolutioncenter.energy.gov/toolkits/green-revolving-funds>

#### **Residential Network Toolkits**

Resources provided are based on experience with energy efficiency programs and partners.

<https://energy.gov/eere/better-buildings-residential-network/resources#voluntary>

<https://energy.gov/eere/better-buildings-residential-network/resources>

### **Financing Navigator**

Use this recently improved tool to explore energy efficiency and renewable energy financing options and see how they compare to each other, identify sector-specific and location-specific financing resources, and connect with financial allies who can finance your projects.

Website: <https://betterbuildingsolutioncenter.energy.gov/financing-navigator/>

### **Solution Center**

[https://betterbuildingsolutioncenter.energy.gov/search?f%5b0%5d=field\\_sector%3A39](https://betterbuildingsolutioncenter.energy.gov/search?f%5b0%5d=field_sector%3A39)

### **Energy Data Accelerator Resources Toolkit**

A compilation of case studies, guidance and real-world best practices adopted by cities and utilities to help building owners measure and track energy use, and benchmark the energy performance of their buildings.

<http://betterbuildingsolutioncenter.energy.gov/toolkits/energy-data-access-blueprint-action>

and <http://energy.gov/eere/articles/energy-department-announces-publication-better-buildings-energy-data-accelerator>

### **Dept. of Energy**

#### **Qualified Energy Conservation Bonds for State and Local Governments**

Qualified energy conservation bonds (QECB) are among the lowest-cost public financing available for eligible energy efficiency, renewable energy, and mass commuting programs.

<https://energy.gov/eere/slsc/downloads/qualified-energy-conservation-bonds-frequently-asked-questions-state-and-local>

### **Dept. of Energy**

#### **State and Local Energy Data (SLED) Website**

This new website provides planning tools for cities. Provides city-specific data for 23,400 cities across the U.S., including estimates of electricity and natural gas use and costs by sector, energy market profiles that provide data on fuel types, and the fuel economy of vehicles registered in each city. The profiles also provide an estimate of vehicle fuel consumption, vehicle miles traveled, rooftop solar energy potential for small buildings, a building stock characterizations, and a snapshot of the top energy consuming industries in each city.

The website also includes a local energy toolbox, where communities can access a customizable list of actions to help make strategic energy decisions. The more than 500 searchable resources in the toolbox are technology-neutral, actionable energy strategies based on the energy activities cities are currently pursuing.

<http://apps1.eere.energy.gov/sled/#/>

#### **(4) GREEN INFRASTRUCTURE, HEAT ISLAND**

Some green infrastructure (stormwater) and heat island programs (tree planting, green roofs, cool walls, etc.) can result in air quality benefits and would be worth noting in Advance plans.

##### **Yale University**

###### **Methodology for Estimating Heat Island Intensity**

Researchers used satellite images to calculate heat island intensity for over 9,500 urban clusters over 15 years and used existing multi-city studies to validate their findings. Whereas most heat island studies focus on single cities or major cities, the new methodology is global in scale and does not discriminate by city size. Information can be displayed on a map.

<https://phys.org/news/2018-12-algorithm-urban-islands.html>

##### **National Public Radio Video**

###### **Urban Heat Islands: How Design Affects Temperature**

Online video provides a quick overview of the heat island effect; suitable for a majority of audiences.

<https://www.npr.org/2018/07/24/631560598/watch-why-its-usually-hotter-in-a-city>

##### **Arbor Day Foundation**

###### **Community Resources**

Tree City USA provides the framework for communities to manage and expand their public trees. Many Advance areas are among the 3,400 communities that are participating.

<https://www.arborday.org/programs/treecityusa/index.cfm>

Energy-Saving Trees is a tool that helps homeowners, communities and companies save energy and money by strategically planting trees. <http://energysavingtrees.arborday.org/#Home>

The Community Canopy program offers companies, cities, states and nonprofits a turnkey approach to providing trees to customers, employees, or their community. The program provides trees and education to ensure the trees are planted in the right place. Trees are reserved through an online mapping tool that identifies the best place to plant the tree on a specific property. <https://www.arborday.org/programs/community-canopy/>

##### **Environmental Protection Agency**

**Green Infrastructure Program:** <https://www.epa.gov/green-infrastructure>

**Funding Sources and Resources:** <https://www.epa.gov/green-infrastructure/green-infrastructure-funding-opportunities>

**Using Green Roofs to Reduce Heat Islands:** <https://www.epa.gov/heat-islands/using-green-roofs-reduce-heat-islands>

###### **Green Infrastructure Wizard (GIWiz):**

This interactive web application connects communities to a wealth of tools and resources to help manage stormwater runoff. <https://cfpub.epa.gov/giwiz/>

## **U.S. Forest Service, American Forests, National Assn. of Regional Councils**

### **Vibrant Cities Lab**

This resource center merges the latest research with best practices for implementing green infrastructure projects in your community. Includes a toolkit, case studies, research, information about cobenefits.

[http://www.vibrantcitieslab.com/?utm\\_source=Jan2017+Urban+Forest+Connections+Webinar+Follow+Up&utm\\_campaign=Urban+Forest+Connections+Webinar&utm\\_medium=email](http://www.vibrantcitieslab.com/?utm_source=Jan2017+Urban+Forest+Connections+Webinar+Follow+Up&utm_campaign=Urban+Forest+Connections+Webinar&utm_medium=email)

Information about green infrastructure and air quality: <http://www.vibrantcitieslab.com/air-quality/>

## **U.S. Forest Service Resources**

### **Data and Decision Tools**

Includes the i-Tree software suite, the urban tree canopy assessment, the Stewardship Mapping and Assessment Project, and a Tree Carbon Calculator, among other

things. [https://www.fs.fed.us/research/urban/tools.php?utm\\_source=April+Urban+Forest+Connections+Webinar+Follow+Up&utm\\_campaign=Urban+Forest+Connections+Webinar&utm\\_medium=email](https://www.fs.fed.us/research/urban/tools.php?utm_source=April+Urban+Forest+Connections+Webinar+Follow+Up&utm_campaign=Urban+Forest+Connections+Webinar&utm_medium=email)

## **Environmental Protection Agency**

### **Heat Island Program**

Home page: <https://www.epa.gov/heat-islands>

Measuring heat islands: <https://www.epa.gov/heat-islands/measuring-heat-islands>

Webinar recordings: <https://www.epa.gov/heat-islands/heat-island-webcasts>

Using green roofs to reduce heat islands: <https://www.epa.gov/heat-islands/using-green-roofs-reduce-heat-islands>

## **(5) WOOD SMOKE**

## **Environmental Protection Agency**

### **BurnWise Program**

<https://www.epa.gov/burnwise>

A BurnWise Health and Safety Awareness Kit is available to state, local, and tribal air agencies interested in reducing residential wood smoke pollution. It includes best burn tips, infographics, social media messages, a fast facts one pager and an article template. These materials will make it easier to add facts to your website, post information on social media, or conduct a health and safety awareness campaign.

<https://www.epa.gov/burnwise/burn-wise-awareness-kit>



## **(6) ENVIRONMENTAL JUSTICE**

### **Environmental Protection Agency**

#### **Environmental Justice Grants and Communities Story Map**

This new story map showcases three recent environmental justice grantees and their projects, which include job training in green infrastructure and environmental restoration, multi-lingual outreach and education, and youth environmental education. Since 2014, the EJ Collaborative Problem-solving Grants program and the EJ Small Grants program have provided more than \$6 million to 112 communities.

<https://epa.maps.arcgis.com/apps/Cascade/index.html?appid=d426d553c4cc44a3af62bff7e175108e/>

## **(7) OUTREACH, EDUCATION**

### **North American Assn. for Environmental Education Annual Conference, Lexington KY,**

**October 16-19, 2019**

This conference promotes innovation, networking, learning and dissemination of best practices among environmental education professionals. The annual research symposium, held in advance of the conference (October 15-16, 2019), attracts new and established researchers to examine in-progress environmental education research and promote dialogue between researchers and practitioners.

[https://naaee.org/conference?utm\\_content=&utm\\_medium=email&utm\\_name=&utm\\_source=govdelivery&utm\\_term=](https://naaee.org/conference?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=)

### **Assn. for the Advancement of Sustainability in Higher Education 2019 Conference, Spokane**

**WA, October 27-30, 2019**

This conference allows for an exchange of effective models, policies, research, collaborations, and transformative actions that advance sustainability in higher education and surrounding communities.

[https://www.aashe.org/conference/?utm\\_content=&utm\\_medium=email&utm\\_name=&utm\\_source=govdelivery&utm\\_term=](https://www.aashe.org/conference/?utm_content=&utm_medium=email&utm_name=&utm_source=govdelivery&utm_term=)

### **Dept. of Energy**

#### **National Energy Education Development Project - STEM Resources for K-12 Students**

Free books and classroom activities related to energy efficiency, solar, and building science.

<https://www.solardecathlon.gov/education-curriculum.html>

### **North Carolina Dept. of Environmental Quality**

#### **Air Quality Curriculum for High School Students**

This new curriculum will be used throughout the State of NC; Advance areas may be interested in taking a look and gleaning ideas for use in their communities/states.

[www.itsourair.org](http://www.itsourair.org)

**Environmental Protection Agency**

**Air Quality Resources for Teachers**

Includes curriculum resources, information about past and upcoming teacher workshops, links to web sites for teachers and students, and activities and materials for students.

<https://www.airnow.gov/index.cfm?action=learning.forteachers>

**Environmental Protection Agency**

**APTI-Learn Portal**

Technical training portal for federal, state, tribal, and local air pollution professionals. Courses include topics such as: introduction to air pollution, permitting, enforcement, monitoring and data analysis. Courses are available in several formats: classroom, videos, webinars, self-instructional. <http://www.apti-learn.net>

**Environmental Protection Agency, Office of Air Quality Planning and Standards**

**Air Quality Flag Program**

As of May 2018, over 1,600 schools and organizations in 41 states, Puerto Rico, and the District of Columbia are participating in the program, including several in Advance program partner areas. Participants are recognized on the program website and are displayed on a story map:

[https://gispub.epa.gov/OAR\\_OAQPS/FlagProgram/](https://gispub.epa.gov/OAR_OAQPS/FlagProgram/)

Register a program: <https://www.airnow.gov/index.cfm?action=airnow.schoolflagprogram>

Free Flag Program postcards for outreach events: <http://www.epa.gov/nscep> (search for 456F1803)