



## WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

The goal of the Collaborative is to leverage federal funds to strategically reduce emissions from the most polluting diesel sources in impacted communities. The Collaborative seeks to improve air quality and public health by targeting the highest polluting engines with the most cost effective control strategies.

## DERA 2013: Electric & Natural Gas School Buses in Southern California

The West Coast Collaborative (WCC) is pleased to announce the South Coast Air Quality Management District's (SCAQMD's) receipt of a United States Environmental Protection Agency (US EPA) Diesel Emissions Reduction Act (DERA) National Clean Diesel Funding Assistance Program grant to replace heavy-duty diesel school buses. This project will be implemented using \$502,240 in DERA grant funding combined with \$2,211,341 in matching funds from SCAQMD, \$300,000 from the California Air Resources Board (CARB), \$175,185 from participating school districts, and \$63,448 from the Clinton Global Initiative (CGI).

### What is the project?

This project will replace 13 model year 1990-2001 heavy-duty diesel school buses with 5 zero tailpipe emission battery-electric buses (3 new and 2 repower), and 8 model year 2015 compressed natural gas (CNG) buses. Project vehicles will be selected from school bus fleets operating in San Bernardino, Long Beach and Los Angeles' Boyle Heights area.

### Why is this project important?

This project's primary objective is to improve the environmental health of children by partnering with local school districts to replace legacy heavy-duty diesel school bus buses with low and zero emission alternative fuel buses. The project will reduce emissions in communities disproportionately affected by diesel exhaust and poor air quality. Exposure to diesel exhaust has been associated with decreased lung function and retarded lung development and can also exacerbate the symptoms of asthma, bronchitis and pneumonia. This project will reduce children's exposure to diesel emissions as well as the negative health effects associated with exposure.

### What are the environmental benefits?

Over the remaining lifetime of the 13 affected engines, these upgrades are estimated to reduce emissions of nitrogen oxides (NOx) by 17.6 tons, fine particulate matter (PM2.5) by 1.2 tons, hydrocarbons (HC) by 1.9 tons, carbon monoxide (CO) by 4.1 tons, and carbon dioxide (CO<sub>2</sub>) by 841 tons. Additionally, the reduction of PM2.5 emissions will also reduce black carbon (BC), which influences climate by directly absorbing light, reducing the reflectivity ("albedo") of snow and ice through deposition, and interacting with clouds. The project will also conserve nearly 18,000 gallons of diesel fuel annually.

### Who are the partners on this project?

The project will be led by SCAQMD, the regional air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties of California; in partnership with the participating school districts. SCAQMD received the DERA grant award through the WCC, and will distribute funds to participating school districts. CARB will contribute funding for battery-electric bus replacements via its Hybrid & Zero-Emission Truck & Bus Voucher Incentive Project (HVIP), school districts will provide matching funds for CNG bus replacements, and CGI will provide funding to support diesel-to-electric bus repowers. SCAQMD will be responsible for data monitoring and reporting for the project.

### What is the Collaborative?

The WCC is an ambitious partnership between leaders from federal, state, local and tribal government, the private sector, and environmental groups committed to reducing diesel emissions along the West Coast. Partners come from all over Western North America, including Alaska, Arizona, California, Hawaii, Idaho, Nevada, Oregon, Washington, the Pacific Islands, Canada and Mexico. The WCC is part of the US EPA National Clean Diesel Campaign ([www.epa.gov/cleandiesel](http://www.epa.gov/cleandiesel)).

### How can I find out more information?

For more information on this project, please contact John Mikulin at US EPA ([mikulin.john@epa.gov](mailto:mikulin.john@epa.gov) / 415-972-3956). For more information on the WCC, please visit our website. [www.westcoastcollaborative.org](http://www.westcoastcollaborative.org)