

# HCBF CLEAN PORTS PROGRAM GLOSSARY OF TERMS (A-Z), V.1



HARBOR COMMUNITY  
BENEFIT FOUNDATION

Developed in response to public input and in consultation with the Port of Los Angeles, this glossary defines technical terms and zero-emission port equipment.

FEB  
2026

HARBOR COMMUNITY BENEFIT  
FOUNDATION (HCBF)

[WWW.HCBF.ORG](http://WWW.HCBF.ORG)

# A

## ALTERNATIVE FUEL

A fuel other than conventional diesel used in engines or equipment, including electricity, hydrogen, propane, natural gas, methanol, or ethanol.

## ALTERNATIVE MARITIME POWER (AMP)

Also called shore power; a system that allows ships to plug into electrical power while docked so onboard diesel engines can be shut off.

# AT BERTH



The state of an ocean-going vessel being securely tied to a wharf, pier, or dock in a harbor.

# A

## AUXILIARY ENGINE

A secondary-engine used to provide electricity for onboard needs like lighting, refrigeration, and heating, rather than for moving the ship.

# B

## **BATTERY-ELECTRIC VEHICLES (BEV)**

A type of equipment or vehicle that runs entirely on electricity stored in rechargeable batteries, rather than burning fuel.

## **BATTERY ENERGY STORAGE SYSTEM (BESS)**

An integrated system of rechargeable batteries and control equipment that stores electricity for later use, helping stabilize the grid and support charging of zero-emission equipment at ports.

# B

## **BUILD AMERICA, BUY AMERICA (BABA)**

Is a federal requirement that applies to the EPA Clean Ports Program and requires that iron, steel, manufactured products, and construction materials used in federally funded projects be produced in the United States. For manufactured products, BABA generally requires that at least 55 percent of the total cost of components be domestically produced.



## **CALIFORNIA AIR RESOURCES BOARD (CARB)**

The California state agency responsible for regulating air pollution and setting zero-emission requirements for vehicles and equipment.

## **CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

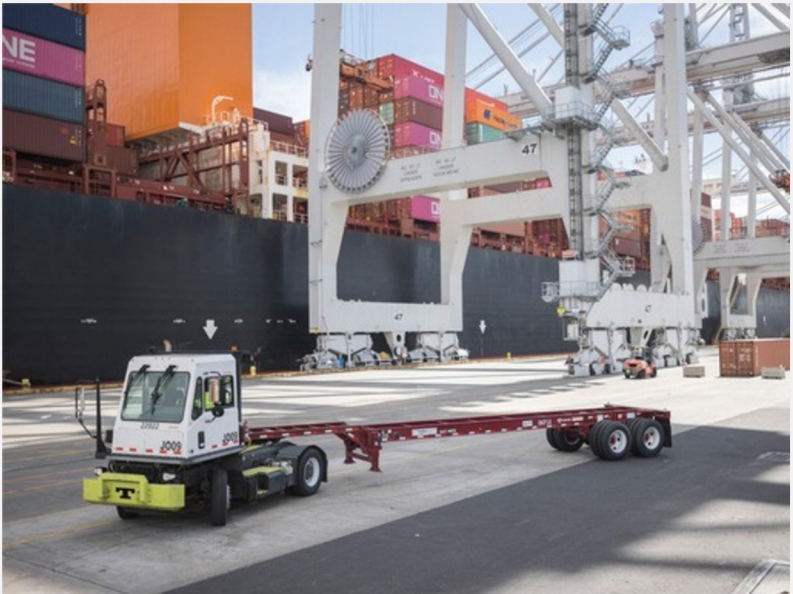
A state law that requires public agencies to identify and share the potential environmental impacts of a proposed project before it is approved.

# CARGO HANDLING EQUIPMENT (CHE)



Machines used at ports to move cargo, such as yard tractors, forklifts, top handlers, and cranes.

# CHASSIS



A wheeled trailer frame designed to carry and transport intermodal cargo containers by truck between ports, rail yards, and other freight facilities.

# CCLEAN PORT

A federal grant program created by the Inflation Reduction Act to reduce air pollution at ports by funding zero-emission equipment, trucks, and infrastructure.

## COMMUNITY

For purposes of the HCBF Clean Ports Program, “community” refers to Wilmington and San Pedro neighborhoods adjacent to the Port of Los Angeles that are directly affected by port-related air quality and freight activity.

# D

## **DIESEL PARTICULATE MATTER (DPM)**

Tiny particles released from diesel engines that can harm lungs and increase the risk of heart and respiratory diseases.

# DRAYAGE TRUCK



A drayage truck is a large, heavy-duty truck (over 26,000 pounds) that moves cargo to and from a seaport or rail yard. It may travel within the port or rail yard and make short trips nearby as part of port or rail operations.

# ELECTRIC CHARGER (PORT EQUIPMENT CHARGER)



Infrastructure that supplies electricity to recharge battery-electric port equipment, trucks, and handling equipment.

# FORKLIFT



A vehicle used to lift and move cargo at ports.



## **GREENHOUSE GASES (GHGS)**

Gases like carbon dioxide (CO<sub>2</sub>) that trap heat in the atmosphere and contribute to climate change.

# HARBOR CRAFT



Harbor craft are non-recreational boats that operate in ports, harbors, and nearby coastal waters to support commercial, industrial, government, or emergency activities. They include vessels such as tugboats, ferries, work boats, fishing vessels, dredges, barges, pilot boats, research vessels, supply boats, and emergency response boats. They do not include large ocean-going ships or recreational boats.

# H

## HEAVY LIFT

A larger capacity forklift that can be used for chassis stacking.

## HYBRID

A vehicle or piece of equipment powered by two or more energy sources, typically combining an internal combustion engine with an electric motor and battery system.

# H

## HYDROGEN

A chemical element used as a fuel in fuel cell systems to generate electricity, producing only water vapor as a byproduct and no exhaust emissions during operation.



## INFRASTRUCTURE

Facilities and systems that support zero-emission equipment, including chargers, electrical upgrades, battery storage, and solar systems.

# LOCOMOTIVE



A locomotive is a self-powered rail vehicle that runs on tracks and pulls or pushes railcars carrying freight, passengers, or equipment. It does not carry cargo or passengers itself (other than crew) and does not operate on roads.

# M

## MICRON

A unit of length equal to one-millionth of a meter ( $1 \mu\text{m} = 0.000001$  meters), commonly used to measure the size of airborne particles such as particulate matter (e.g.,  $\text{PM}_{2.5}$  is 2.5 microns in diameter).

# N

## NITROGEN OXIDES (NOX)

Air pollutants (compounds of nitric oxide) produced by diesel engines that contribute to smog and respiratory problems.

# OCEAN GOING VESSEL (OGV)



Large ship that can carry cargo and/or passengers across the ocean (ex: cruise ship, container vessel).

# P

## **PARTICULATE MATTER (PM)**

Small solid or liquid airborne particles—excluding pure water—that range from coarse dust to fine combustion particles and can penetrate the lungs, including  $PM_{2.5}$  and  $PM_{10}$ .

# REACH STACKER



A mobile vehicle used at ports and terminals to lift, move, and stack intermodal cargo containers, capable of transporting containers short distances and stacking them in multiple rows.

# RUBBER-TIRED GANTRY CRANE (RTG CRANE)



A type of cargo handling equipment that is large and used to lift shipping containers.

# S

## SHORE POWER

See AMP

## SOLAR (PHOTOVOLTAIC) SYSTEM

Equipment (ex: solar panels) that converts sunlight into electricity. At port facilities, solar PV systems are often paired with batteries for on-site power. This means solar panels (photovoltaics) likely connected to batteries to store daytime power. Solar power on-site can directly charge equipment or feed the grid.

# S

## **SUBAWARD**

A grant of funds issued by a primary recipient to another entity to carry out a portion of a funded project.

## **SUBRECIPIENT**

An organization, such as the Harbor Community Benefit Foundation (HCBF), that receives grant money through a primary agency (like the Port) to perform specific tasks.

# S

## SULFUR OXIDES

A group of air pollutants, primarily sulfur dioxide (SO<sub>2</sub>), formed when fuels containing sulfur are burned, contributing to smog, acid rain, and respiratory health problems.

# TERMINAL



A designated area within a port where cargo is loaded, unloaded, stored, and transferred between ships, trucks, and rail.

# TOP HANDLER (TOP PICK)



Truck-like mobile crane used to lift shipping containers by their top. A top handler straddles a container and grabs it from the top using a telescoping boom. These machines move empty or loaded containers and can have diesel or electric drives.



**UNITED STATES ENVIRONMENTAL  
PROTECTION AGENCY (U.S. EPA)**

The federal agency responsible for protecting human health and the environment by enforcing environmental laws and administering programs such as the Clean Ports Program.

# W

## WORKFORCE DEVELOPMENT

Programs and training initiatives designed to prepare, upskill, or transition workers for employment related to zero-emission equipment, infrastructure, and port operations.

# YARD TRUCK (YARD TRACTOR, YARD GOAT, TERMINAL TRACTOR, UTR/UTILITY TRACTOR RIG)



A short-distance vehicle used within a port or terminal to move cargo containers and chassis between ships, storage areas, and loading points.

# Z

## ZERO-EMISSION (ZE)

Equipment or vehicles that produce no tailpipe pollutants or greenhouse gases during operation. In practice, ZE cargo equipment runs on electricity (from batteries or fuel cells) instead of diesel. For example, ZE yard tractors and forklifts emit no diesel particulate or NOx while working, helping to dramatically cut port air pollution.

# Z

## **ZERO-EMISSION AND ADVANCED TECHNOLOGY (ZEAT)**

A harbor craft vessel that is either zero-emission or a hybrid that can operate with zero emissions for at least part of the time.

## **ZERO-EMISSION INFRASTRUCTURE (ZE INFRASTRUCTURE)**

See infrastructure definition.