



## WEST COAST COLLABORATIVE

A public-private partnership to reduce diesel emissions

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

# Diesel and the Economy

Every day millions of diesel-powered vehicles busily move consumer goods and raw materials from ports, distribution centers and rail yards to stores and industrial facilities throughout our country. Ships, trains, and trucks are just a few of diesel engines that power commerce in the US and abroad. One hundred percent of all river barges, freight railroad cars and ocean-going transport ships are powered by diesel, as are the overwhelming majority of trucks and trains.

Diesel-powered equipment is also a major part of the supply chain that moves crops from the farm to the dinner table. Diesel-powered farm tractors, combines, and irrigation pumps are just a few examples of the types of equipment that literally drive one of the most important industries in our national economy. Diesel engines are unmatched in their reliability, durability, fuel efficiency and mobility. As a result, 89 percent of all agricultural trucks are powered by diesel.<sup>1</sup>

Diesel engines fuel national job growth, and they encourage greater productivity:

- According to the consulting firm Global Insights, exponential growth in U.S. imports (by 176 percent) and exports (by 248 percent) between 2002 and 2020—will encourage concurrent growth for diesel-powered equipment operators.<sup>2</sup>
- The value of two-way trade at the Los Angeles Customs District—which includes the busiest cargo container port in the nation—increased by approximately 12.4 percent to \$264.2 billion in 2004, according to the Los Angeles Economic

Development Corporation. This translates to an additional 404,600 jobs in 2004.<sup>3</sup>

The economically productive role of diesel engines in our national economy, however, comes with their emissions' harmful effects on human health. Emissions from diesel engines found in trucks, ships, locomotives, agricultural and construction equipment—especially the microscopic soot known as “particulate matter” (PM)—create serious health problems for adults and have extremely harmful effects on children and the elderly. Children are especially adversely affected by diesel emissions because their respiratory systems are still developing; and they have a faster breathing rate. Public health authorities associate exposure to PM with an increased risk of premature death, greater number of hospital admissions for heart and lung disease, and amplified adverse respiratory symptoms such as asthma. Long-term exposure to diesel exhaust may pose a lung cancer hazard to humans.

Diesel emissions from port-related goods movement are a significant and growing contributor to regional air pollution. In the Los Angeles region, the emissions resulting from trade through the Ports of Los Angeles and Long Beach will account for about 25 percent of the diesel particulate matter emissions in 2005, according to the Business, Transportation and Housing Agency and the California Environmental Protection Agency. A tripling in trade at the Ports of Los Angeles and Long Beach by 2020 would result in about a 50 percent increase and a 60 percent increase in diesel PM emissions from current levels, unless new pollution-control efforts are instituted.<sup>4</sup>

Failure to bring port-related pollution under control could have significant adverse economic impacts, including increased health-care and lost-productivity costs and disqualification from billions of dollars in federal transportation project funding. For instance, according to a 1998 study by the Asthma and Allergy Foundation of America, hospitalizations and medications for asthma patients

<sup>1</sup> Diesel Technology Forum website:

<http://www.dieselforum.org/background/agricultureapplications.html>

<sup>2</sup> “Goods Movement Action Plan. Phase I: Foundations,” Business, Transportation and Housing Agency and California Environmental Protection Agency, March 2005, p VI-1.

<sup>3</sup> Los Angeles Economic Development Corporation. [www.laedc.info](http://www.laedc.info).

<sup>4</sup> “Goods Movement Action Plan. Phase I: Foundations,” Business, Transportation and Housing Agency and California Environmental Protection Agency, March 2005, p VI-1.

affected by polluted air cost California taxpayers more than \$1.3 billion.<sup>5</sup>

A balance must be sought between the economic benefits of diesel engines and their extremely harmful health impacts. The West Coast Collaborative is funding projects that allow economic growth to continue, jobs to be created and communities to breathe cleaner air.

Some examples of recent West Coast Collaborative projects include:

#### ***Clean Fuel for Bridge Construction project***

EPA has awarded an \$80,000 grant to the Lane Regional Air Pollution Authority in conjunction with the Oregon Department of Transportation and the Oregon Bridge Development Partners. These agencies will provide a 5 cent-per-gallon fuel subsidy to heavy construction contractors in the private sector to encourage use of ultra-low sulfur diesel (ULSD). Through this grant, the sulfur content of the fuel used in bridge projects will be reduced from 5,000 parts per million (ppm) to 15 ppm, exceeding the 2006 non-road diesel fuel sulfur standard of 500 ppm. In addition, the project will replace 1.2 million gallons of non-road diesel fuel with ULSD fuel.

#### ***San Francisco Bay CLEARING program***

A \$100,000 EPA grant will enable the Port of San Francisco to provide monetary incentives for cruise ships to burn cleaner, lower sulfur fuels while they are docked at the port. These subsidies reduce the cost of the lower-sulfur fuels for the cruise ship companies through lower overall fees while their ships are docked in San Francisco. It is estimated that the project will reduce sulfur oxide emissions by nearly 39 tons as well as reduce particulate matter emissions by over 1,000 lbs per year.

#### **About the Collaborative**

The West Coast Collaborative (Collaborative) is an ambitious partnership between leaders from federal, state, and local government, the private sector, and environmental groups in California, Arizona, Oregon, Idaho, Washington, Alaska, Canada and Mexico committed to reducing diesel emissions along the West Coast. Part of the National Clean Diesel Campaign, the Collaborative's members create, support and implement diesel emissions reductions projects that are regional in scope, leverage funds from a variety of sources, achieve measurable emissions reductions, and build momentum for future diesel emissions mitigation efforts.

For more information about the West Coast Collaborative, visit our website at <http://www.westcoastcollaborative.org>.

---

<sup>5</sup> "Recent Research Findings: Health Effects of Particulate Matter and Ozone Air Pollution," California Air Resources Board and American Lung Association, January 2004, <http://www.arb.ca.gov/research/health/fs/PM-03fs.pdf>.