EPA Clean Ports Program – First Look!





Welcome to today's webinar!

Today's Agenda



- Welcome and opening remarks
- Clean Ports Program design and timing
- How to prepare for upcoming Clean Ports Program funding opportunity
- Complementary funding opportunities
- Ongoing engagement opportunities
- Conclusion

EPA's Clean Ports Program – First Look! 🚓 EPA





Welcome and **Opening Remarks**

- Jennifer Macedonia, Associate Deputy Assistant Administrator for Implementation, Office of Air and Radiation (OAR)
- Alejandra Núñez, Deputy Assistant Administrator for Mobile Sources, OAR
- **Karl Simon**, Director, Transportation and Climate Division (TCD), Office of Transportation and Air Quality (OTAQ), OAR
- Mike Moltzen, Deputy Director, TCD, OTAQ OAR

Port Sector



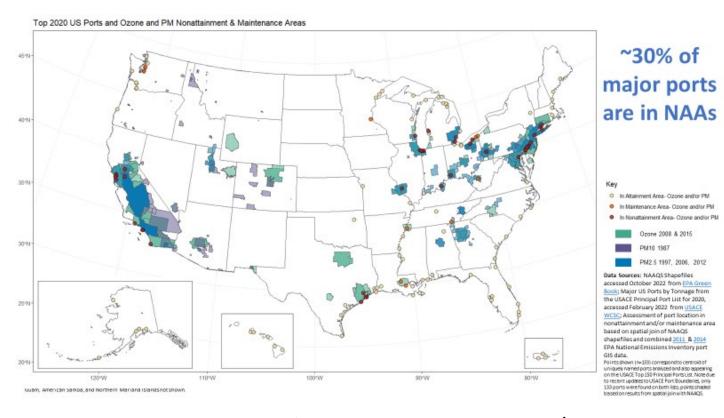


Photo source: Susan Monteverde, AAPA presentation on 9/24/13 EPA Webinar: "A National Conversation on the State of US Ports"



Photo source: Angelo Logan, East Yards Communities for Environmental Justice presentation on 1/14/14 EPA webinar: "A National Conversation on the State of US Ports"

"If you've seen one port, you've seen one port"



In 2017, American Association of Port Authorities estimated \$66 billion in federal investment needed for port-related infrastructure over the next 10 years.

Background on EPA Ports Initiative Efforts





Cross-agency effort to address diesel pollution at ports to achieve EJ, air quality, climate goals.



Through EPA tools and assistance in the five program areas, we aim to accelerate adoption of:



- Cleaner technologies and other strategies
- Clean air planning practices (emissions inventories, clean air plans, community engagement) that inform strategic clean air investments



Stakeholder Engagement to Date



- Clean Ports Program recommendations build on EPA experience with the Ports Initiative and consistent stakeholder engagement over many years
- Thank you for the targeted feedback on Clean Port Program design!
 - Two public listening sessions
 - General OAR IRA Request for Information
 - Technical Request for Information
 - Helpdesk

Stakeholder Input



- Interest in zero-emissions (ZE) technologies and related fueling infrastructure for all sectors at ports (drayage trucks, switcher locomotives, cargo-handling equipment, harbor craft, shore power for ocean-going vessels)
- Significant barriers to deploying ZE technologies at ports
- Opportunity to complement other EPA, DOT, and DOE programs
- Recognition of the importance of climate and air quality action planning
- Strong interest in EPA prioritizing applicants with meaningful community engagement efforts, and projects responsive to community concerns

Clean Ports Program Goals



- 1. Reduce diesel pollution (criteria pollutants, GHGs, and air toxics) in near-port communities, with a deliberate focus on those with environmental justice concerns.
- Maximize zero-emissions (ZE) technology deployment and provide funding for a limited amount of infrastructure to deliver near-term emissions reductions
- 2. Build a foundation for the port sector to transition over time to fully zero-emissions operations using domestically-produced equipment, positioning ports to serve as a catalyst for transformational change across the freight sector.
- 3. Help ensure that meaningful community engagement and emissions reduction planning are port industry standard practices.
- Build capacity of ports to continue to make strategic clean air and climate investments into the future
- Ensure some amount of geographic and port type diversity to transition the entire sector

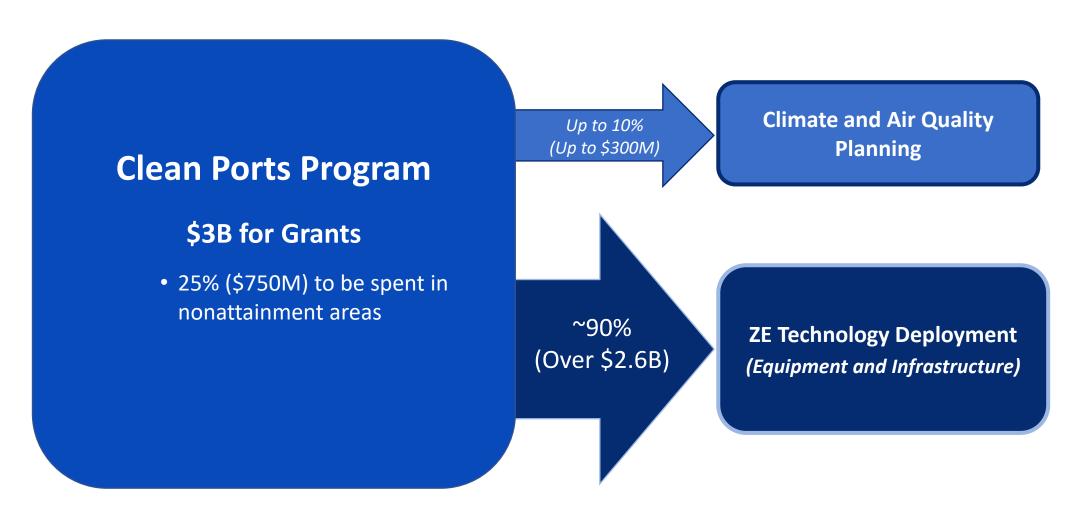




Clean Ports Program Design and Timing

Overview of Anticipated Clean Ports Program







Key Elements of Overall Program Design



Clean Ports Program Eligible Recipients



Eligible Entities

- Port authority
- State, regional, local, or Tribal agency that has jurisdiction over a port authority or port
- Air pollution control agency
- Private entity that:
 - i. Applies for a grant in partnership with an eligible entity above, and
 - ii.Owns, operates, or uses facilities, cargo-handling equipment, transportation equipment, or related technology of a port.

Overall Program Design ElementsAnticipated Program Structure



Two Sub-Programs

One grant funding opportunity with two sub-programs.

Applicants can apply for one or both.

- Zero Emission (ZE) Technology ~\$2.6B
- Climate and Air Quality Planning (Planning) – up to ~\$300M

Project Scale

Encouraging large-scale projects

- ZE Technology Projects (up to ~\$500M/grant)
- Planning Projects (up to ~\$3M/grant)

Ensuring geographic diversity and providing support for smaller projects

 Considering set-asides and other provisions for small water ports and tribal areas

Overall Program Design Elements Anticipated Provisions to Ensure Key Policy Objectives



Evaluation criteria and related provisions

Community Engagement/EJ

- Plan to award priority
 points for meaningful
 community engagement
 activities before
 application, during project,
 and for efforts to help
 ensure engagement after
 project completion
- Planning funds can be used to support stakeholder collaboration and communication

Justice 40 and

Nonattainment Areas

 Plan to award priority points for projects in defined disadvantaged communities that have nonattainment or air toxics concerns

Workforce/Labor

- Plan to award priority points for:
 - Preparing workforce to operate new equipment
 - Preventing replacement of workers because of new technology
- Planning funds can be used for workforce planning
- Workforce training will be eligible ZE tech management expense
- Planning to only fund equipment with human operator onboard

Overall Program Design ElementsAnticipated Eligibility



Port Definition

Planning to include all water ports and large dry ports

Marine and Inland Water Ports similar to DERA "port" definition

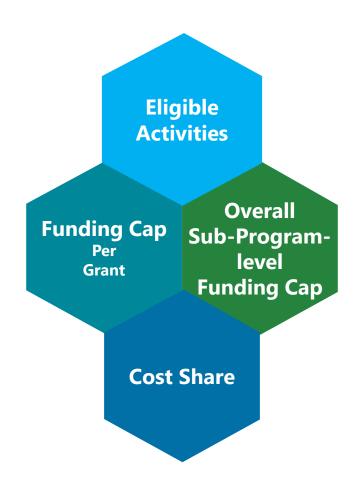
 Places alongside navigable water (e.g., oceans, rivers, or lakes) with facilities for the loading and unloading of passengers or cargo from ships, ferries, and other commercial vessels. This includes facilities that support non-commercial tribal fishing operations.

Dry Port

• Intermodal truck-rail facilities (not on a water body) where goods are transferred between rail cars and trucks via shipping containers, truck trailers, or as bulk cargo at an appropriately high rate.



Key Elements of
Planning
Sub-Program Design
(Anticipating up to \$300M)



Planning Sub-Program Design Elements Anticipated Eligible Planning Activities



Applicants can seek funding for some or all eligible planning activities.

Emissions Inventory and Accounting Practices (required)

- Develop or update port-wide, terminalspecific, and/or sector-based inventories
- Conduct core data collection and processing activities or (for more advanced ports) in-depth activity data collection

Publish summary results of planning activities (required)

Resiliency Measure Identification

- Assess climate change vulnerabilities
- Identify priority measures to protect port equipment, energy systems, operations, and nearby communities from climate impacts

Stakeholder Collaboration and Communication, with a Focus on Near-Port Communities

- Create and support formal process to get input from communities and other stakeholders on climate/air quality planning activities
 - Engage near-port community during project (required)
- Conduct local workforce planning analysis

Eligible Activities

Strategy Analysis and Goal-Setting

- Develop or update comprehensive document
 outlining emissions reduction goals and strategies
- Assess cost and feasibility of diesel emissions reduction strategies, including in-depth zeroemission technology assessments
- Assess emissions reductions from package of diesel emissions reductions strategies

Planning Sub-Program Design Elements Anticipated Cost Cap



Funding Cap
Per
Grant

Up to \$2M-\$3M per grant

- \$2M would support applicants who want to conduct all categories of activities or to delve deeply into one or two
- To be considered for funding beyond \$2M, we are thinking of requiring applicants to have prior experience with climate and air quality planning and managing federal grants. Proposed project must also include:
 - Multiple Planning elements
 - Multi-sector, port-wide scope and/or multiple port areas
 - o In-depth ZE technology feasibility assessment (e.g., using port-specific duty cycles, facility parameters, etc.)
 - Demonstrated commitment to continue planning efforts beyond project period

\$250k cap on resilience measure identification per grant

Cost Share

No cost share but prioritization of applicants with leveraged funds (small % of overall score)

Funding Floor Per Grant

\$100k funding per grant

Duration

Up to 3-year project period



Key Elements of
ZE Technology
Sub-Program Design
(Anticipating over \$2.6B)



ZE Technology Sub-Program Design Elements Anticipated Technology Commercial Readiness, BABA, and Scrappage



Technology Commercial Readiness

Plan to fund **technology with a few records of implementation** as well as those that have been extensively implemented (roughly Technology Readiness Levels 8 and 9)

BABA criteria

guidance/ EPA encourages domestic production of equipment and infrastructure. More details will be in the notice of funding opportunity.

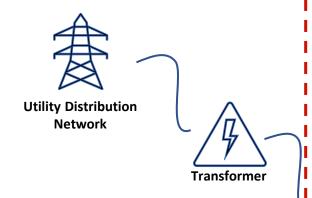
Scrappage

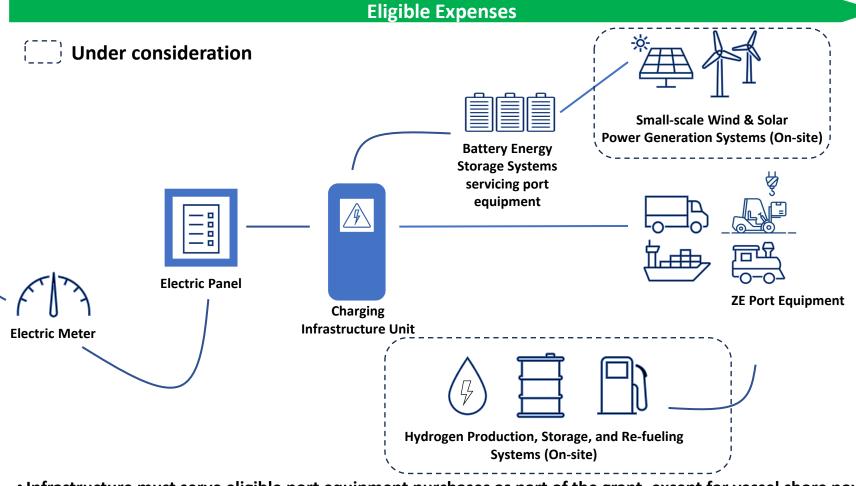
Plan to award priority points for scrappage, but not require scrappage.

ZE Technology Sub-Program Design Elements Anticipated Eligible Infrastructure Expenses









Front-of-the-Meter (FTM) - Utility side

• Infrastructure must serve eligible port equipment purchases as part of the grant, except for vessel shore power

• Anticipate capping infrastructure costs (e.g., at 10-20% of overall grant), except for vessel shore power

Behind-the-Meter (BTM) - Customer side

ZE Technology Sub-Program Design Elements Anticipated Guidance on Serving a 'Port'



Guidance on Serving a Port

ZE equipment must be located on site, dedicated to port(s), or have a primary purpose of serving port(s).

- Considering annual thresholds for using equipment at port(s) identified in the application.
 - ~75-90% of annual hours
 - cargo handling equipment
 - locomotives
 - harbor craft
 - ~100 truck visits/year for drayage trucks

ZE fueling infrastructure must serve equipment purchased as part of the grant. Projects that propose only infrastructure without accompanying equipment will not be eligible.

• <u>Exception</u>: Vessel shore power

Fueling infrastructure must also be located at a port w/ the exception of infrastructure serving drayage trucks and locomotives.

 Anticipate requiring that fueling infrastructure must be within a certain distance from the port.

Equipment not purchased as a part of the grant may also utilize the fueling infrastructure

ZE Technology Sub-Program Design Elements Anticipated Cost Share, Funding Floor, Cap, and Duration



Cost Share

10-20% cost share

May not require cost share for certain applicants or project types known cost/demand barriers.

Up to 4-year project period

Duration

Funding Floor Per Grant

\$10M for general; \$2M for small water ports and tribal areas

\$500M funding per grant

Funding Cap
Per
Grant

Anticipated Timeline





Release notice of funding opportunity (NOFO) late winter (~February 2024)



NOFO closes (~May 2024)

Applicants selected (~September 2024)



Grants awarded (~December 2024)





Clean Ports Program Design and Timing

Today's Agenda



- Welcome and opening remarks
- Clean Ports Program design and timing
- How to prepare for upcoming Clean Ports Program funding opportunity
 - Grant proposal preparation tips
 - EPA Ports Initiative technical resources and case studies
- Complementary funding opportunities
- Ongoing engagement opportunities
- Conclusion

Disclaimer



Today's event is being recorded.

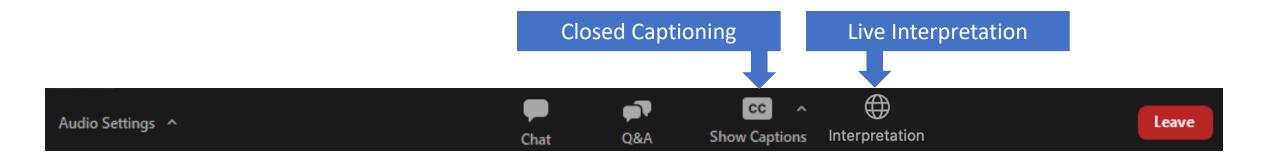


Please note that by participating in today's online event, you acknowledge and consent that your name, video, image or phone number <u>may</u> be visible to others in the live online meeting as well as captured in the recording.

We will post today's recording online in English and Spanish.

Zoom Webinar Logistics

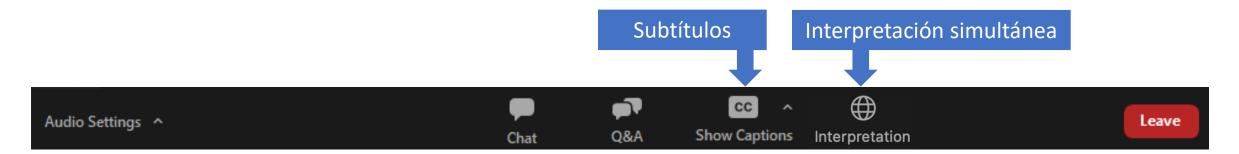




- This session is being recorded. EPA will make a copy of the recording and presentation slides available on their website in the near future (www.epa.gov/ports-initiative).
- All attendees are in listen-only mode. Audio is available through your computer speakers or by phone.
- **Technical difficulties:** If you are having technical difficulties, please email <u>cleanports@epa.gov</u>.
- Live interpretation: Live Spanish interpretation is available by clicking the "Interpretation" icon and selecting Spanish.
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- Questions: Submit written questions in the Q&A box on the toolbar or to cleanports@epa.gov.

Logística del Webinario de Zoom

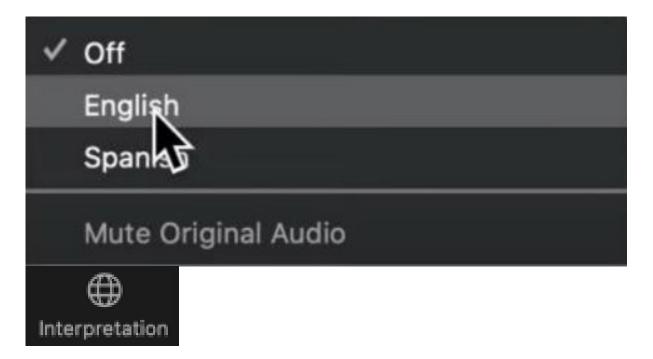




- Esta presentación está siendo grabada. La EPA publicará una copia de la grabación y las diapositivas de la presentación en su sitio web en un futuro próximo (https://www.epa.gov/ports-initiative).
- Todos los participantes están en modo solo de audio. El audio está disponible a través de los altavoces de su computadora o por teléfono.
- Dificultades técnicas: Si tiene dificultades técnicas, envíe un correo electrónico a <u>cleanports@epa.gov</u>.
- Interpretación simultánea: La interpretación simultánea al español está disponible al hacer clic en el icono "Interpretation" y seleccionar español.
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- Preguntas: Envíe sus preguntas por escrito a <u>cleanports@epa.gov</u>.



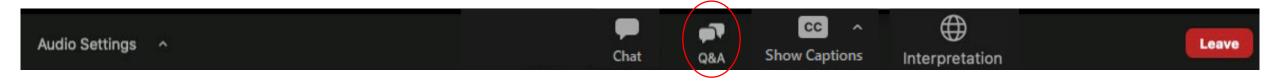
Live Spanish Interpretation / Interpretación simultánea



General Question & Answer Session



Please ask your question in the Q&A Module







How to Prepare:

Grants Proposal Preparation Tips

Required Accounts Overview



All EPA grant applications are submitted online. Applicants must be registered in two government systems to apply for EPA grants:

- The System for Award Management (<u>SAM.gov</u>) registers organizations to conduct business with the U.S. Government, which includes federal grants.
- **Grants.gov** is the official system for managing all federal grant applications.



These two systems share information. Together, they provide access to everything needed to identify federal grant opportunities and to complete the online application process.

Note: **Both systems are accessed through a single user account set up in <u>Login.gov</u>. Creating a Login.gov account is easy. If you do not have a Login.gov account, you will be prompted to create one when you register with SAM.gov or Grants.gov.**



Start Early: Completing the registration process usually takes a minimum of 10 business days. It can take much longer, especially if there are errors or inconsistencies in the information submitted.

General Grant Preparation Tips



General Tips

- Build partnerships
- Engage near-port communities
- Read the entire grant application guide and follow instructions carefully. Be sure to address all the requirements and scoring criteria to the best of your ability.
- For more grant tips, visit https://www.epa.gov/ports-initiative/tips-successful-grant-application

ZE Technology Grant Preparation Tips



- Consult your utility provider(s) early and bring them in as a partner to the project
- Conduct a technology assessment to evaluate zero-emission technology potential
- Evaluate your vehicle/equipment acquisition plans
- Identify potential charger locations
- Consider workforce needs and opportunities including training and education
- Engage near-port communities to gather feedback and perspectives
- For more information, see:
 - U.S. Department of Transportation **EV Infrastructure Project Planning Checklist**
 - Joint Office of Energy and Transportation <u>The National Electric Vehicle Infrastructure Utility Finder (NEVI U-Finder)</u>





How to Prepare:

EPA Ports Initiative
Technical Resources and Case Studies

Best Practices Web Area



- Best clean air practices generally and for each mobile source sector:
 - Port-wide planning
 - Drayage Trucks
 - Rail Facilities
 - Ocean Going Vessels
 - Cargo Handling Equipment
 - Harbor Craft
- Information:
 - Overview of practice
 - Technical resources
 - Tips on performance targets and data collection
 - Real world examples



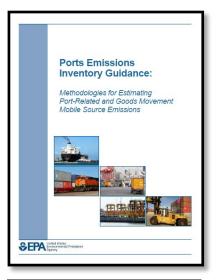
www.epa.gov/ports-initiative/best-clean-air-practices-port-operations



Best Port-wide Planning Practices to Improve Air Quality



- Develop an emissions inventory
- Enhance community-port collaboration
- Develop a plan to reduce emissions
- NEW: Increase port resilience to impacts of climate change
- Apply for funding to implement clean air strategies



Port Emissions Inventory Guidance

https://www.epa.gov/ports-initiative/port-and-goods-movement-emission-inventories



Case Study on San Pedro Bay Ports Clean Air Action Plan

www.epa.gov/ports-initiative/san-pedro-bay-portsclean-air-action-plan-best-practices-and-lessonslearned

https://www.epa.gov/ports-initiative/best-port-wide-planning-practices-improve-air-quality



Interactive Map Highlighting Clean Air Practices at Ports



Clean Air Practices at Ports

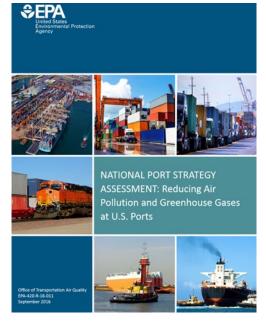
This <u>EPA Ports Initiative</u> Clean Air Practices at Ports tool brings together real-world examples of emissions reduction activities as well as key practices highlighted in the <u>Best Port-Wide Planning Practices to Improve Air Quality</u> webpage. These data were gathered from a review of public websites and EPA's <u>Diesel Emissions Reduction Act</u> (<u>DERA) grant funding</u> for the ports featured in the Bureau of Transportation Statistics' Port Performance Freight Statistics' Annual Report to Congress from <u>2018</u>, <u>2019</u> and <u>2020</u>. To see examples of where each practice is in place, select a button below the map. To learn details about a specific port's practices, select a port on the map and then click on the "Go to Port Profile" button.

Questions or comments? Contact us at talkaboutports@epa.gov.



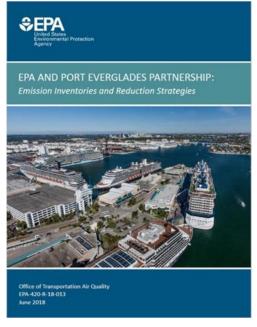
Tools to help identify smart infrastructure investments







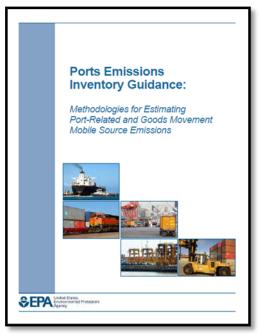
www.epa.gov/ports-initiative/national-portstrategy-assessment-reducing-air-pollutionand-greenhouse-gases-us



EPA, Port Everglades Report Shines Light on New Methods for Analyzing Potential Air Pollution Reductions

June 2018

www.epa.gov/ports-initiative/epa-and-porteverglades-partnership-emission-inventoriesand-reduction-strategies



Port Emissions Inventory
Guidance: Methodologies
for Estimating Port-Related
and Goods Movement
Mobile Source Emissions,
April 2022

https://www.epa.gov/ports-initiative/port-and-goods-movement-emission-inventories

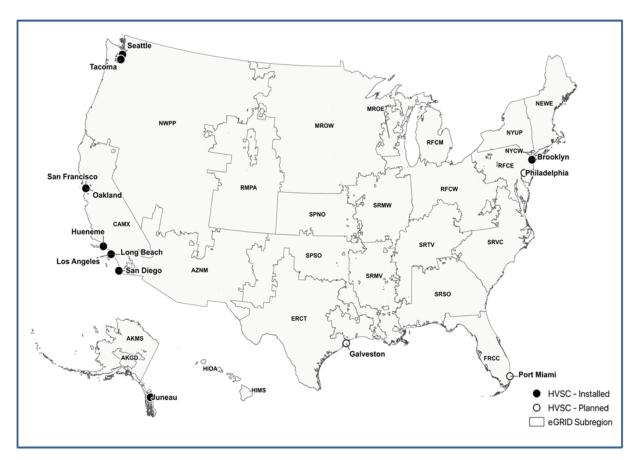


Shorepower report characterizes the technical and operational aspects of shore power systems, December 2022

https://www.epa.gov/portsinitiative/shore-power-technologyassessment-us-ports

2022 Update: Shore Power Technology Assessment and Calculator





Overlay of Installed and Planned High Voltage Shore Power Connection (HVSC) Systems and eGRID Subregions.

- Information on new projects, standards, regulations, vessel readiness, costs
- Lessons learned in LA, Hueneme,
 Seattle, and NY/NJ
- Updated calculator with new emission factors and expanded options for vessel and fuel types to better estimate emissions reductions from shore power

Promoting community-port collaboration for effective planning



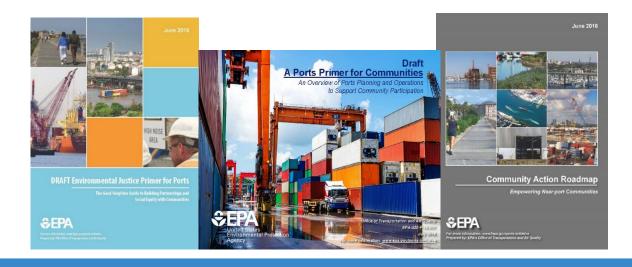


Port of Savannah Tour



Collaboration Training

- Tools and training:
 - Ports Primer for Communities
 - Community Action Roadmap
 - EJ Primer for Ports, including Good Neighbor Roadmap
- Case studies: Providence (Region 1), Wilmington (Region 3), Savannah (Region 4), New Orleans (Region 6), Los Angeles and Long Beach (Region 9), Seattle (Region 10)





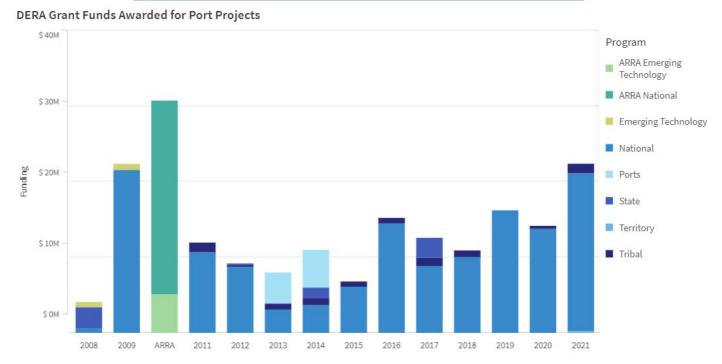


Funding Opportunities for Ports and Near-Port Communities

 See the EPA Ports Initiative <u>searchable table</u> for federal, state, regional, and local funding opportunities relevant to ports and near-port communities.

DERA Grants Awarded for Port Projects

- Since 2008, a total of 207 Diesel Emissions Reduction Act (DERA) grants have been awarded for port projects, totaling approximately \$196 million.
- UPDATED: Interactive bar chart and searchable table



Examples of DERA-Funded Zero Emission Projects at Ports

- All-Electric crane in Los Angeles
- All-Electric terminal tractors in Philadelphia, Long Beach, and Tacoma
- All-Electric engine replacements of marine vessels, including a ferry and tugboat
- Shore Power installations in Boston, New Bedford, Brooklyn, Los Angeles, Seattle, San Francisco, Tacoma and Hueneme
- All-electric dray truck replacements in Baltimore and Charleston





Port of Los Angeles Electric Crane Project www.epa.gov/ports-initiative/port-losangeles-road-heavy-duty-equipment-andinfrastructure-enhancements





How to prepare for upcoming Clean Ports Program funding opportunity

- Grant proposal preparation tips
- EPA Ports Initiative technical resources and case studies





Complementary Funding Opportunities

EPA Funding Opportunities



Examples include:

- Diesel Emissions Reduction Act (DERA): To incentivize and accelerate the upgrading or retirement of the nation's legacy diesel engine fleet, EPA is soliciting applications nationwide for projects that achieve significant reductions in diesel emissions.
 - Funding opportunity is now open through Dec 1
- Climate Pollution Reduction Grants (CPRG)
 - On September 20, **EPA launched a \$4.3 billion competition** for states, local governments, tribes, and territories to fund policies and programs to cut climate pollution. Funding opportunity is now open through April 1.
 - **EPA also launched \$300 million competition** for only tribes and territories to fund policies and programs to cut climate pollution. Funding opportunity is now open through May 1.
- <u>Community Change Grants</u>: Approximately \$2 billion dollars for environmental and climate justice activities to benefit disadvantaged communities through projects that reduce pollution, increase community climate resilience, and build community capacity to respond to environmental and climate justice challenges. Coming soon!
- <u>Thriving Communities Technical Assistance Centers</u> (TCTACs): Centers will provide training and other assistance to build capacity for navigating federal grant application systems, writing strong grant proposals, and effectively managing grant funding.

 For more EPA funding opportunities, visit:

State and Local Funding Opportunities



- Examples include:
 - Texas Commission on Environmental Quality (TERP): <u>Seaport and Rail Yard Areas Emissions Reduction</u>
 <u>Program (SPRY)</u> Repower or replace older vehicles and equipment operating at eligible seaports and rail yards with newer models to reduce emissions of nitrogen oxides (NOX) and other pollutants
 - California Air Resources Board (CARB): <u>Carl Moyer Air Quality Standards Attainment Program</u> Grant funding for cleaner-than-required engines, equipment, and other sources of air pollution
 - **Port Authority of New York and New Jersey:** <u>Clean Vessel Incentive Program</u> Incentives for voluntary engine, fuel, and technology enhancements to ocean-going vessels

For more state and local funding opportunities, visit: https://www.epa.gov/ports-initiative/funding-opportunities-ports-and-near-port-communities

DOT Funding Opportunities in 2024



Examples include:

Port Infrastructure Development Program (PIDP)

• Funds projects that improve the safety, efficiency, or reliability of the movement of goods into, out of, around, or within a port.

Reduction in Truck Emissions at Port Facilities (RTEPF)

• Funds projects that reduce truck idling and emissions at ports, including through the advancement of port electrification.

Consolidated Rail Infrastructure and Safety Improvements (CRISI)

Funds projects that improve the safety, efficiency, and reliability of intercity passenger and freight rail.

Charging and Fueling Infrastructure (CFI) Discretionary Grant

 Funding to strategically deploy publicly accessible electric vehicle charging infrastructure and other alternative fueling infrastructure.

DOE Hydrogen Hubs



- \$7 billion flowing to 7 regional hubs to kickstart a network of clean hydrogen producers, consumers, and connective infrastructure while supporting the production, storage, delivery, and end-use of clean hydrogen
- Multiple hubs are already working with ports or have opportunities to coordinate and partner with ports







Complementary Funding Opportunities





Ongoing Engagement Opportunities

COMMUNITY, EQUITY&

Building Environmental and Climate Justice through Engagement

U.S. ENVIRONMENTAL PROTECTION AGENCY

Voyage to Justice Navigating Equity at America's Ports

Thursday, 11/9/2023 @ 4:00 PM ET

Moderated by the Environmental Protection Agency Featuring

- Duwamish Valley Port Community Action Team
- New Jersey Environmental Justice Alliance
- Healthy Port Communities Coalition









Upcoming Engagement: Stay Tuned



 We will host additional webinars on the Clean Ports Program once NOFO is released

• This fall: more information on federal funding to reduce emissions at ports

Sign up for <u>Ports Initiative newsletter</u>

Feedback



What additional technical assistance, informational webinars, or resources would you find useful for:

- preparing an application
- conducting clean air and climate planning activities at ports, and/or
- deploying zero emissions equipment and infrastructure at ports?

Conclusion



Thank you!

- This presentation has been recorded in both English and Spanish.
 The recordings and slides will be posted to the Ports Initiative website.
- If you have any questions, please contact <u>cleanports@epa.gov.</u>
- Sign up for the <u>Ports Initiative newsletter</u> and continue to check <u>www.epa.gov/ports-initiative/cleanports</u> for information on the Clean Ports Program.