



Historic Opportunities to Decarbonize and Clean the Air at U.S. Ports

Harold Rickenbacker, Ph.D. EPA Ports Branch

2024 Hydrogen Program Annual Merit Review and Peer Evaluation Meeting (AMR)

May 8th, 2024

Background on the Port Sector



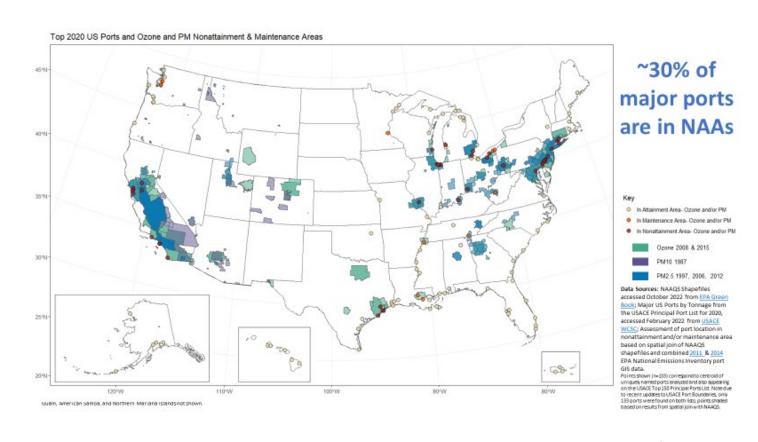
"If you've seen one port, you've seen one port"



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"



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

EPA Ports Initiative















The new Clean Ports Program builds on EPA's Ports Initiative efforts to address diesel pollution at ports to achieve EJ, air quality, climate goals.

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

- Cleaner technologies and other strategies
- Clean air planning practices that inform strategic clean air investments
 - Emissions inventories
 - Clean air plans
 - Community engagement

Funding Overview

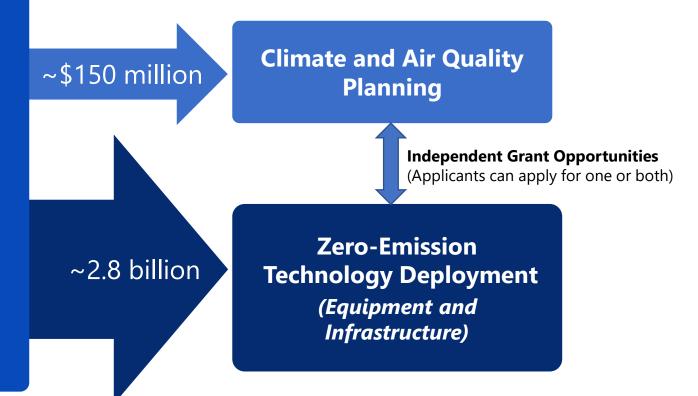


Open now through May 28

Clean Ports Program in the Inflation Reduction Act

\$3B for Grants

At least 25% (\$750M) to be spent in nonattainment areas



Administrative costs: up to 2% (\$60M)

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:
 - Applies for a grant in partnership with an eligible entity above, and
 - Owns, operates, or uses facilities, cargo-handling equipment, transportation equipment, or related technology of a port.
- Note: All projects must serve a water port or dry port

See: ZE or CAQP NOFOs section III.A

Prohibited logistics platform

As proscribed in Section 825 of the National Defense Authorization Act, no funds may be awarded to an entity that uses in part or in whole: the national transportation logistics public information platform (commonly referred to as 'LOGINK'); any national transportation logistics information platform provided by or sponsored by the People's Republic of China, or a controlled commercial entity; or a similar system provided by Chinese state-affiliated entities.

Climate and Air Quality Planning Competition: Eligible Activities



Climate and Air Quality Planning Competition (Approx. \$150M)

Eligible activities:

- Emissions inventory and accounting practices (one or more required)
- Emissions reduction strategy analysis and goal-setting
- Stakeholder collaboration and communication, with a focus on near-port communities
- Resiliency planning

ZE Technology Deployment Competition: Eligible Technologies



ZE Technology Deployment Competition (Approx. \$2.8B)

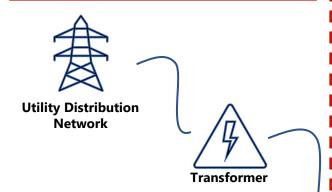
Eligible technologies:

- Electric and hydrogen fuel cell mobile equipment
 - Cargo handling equipment
 - Drayage trucks
 - Locomotives and railcar movers
 - Harbor craft and other vessels
- Charging and other fueling infrastructure for zero emission mobile port equipment, including shore power for marine vessels

ZE Technology Deployment Competition: Eligible Infrastructure Expenses



Ineligible Expenses



- Eligible infrastructure expenses are limited to electric meters and equipment behind the meter; transformer and electric meter expenses may be considered eligible if they are on the customer's side
- Costs for minor grid upgrades in front of the meter (utility side) may be considered if the work is necessary to connect an eligible charging station to the electric distribution network

Eligible Expenses For additional details on eligibility, applicants should refer to the ZE Technology Deployment Competition NOFO (Sections I.B. and III.D) **Solar and Wind generation systems** (installed primarily to power mobile **Battery Energy** equipment) **Storage Systems** servicing port equipment **Electric Panel ZE Port Equipment** Charging Infrastructure Unit **Electric Meter** See: ZE NOFO **Hydrogen Storage and** section I.B **Fueling Systems**

- Infrastructure must serve eligible port equipment purchases as part of the grant, except for vessel shore power
- Applicants are encouraged to use no more than 50% of funds for infrastructure (not including shore power costs), ZE technology support activities and project administration related expenses

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

Behind-the-Meter (BTM) - Customer side

Funding Limits



ZE Technology Deployment Competition:

Tier	Port Type	Applicant Type	EPA Funding Range per Award	EPA Share of Total Project Cost (Maximum)	Mandatory Applicant Share of Total Project Cost (Minimum)	Anticipated Number of Awards
Tier A	Water ports only	Any eligible entity	\$150,000,000 - \$500,000,000	80%	20%	5-10
Tier B	Water or dry ports	Any eligible entity	\$10,000,000 - \$149,999,999 (Projects at small water ports: \$5,000,000 - \$149,999,999)	90%	10%	25-70
Tier C	Water or dry ports	Tribal applicants only	\$2,000,000 - \$50,000,000	100%	0%	2-10

For territory applicants (the U.S. Virgin Islands, American Samoa, Guam, and the Commonwealth of the Northern Mariana Islands), up to \$5 million of the applicant cost share will be waived, in accordance with the policies of the Omnibus Territories Act.

Climate and Air Quality Planning Competition:

- \$200,000 \$3 million
- No awardee match requirement
- Anticipate awarding 50-70 grants

Summary of Key Evaluation Criteria



Project Summary and Approach

Emphasis on ensuring project success, including through technology readiness, and risk mitigation (ZE Technology Deployment grants) and partnerships, coordination with larger initiatives (both competitions)

Budget

Including reasonableness of costs

Key
Evaluation
Criteria

Environmental Results

Emphasis on voluntary retirement of existing equipment to ensure emissions reductions (ZE Technology Deployment grants) and development of outcomes, outputs, and performance measures (both competitions)

Environmental Justice and Disadvantaged Communities

As part of the Justice40 Initiative, there will be a focus on engagement with near-port communities and delivering benefits to communities that are disproportionately impacted by air pollution from ports

Job Quality and Equitable Workforce Development

Emphasis on supporting high-quality jobs, including through workforce training and safety, pay and benefits, labor engagement (ZE Technology Deployment grants), and workforce impact analysis (Planning grants)

ZE Technology Deployment Competition: Build America, Buy America (BABA) Act



Waiver Comments were due on April 15

Under the Zero-Emission Technology Deployment Competition, all projects are expected to comply with BABA

For the Clean Ports Program, market analysis shows that there is a limited number of manufacturers and supply of mobile port equipment that would meet BABA criteria.

Proposal

- 1. To waive the 55% domestic content requirement for zero emissions mobile port equipment. Only the final assembly of zero emissions mobile port equipment must occur in the United States to be considered "produced in the United States" during the waiver period.
- 2. A supplemental de minimis waiver, waiving all aspects of BABA compliance for ten percent of material costs attributable to zero emissions mobile port equipment, that may be used for recipients of the Clean Ports Program only on zero emissions mobile port equipment.

You can view the proposed waiver on EPA's **BABA Waivers webpage**.

Clean Ports Program Important Dates



February 28, 2024	Clean Ports Program Notices of Funding Opportunities (NOFOs) Open		
March 28, 2024	Optional Notice of Intent to Apply Due to <u>cleanports@epa.gov</u>		
April 15, 2024	Clean Ports Program Proposed Build America Buy America (BABA) Waiver Open for Comment Until April 15 Please review the proposed waiver on EPA's BABA Waivers webpage.		
March – May 2024	Additional Webinars on Clean Ports Program Funding Opportunities More information can be found on the https://www.epa.gov/ports-initiative/cleanports website under the 'Educational Events' section		
May 6, 2024	Final Date to Submit Questions to cleanports@epa.gov		
May 28, 2024 at 11:59 p.m. ET	NOFO Closes – Application Deadline Application packages must be submitted electronically to EPA through Grants.gov (www.grants.gov) no later than May 28, 2024 at 11:59 p.m. Eastern Time (ET) to be considered for funding		
August – September 2024	Anticipated Notification of Selection		
December 2024	Anticipated Awards		

Clean Ports Program

Keep in Touch



For more information about the Clean Ports Program, visit:

https://www.epa.gov/ports-initiative/cleanports

For questions about the Clean Ports Program, email: cleanports@epa.gov

 Deadline for submitting questions about the Clean Ports Program funding opportunities is May 6th, 2024

EPA's Clean Ports Program website and newsletter sign-up:

https://www.epa.gov/ports-initiative/cleanports

Harold Rickenbacker, Ph.D.

Technical Expert, Ports Branch

Rickenbacker.Harold@epa.gov