

FUEL AND VEHICLE STANDARDS.
GLOBAL SULPHUR STRATEGY.
SOOT-FREE BUSES.

CCAC HEAVY-DUTY DIESEL VEHICLES AND ENGINES INITIATIVE

WHY DRIVE DOWN BLACK CARBON FROM DIESEL VEHICLES AND ENGINES?

Eliminating black carbon emissions from new and existing heavy-duty diesel vehicles and engines benefits air quality and health and helps address near-term warming. Moreover, vehicle and fuel improvements generate fuel efficiency benefits, with lower operating cost for users, and additional CO₂ reductions from lower fossil fuel consumption.

To achieve maximum benefits low-sulphur fuels, improved engine technologies and after-treatment devices need to be combined. This is why it is critical to improve both, fuel quality and vehicle emission standards, and enforce vehicle inspection and maintenance programmes. For example, urban buses provide effective and affordable transport services to citizens, but they account for some 25% of transportation-related black carbon emissions. Only few developing countries have appropriate emission limits for buses in place.

Many cities around the world are facing air pollution peaks, and the number of early deaths from PM_{2.5} is estimated to increase by over 50 % by 2030 from 2015 levels. Introducing low and ultra-low sulphur fuels along with equivalent vehicle emission standards would reduce cumulative black carbon emissions by 7.1 million tonnes by 2050, and annual PM_{2.5} emissions by over 85%, resulting in 100,000 fewer yearly premature deaths in 2020, and 470,000 in 2050, and net climate benefits equivalent to preventing 14 trillion miles of travel by passenger vehicles.



**CLIMATE &
CLEAN AIR
COALITION**
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

WHO WE ARE

The Climate and Clean Air Initiative (CCAC) Heavy-Duty Diesel Vehicles and Engines Initiative (HDDI) brings together national and local governments, NGOs and industry to reduce black carbon emissions from heavy-duty vehicles and engines. In addition to workstreams to support regional and national fuel and vehicle standards, a Global Strategy to Introduce Low Sulphur Fuels and Clean Diesel Vehicles, and soot-free buses, the initiative supports a Global Green Freight Action Plan and programmes for the ports and marine sector.

WHAT WE OFFER

- Support to regional and national regulatory processes to develop fuel quality and vehicle emission standards, including development of action plans, cost-benefit analysis of the introduction of low-sulphur fuels and filter forcing emission standards, guidance for vehicle replacement programmes, and strategies for different market categories of countries and regions, including market and refinery investment baseline surveys.
- Support to cities to accelerate the transition of diesel urban bus fleets towards soot-free engine technologies, including baseline assessment of urban bus fleets, identification of barriers to clean bus deployment, and identification of funding opportunities in cooperation with the CCAC Black Carbon Finance Study Group.
- Partnership with the private sector.

GLOBAL ADOPTION OF
EURO VI STANDARDS COULD
AVOID 300 - 700 THOUSAND
PREMATURE DEATHS IN 2030.



“ The proposed modification to our heavy-duty diesel emission standard NOM-044 alongside with the introduction of ultralow-sulphur fuel nationwide is expected to avert 6,800 premature deaths from exposure to PM2.5 in urban areas, reduce dramatically incidents from cardio- and pulmonary disorders, prevent 17,000 tonnes of black carbon and the equivalent of 54 million tons of CO2 by 2037. ”

Rodolfo Lacy Tamayo, Undersecretary for Environmental Policy and Planning Ministry of Environment and Natural Resources, Mexico

AMBITIONS

Virtually eliminate fine particle and black carbon emissions from new and existing heavy-duty diesel vehicles and engines by introducing low sulphur fuels, vehicle emission standards, and measures such as green freight programs that address existing vehicles.

- Reach 50 ppm sulphur in fuels globally by 2025, and 10 ppm by 2030, while supporting the introduction of vehicle emission standards to cover the two-thirds of new heavy-duty diesel vehicles that are not yet subject to world-class emission standards.

PARTNERS, ACTORS AND LOCATIONS OF ACTIVITIES

Governments, civil society and the industry are invited to join. City governments interested in the Soot Free Urban Bus Fleets project are encouraged to contact the CCAC Secretariat.



● **Location of activities:** Latin America, Indonesia, East Africa, Mexico, China. Sulphur and Green Freight Strategies are global. Arctic Region, Western and Southern Africa.

Lead Partners: Canada, Switzerland, United State, ICCT, and UNEP.

Initiative Partners: Bangladesh, Chile, Colombia, Ethiopia, Mexico, Peru, Sweden, Natural Resources Defense Council, Clean Air Initiative for Asian Cities; Molina Center, Centro Mario Molina Chile (CMMCh), and CEGESTI.

ABOUT THE CCAC

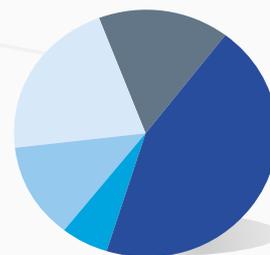
The Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC) is a voluntary global partnership of governments, intergovernmental organizations, business, scientific institutions and civil society committed to catalysing concrete, substantial action to reduce SLCPs (including methane, black carbon and many hydrofluorocarbons). The Coalition works through collaborative initiatives to raise awareness, mobilise resources, and lead transformative actions in key emitting sectors.

- Have 20 cities commit to introduce soot-free buses by 2016; and, by 2017, serve as a technical resource in partnership with soot-free bus manufacturers to cities transforming their bus fleets.

RESULTS SO FAR

- Development of More stringent Fuel and/or vehicle emission standards at the regional and national levels, including in Barbados, China, Colombia, Indonesia, Mexico, Panama, Uruguay, and East Africa (Burundi, Kenya, Rwanda, Tanzania, and Uganda);
- Up-grades of bus standards were fast-tracked in Lima/Peru and Santiago/Chile;
- Indonesia's state-owned Pertamina signed contracts to upgrade 5 of its refineries to produce 50 ppm fuels (down from 500 ppm)
- Guidance on vehicle replacement programmes;
- Cost-benefit analysis of the introduction of low-sulphur fuels and filter forcing emission standards;
- Global Strategy to Introduce Low Sulfur Fuels and Clean Diesel Vehicles that caters for different markets (fuel importers, in need of refinery upgrades).

FUNDING



Total approved funding from the CCAC Trust Fund:

USD 5,649,310

Emissions Standards	USD 2,519,140
Bus Fleets	USD 899,960
Ports/Marine	USD 1,200,790
Green Freight	USD 704,350
Global Sulphur Strategy	USD 325,000

Note: The HDDI has two other workstreams, on green freight and ports that are covered separately, but reflected in this budget.



MORE INFORMATION

www.ccacoalition.org/en/initiatives/diesel

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