

# International Illinois Port District (IIPD) and Canadian Pacific Kansas City (CPKC) Application for Illinois Environmental Protection Agency Clean Ports Partnership

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## Table of Contents

|  |   |
|--|---|
| Scope of Project .....   | 1 |
| Technical Implementation Plan.....                                   | 1 |
| Iroquois Landing Terminal, Lake Calumet Terminal .....               | 1 |
| CPKC Bensenville railyard (under negotiation) .....                  | 2 |
| Other Chicago Railyards .....  | 2 |
| Partnering organizations.....  | 2 |
| International Illinois Port District (Primary Grant Applicant) ..... | 2 |
| Canadian Pacific Kansas City (under negotiation).....                | 3 |
| ComEd and Constellation (Utility Partners, under negotiation) .....  | 3 |
| MACH H2 Hydrogen Hub (under negotiation).....                        | 3 |
| Advanced Energy Group/Agency (Support Partner) .....                 | 3 |
| Other Partners .....   | 3 |
| Outreach/engagement efforts .....                                    | 4 |
| Performed.....   | 4 |
| Planned .....  | 5 |
| Environmental Justice.....   | 5 |
| Prior emissions estimates/inventories .....                          | 5 |
| Appendix A: Environmental Justice Counties in Project .....          | A |
| Appendix B: Online Roundtable Solicitation .....                     | B |
| Appendix C: Stakeholder Dinner Solicitation .....                    | C |
| Appendix D: Environmental Justice GIS Mapping Sample .....           | D |

## Scope of Project

The **International Illinois Port District (IIPD)** intends to submit an implementation and planning grant for the EPA Clean Ports program:

- **Zero Emission Technology Deployment:** We will be seeking a **~\$50 million grant** to support electrification (charging stations, solar generation, and battery backups) and hydrogen refueling infrastructure at the **Iroquois Landing Terminal, Lake Calumet Terminal, and the Canadian Pacific Kansas City (CPKC) Bensenville railyard, located near O’Hare International Airport**. These funds will be used to install infrastructure, purchase equipment and vehicles, and build a hydrogen storage and refueling system at these ports.
- **Climate and Air Quality Planning:** This planning grant will be used to identify further opportunities to pursue air quality monitoring and zero emissions solutions at the prior mentioned ports with potential to plan a project for integrated hydrogen infrastructure along the rest of the **Chicago rail belt**. We will be seeking **~\$1 million** for this planning grant.

The exact funding request is subject to change as we work to communicate with end users, community stakeholders, and various partners.

## Technical Implementation Plan

The plan is to pursue all the following zero emissions projects at each port location for the ZE technology implementation grant. Any projects that are too underdeveloped by the May application deadline will be shifted to the planning grant. **A specific timeline of all current action items for the grant writing can be found [here](#).**

### Iroquois Landing Terminal, Lake Calumet Terminal

Combined the Illinois International Port District (IIPD) contains two multi-modal terminals (Iroquois Landing and Lake Calumet) seeing millions of tons of cargo pass through the port via rail, truck, barge and ship each year. Various projects will be pursued to reduce emissions at the port:

1. Individual transportation electrification projects for each of the numerous tenants at the IIPD including, but not limited to electric trucks and heavy equipment, battery storage, solar generation, and charging stations.
2. Electrification projects at IIPD managed facilities including but not limited to electric trucks and heavy equipment, battery storage, solar generation, and charging stations.

3. Hydrogen refueling and storage infrastructure for locomotives and possible additional shipping at the IIPD.
4. Due to the availability of land at the IIPD, much of the support equipment and support systems for a Chicago hydrogen rail system will be constructed at the IIPD.

### CPKC Bensenville railyard (under negotiation)

~300,000 containers pass through the Bensenville railyard each year. The plan to reduce emissions at this major intermodal port falls into 2 categories:

1. Electrification projects for local intermodal transportation might include electric shunt trucks, charging infrastructure, and renewable energy (solar).
2. Potentially, hydrogen refueling infrastructure and switching locomotives for freight rail emissions reduction.

### Other Chicago Railyards

Starting with the larger IIPD and CPKC Bensenville ports, we hope this grant will catalyze change throughout the Chicago shipping and rail system. Our intent is to include funding to engage the other intermodal ports in Chicago through the Climate and Air Quality Planning grant. Under this grant, we could look at how we could integrate these other ports into the built hydrogen refueling system and air quality monitoring plan.

We are open to reaching out to the smaller ports to see if they would like to be included in the ZE technology implementation grant. Our current assumption is that the smaller ports would not be able to reach the \$10 million threshold to pursue this grant opportunity.

### Partnering organizations

#### International Illinois Port District (Primary Grant Applicant)

The International Illinois Port District (IIPD) oversees the Iroquois Landing and Lake Calumet Terminals. It will create and manage a shared fund to fund electrification and hydrogen refueling equipment/infrastructure at the port district. This fund will be contributed to by interested tenants, outside partners, and other interested parties. Due to the requirement of managing multiple stakeholders for this fund, the IIPD will be responsible for hiring the relevant staff/contractors to oversee the implementation of the grant across the various locations in the Chicago area.

IIPD is eligible as a port district to apply and is registered on SAM.gov. IIPD Unique Entity ID: CYXEKLMHHCN1

## Canadian Pacific Kansas City (under negotiation)

Canadian Pacific Kansas City (CPKC) is the primary operator of the Bensenville railyard.

As a port operator, CPKC is eligible to apply and is registered on SAM.gov. The correct SAM.gov entity for the Bensenville Yard is under “Canadian Pacific Railway Company” and the active entity ID is CYXEKLMHHCN1 L4079.

Prior implementation (s): [89233019PNR000021](#)

## ComEd and Constellation (Utility Partners, under negotiation)

For the [utility partnership agreement](#), we are working with ComEd and Constellation to support the infrastructure improvement for this grant.

We are working with ComEd to determine the available capacity for electrification at each port. This includes exploring [solar hosting capacity](#), charging stations, and electric equipment for a potential microgrid for each port.

Constellation is involved with supporting the hydrogen refueling endeavor for this project. The current intention is for Constellation to provide support for hydrogen utilities in collaboration with the MACH H2 Hydrogen Hub.

## MACH H2 Hydrogen Hub (under negotiation)

Since the inception of this project, we have been working with Neil Banwart, Chief Integration Officer, and Colleen Wright, Chief Strategy Officer, of the [MACH H2 Hydrogen Hub](#). We are currently working with eh hydrogen hub to ensure that the hydrogen fueling infrastructure built at the ports can integrate with existing plans for the Illinois Hydrogen Hub.

## Advanced Energy Group/Agency (Support Partner)

[Advanced Energy Group](#) (AEG) works with city governments, utilities, regulators, national energy labs, and other organizations to drive systemic change in energy. AEG is working with IIPD and CPKC to write the clean ports grants, engage key stakeholders through meetings, and perform essential community outreach.

Prior implementation (s): <https://goadvancedenergy.com/all-content>

## Other Partners

Through the planning process so far, we have engaged several other partners to provide support for this grant. The full list of partners (so far) is listed below:

### **Solution Provider**

- Advanced Energy Group
- National American Council for Freight Efficiency
- Burns & McDonnell
- WSP
- Ann L. Schneider and Associates LLC
- Invenergy
- Crowley Advanced Energy
- Advocate Trinity Hospital
- Midwest Alliance for Clean Hydrogen (MACH H2)

### **Utility/Owner/Operator**

- ComEd
- Constellation
- QSL
- Canadian Pacific Kansas City (CPKC)
- International Illinois Port District (IIPD)

### **Government/Non-Profit**

- Argonne National Laboratory
- State of Illinois Commission on Equity and Inclusion
- University of Illinois Chicago
- Bronzeville Community Development Partnership
- Chicago Metropolitan Agency for Planning (CMAP)
- Lake Michigan Air Directors Consortium (LADCO)

## Outreach/engagement efforts

### Performed

Most of the engagement so far has been with industry, community, government leaders, and other stakeholders in the clean transportation space to determine a plan forward for the port including:

- [AEG Chicago Stakeholder Challenge Mobility & Clean Transportation](#)– December 7<sup>th</sup>, 2023
- [AEG Chicago Clean Ports Program Online Roundtable](#) – March 14<sup>th</sup>, 2024

From these meetings, we formed a task force of key stakeholders working to pursue this grant. The task force has had informal conversations with Alderman Peter Chico (10<sup>th</sup> ward,

Chicago) and Anthony Beale (9<sup>th</sup> ward, Chicago). As a task force member, Chicago Metropolitan Agency for Planning (CMAP) is working with to ensure that the grant is in line with the larger development plans for the [IIPD](#). The community council formed as part of this plan has been informed of our intent to pursue this grant.

We also worked with [Northwestern Science Policy Outreach Task Force](#) to prepare two one pagers on alternative fuel technologies and the impacts of fuel emissions to educate key decision makers and community members on the fundamental technologies and issues surrounding the clean ports program.

## Planned

Additional events will continue to engage key stakeholders on the project:

- [AEG Chicago 24Q2 Port Electrification Stakeholder Dinner Reception](#) – April 16<sup>th</sup>

The primary focus of upcoming outreach will focus on engaging the community and community leaders directly. We are working on scheduling formal meetings with each relevant alderman (9<sup>th</sup>, 10<sup>th</sup>, and 41<sup>st</sup> ward) and the Chicago, Franklin Park, and Bensenville mayor's office to appraise them of updates to the project and listen to any concerns or contributions of interest for the community.

We are creating a public-facing website to host relevant information for this project and a form for public comment. We also intend to host in person town halls at/near the Bensenville railyard and IIPD and an online town hall for public comment. The IIPD Community Advisory Team will be directly engaged to provide comment throughout the grant planning process.

## Environmental Justice

All [ports](#) in this project are contained within qualified environmental justice (EJ) communities. Detailed EJ GIS mapping of each railyard can be found [here](#).

## Prior emissions estimates/inventories

No applicable emissions surveys have been conducted for the Iroquois Landing Terminal or Lake Calumet Terminal.

CPKC has completed a baseline emission inventory for limited operational aspects for the Bensenville railyard. It is currently for internal planning purposes only.

## Appendix A: Environmental Justice Counties in Project


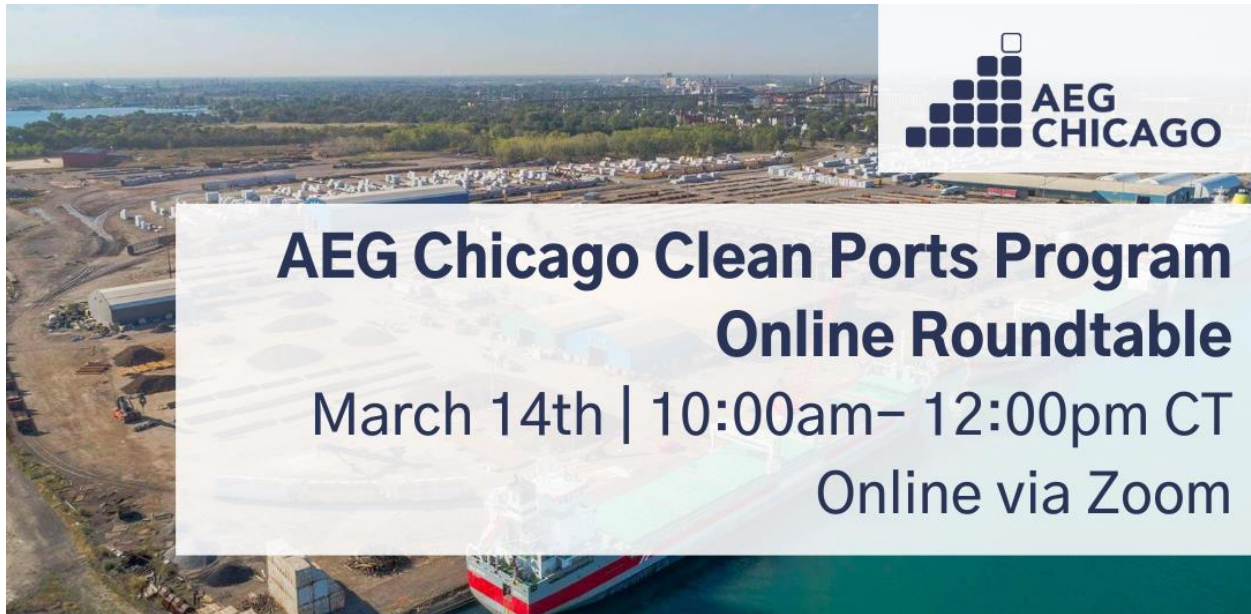
The relevant counties are listed in the Table 1 based on [EPA guidelines](#):

Table 1: Selected Counties from 2024 Clean Ports Program Disadvantaged Community County List

| <b>Port</b>          | <b>Country</b>  | <b>County FIPS</b> | <b>Maintenance area for Ozone or PM2.5?</b> | <b>Nonattainment Area for Ozone or PM2.5?</b> | <b>Severe or Extreme Nonattainment Area for Ozone?</b> | <b>High Ambient Diesel PM Concentration?</b> |
|----------------------|-----------------|--------------------|---|---|--|--|
| IIPD                 | Cook            | 17031              | Yes   | Yes   | No   | Yes  |
| Bensenville railyard | Cook/<br>DuPage | 17031/<br>17043    | Yes/ Yes                                    | Yes/ Yes                                      | No/ No   | Yes/ Yes                                     |



## Appendix B: Online Roundtable Solicitation



# AEG Chicago Clean Ports Program Online Roundtable

March 14th | 10:00am– 12:00pm CT  
Online via Zoom



**H.G.  
Chissell**  
Founder  
& CEO



**Erik  
Varela**  
Executive  
Director



**Colleen  
Wright**  
Vice President  
Corporate Strategy



**Gregorio  
Salinas**  
Great Lakes Region  
Business Diversity  
Manager



# Appendix C: Stakeholder Dinner Solicitation

**BURNS MCDONNELL**

**AEG CHICAGO**

## AEG Chicago 24Q2 Port Electrification Stakeholder Dinner Reception

April 16th | 6:30pm – 8:30pm CT

Host: **BURNS MCDONNELL**



**H.G. Chissell**  
Founder & CEO



**Erik Varela**  
Executive Director



**Colleen Wright**  
Vice President  
Corporate Strategy

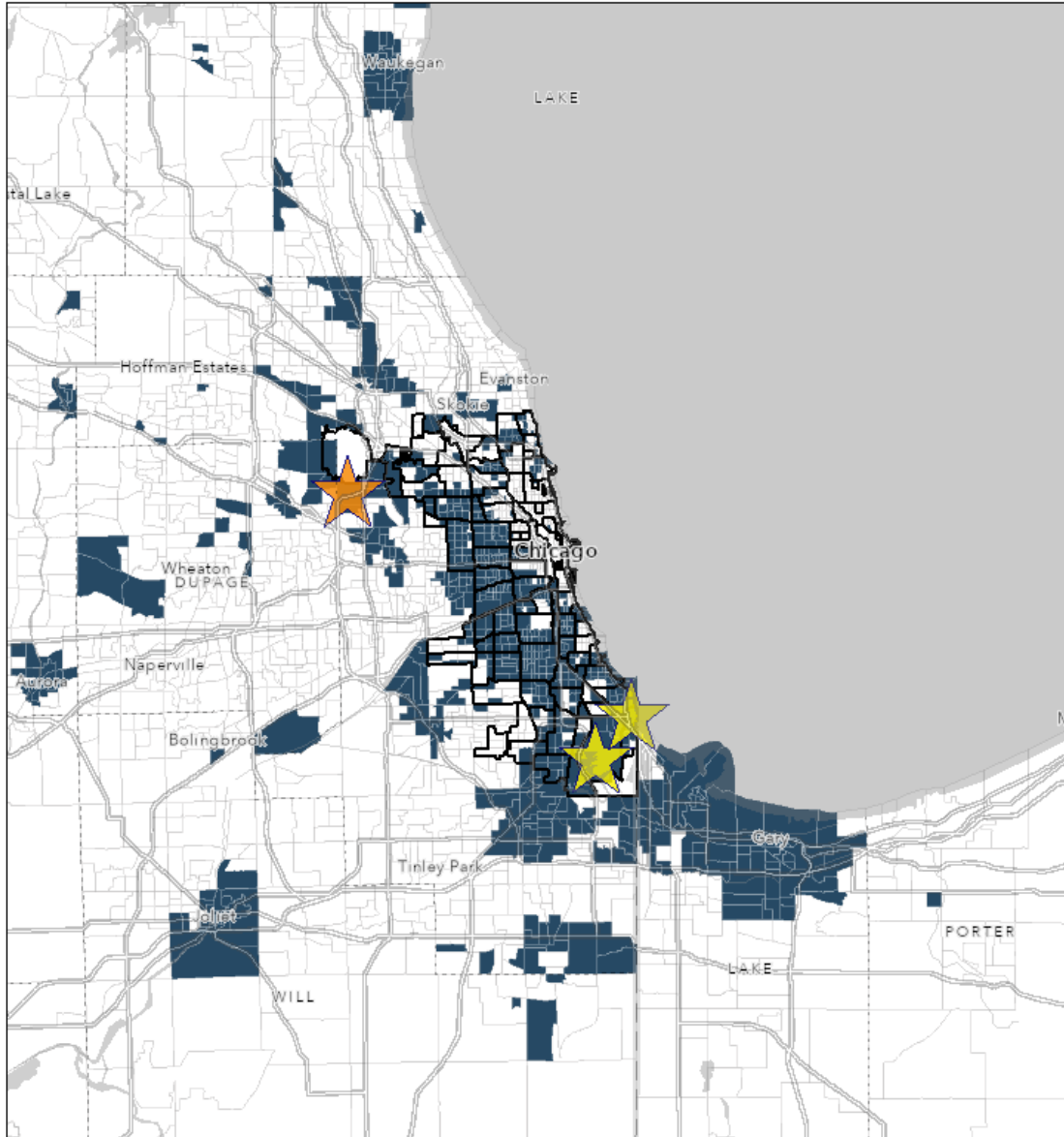


**Gregorio Salinas**  
Great Lakes Region  
Business Diversity  
Manager



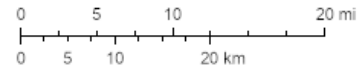
# Appendix D: Environmental Justice GIS Mapping Sample

Justice40 November 2022 Version 1.0 - Port Districts



4/9/2024

1:819,341



City of Chicago, Esri, TomTom, Garmin, SafeGraph, FAO, MET/NASA, USGS, EPA, NPS, USFWS