

Date of Hearing: April 27, 2015

**ASSEMBLY COMMITTEE ON TRANSPORTATION**

Jim Frazier, Chair

AB 678 (O'Donnell) – As Amended April 21, 2015

**SUBJECT:** Greenhouse gases: Energy Efficient Ports Program

**SUMMARY:** Requires the Air Resources Board (ARB), in conjunction with the California Energy Commission (Commission), to develop the Energy Efficient Ports Program (EEPP) to fund energy efficiency upgrades and investments at public ports. Specifically, **this bill:**

- 1) Requires ARB, in conjunction with the Commission, to develop and implement the EEPP to fund efficiency upgrades and investments at public ports that help reduce emissions of criteria pollutants, toxic air contaminants, and greenhouse gases (GHGs).
- 2) Requires that projects eligible for funding in the EEPP include, but not necessarily be limited to:
  - a) Installation of solar technologies at marine terminals, warehouses, and other freight facilities;
  - b) Replacement of conventional lighting with light emitting diodes;
  - c) Installation of cold ironing or shorepower equipment and vessels beyond those required by existing regulations;
  - d) Deployment of zero- and near-zero emission vehicles and infrastructure technologies including, but not necessarily limited to, stationary fuel cells, energy storage and battery, and battery electric trucks; and,
  - e) Projects that reduce grid-based energy demand.
- 3) Requires that ARB, in consultation with the Commission, develop guidelines for the implementation of the EEPP consistent with the California Global Warming Solutions Act of 2006 pursuant to AB 32 (Nunez), Chapter 488, Statutes of 2006.
- 4) Makes monies from the Greenhouse Gas Reduction Fund (GGRF) available for appropriation by the Legislature to the EEPP.

**EXISTING LAW:**

- 1) Required ARB, pursuant to AB 32, to adopt a statewide GHG emissions limits equivalent to 1990 levels by 2020 and adopt regulations to achieve maximum technologically feasible and cost-effective GHG emission reductions.
- 2) Authorizes ARB, pursuant to AB 32, to use market-based compliance mechanisms (cap-and-trade) to comply with GHG reduction regulations.

- 3) Established the GGRF and requires all moneys, except for fines and penalties, collected by ARB pursuant to cap-and-trade be deposited in the GGRF and available for appropriation by the Legislature.
- 4) Established the GGRF Investment Plan and Communities Revitalization Act, pursuant to AB 1532 (John A. Pérez), Chapter 807, Statutes of 2012, which set procedures for the investment of GHG allowance auction revenues.
- 5) Requires, pursuant to SB 535, (De Leon), Chapter 830, Statutes of 2012, that the investment plan allocate a minimum of 25% of the available moneys in the GGRF to projects that provide benefits to identified disadvantaged communities and a minimum of 10% of the available moneys in the GGRF to projects located within identified disadvantaged communities.

**FISCAL EFFECT:** Unknown

**COMMENTS:** According to the author and the sponsor, the Pacific Merchant Shipping Association (PMSA), the maritime and ports industry have made an estimated \$1.8 billion investment into infrastructure necessary to implement ARB's shorepower requirements and, as a result, have kept thousands of tons of criteria pollutants from entering the atmosphere. As a result, however, the port's energy demands have grown substantially and, additionally, there are a number remaining emissions reduction improvements that still need to be made to help reduce port-generated emissions.

To help the ports complete these improvements, the author has introduced AB 678 to fund projects to help California ports reduce power demands, operating costs, and overhead and counteract unavoidable energy impacts of At-Berth regulations. AB 678 is modeled after SB 1204 (Lara), Chapter 524, Statutes of 2014, that created the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program to fund development, demonstration, and early commercial deployment of zero- and near-zero-emission truck, bus, and off-road vehicle and equipment technologies.

The author notes that while air quality across the state has improved as a result of stricter air quality laws and regulations, many areas in the state continue to experience poor air quality. In their annual air pollution rankings released this month, the American Lung Association again reported that the Los Angeles Basin has some of the nation's highest ozone and fine particle pollution and, as a result, ranked fourth among metropolitan areas nationwide for short-term spikes in fine particle pollution. The South Coast Air Quality Management District, in a study released in late 2014, noted specifically that black carbon, formaldehyde, nickel, benzene, arsenic, and dozens of other chemicals are still causing increased cancer risk, around the ports of Los Angeles and Long Beach due primarily to heavy diesel emissions associated with port operations. The author points out that not only are port operations to blame, the maritime shipping industry itself is responsible for an estimated 3% of GHG emissions worldwide. He points out that with the significant expected growth of international trade, this percentage is expected to increase by a factor of 2-3 by 2050 if no further action is taken.

In December of 2007, ARB approved an early action item aimed at reducing the maritime industry's carbon footprint. The "Airborne Toxic Control Measure for Auxiliary Diesel Engines Operated on Ocean-Going Vessels At-Berth in a California Port" Regulation, commonly referred to as the At-Berth Regulation, that directed vessels docked at-berth in California ports must use

shorepower instead of running their onboard diesel engines-which has been proven to be a significant source of emissions and contaminants. Through the use of shorepower, the ship's power load is seamlessly transferred to a dockside power supply without disruption to onboard services, thereby eliminating the negative side-effects of auxiliary engine combustion when ships are in port. The regulation specifically requires at least 50% of the vessels docked at-berth to utilize shore power in 2014, eventually reaching 70% in 2017, and 80% by 2020. California's ports have, for the most part, come into compliance with the At-Berth Regulation. The sponsor reports that not only was the installation of shorepower costly, the result has been that more and more vessels are demanding larger quantities of electrical power.

There are a number of programs within ARB and the Commission that have been created to help reduce emissions including funding mobile source technology such as on- and off-road equipment, developing and increasing availability of alternative fuels, replacing medium- and heavy-duty equipment with cleaner technology and training the workforce as it relates to the continued use of these cleaner, advanced technologies. It is understandable, that California's public ports would therefore seek an opportunity to utilize emissions reduction funding, given that ports generate a significant amount of emissions that result in poor air quality in and around the facilities.

In addition to existing emissions reduction programs, there are a number of bills that have been introduced this year, including AB 678, that, if enacted, would place a substantial demand on limited funding available to support emissions reduction programs. The Legislature will categorically need to prioritize in order to maximize benefits and remain within existing funding limits. By directing monies to projects on or near California's public ports, as envisioned by AB 678, benefits would include targeting known emissions sources that have substantial impacts on air quality and the quality of life for nearby disadvantaged communities. Further, expending money for programs on and around California's ports would encourage leveraging of funds which could increase the return on monies invested.

*Double referral:* This bill passed out of the Assembly Natural Resources Committee on April 13, 2015, with a 9-0 vote.

*Related legislation:* AB 1074 (C. Garcia) would, among other things, fund the development of an integrated strategy for alternative refueling infrastructure. AB 1074 passed out of this committee on April 13, 2015, with a 16-0 vote and is awaiting a hearing in the Assembly Appropriations Committee.

AB 1176 (Perea) would, among other things, establish the Advanced Low-Carbon Diesel Fuels Access Program, administered by ARB to reduce GHG emissions of diesel motor vehicles by providing funding for projects that expand advanced low-carbon diesel fueling infrastructure. AB 1176 is scheduled to be heard by this committee on April 27, 2015.

AB 904 (Perea) would establish the Clean Reused Vehicle Rebate Project to provide purchase incentives for clean, used zero- and near-zero emission light-duty vehicles. AB 904 is scheduled to be heard by this committee on April 27, 2015.

*Previous legislation:* SB 1204 (Lara), Chapter 524, Statutes of 2014, created the California Clean Truck, Bus, and Off-Road Vehicle and Equipment Technology Program to fund development, demonstration, and early commercial deployment of zero- and near-zero-emission

truck, bus, and off-road vehicle and equipment technologies from cap-and-trade Greenhouse Gas Reduction Fund.

AB 1532 (John A. Pérez), Chapter 807, Statutes of 2012, among other things, established the GGRF Investment Plan and Communities Revitalization Act to set procedures for the investment of GHG allowance auction revenues and authorized a range of GHG reduction investments.

SB 535 (De Leon), Chapter 830, Statutes of 2012, required the GGRF investment plan to allocate a minimum of 25 percent of the available moneys to projects that provide benefits to identified disadvantaged communities and a minimum of 10% of the available moneys to projects located within identified disadvantaged communities.

AB 32 (Nunez), Chapter 488, Statutes of 2006, created the California Global Warming Solutions Act of 2006 and required ARB to adopt GHG reduction measures to ensure that statewide emissions are reduced to 1990 levels by 2020.

**REGISTERED SUPPORT / OPPOSITION:**

**Support**

Pacific Marine Shipping Association (sponsor)  
California Infill Builders Federation  
South Coast Air Quality Management District

**Opposition**

None on file

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