



CLIMATE AND CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS

Heavy-Duty Diesel Initiative

Lead Partners: United States, Canada, United Nations
Environment Program, International Council on Clean
Transportation

<http://www.unep.org/ccac>

Background

- At the 68th GRPE the expert from Sweden reported about the diesel initiative under Climate and Clean Air Coalition.
- From the report from the 68th GRPE meeting concludes that “... ***GRPE also welcomed the proposal of the expert from Sweden to present the activities of the Climate and Clean Air Coalition (CCAC), ... in the next GRPE session***”
- This presentation is prepared by UNEP and presented by Sweden as a CCAC Partner and Co-Chair of the CCAC Working Group.

The **Climate and Clean Air Coalition** to Reduce Short- Lived Climate Pollutants (CCAC) is the **first global effort to treat short-lived climate pollutants.**



- Founded in 2011 by Todd Stern, U.S. Climate Envoy; Achim Steiner, UNEP; Mexican Environment Minister Juan Rafael Elvira; Canadian Environment Minister Peter Kent; U.S. Secretary of State Hillary Clinton; U.S. EPA Administrator Lisa Jackson; Bangladesh Environment Minister Hasan Mahmud; Swedish Environment Minister Lena Ek; Ghanian Ambassador to the USA, Daniel Ohene Agyekum (Photo courtesy U.S. State Dept. 2011)

- The Coalition's initial focus: methane, black carbon, and HFCs
- Action on short-lived climate pollutants must **complement, not replace**, global action to reduce CO₂
- Black carbon, methane HFCs are responsible for a substantial fraction of current global warming, large impacts in urban areas, the Arctic, and have harmful health and environmental impacts
- The Coalition's objectives are to address short-lived climate pollutants by:
 - Raising awareness on impacts and mitigation strategies
 - Enhancing and developing new national and regional actions and mobilizing support
 - Promoting best practices
 - Improving scientific understanding of short-lived climate pollutant impacts and mitigation strategies

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39 state + 53 non-state partners, 10 initiatives

- **Reducing Black Carbon Emissions from Heavy Duty Diesel Vehicles and Engines**
- Mitigating Black Carbon and Other Pollutants From Brick Production
- Mitigating SLCPs from the Municipal Solid Waste Sector
- Promoting HFC Alternative Technology and Standards
- Accelerating Methane and Black Carbon Reductions from Oil and Natural Gas Production
- Addressing SLCPs from Agriculture
- Reducing SLCPs from Household Cooking and Domestic Heating
- Financing of SLCP mitigation
- Supporting National Planning for action on SLCPs (SNAP)
- Regional Assessments of SLCPs

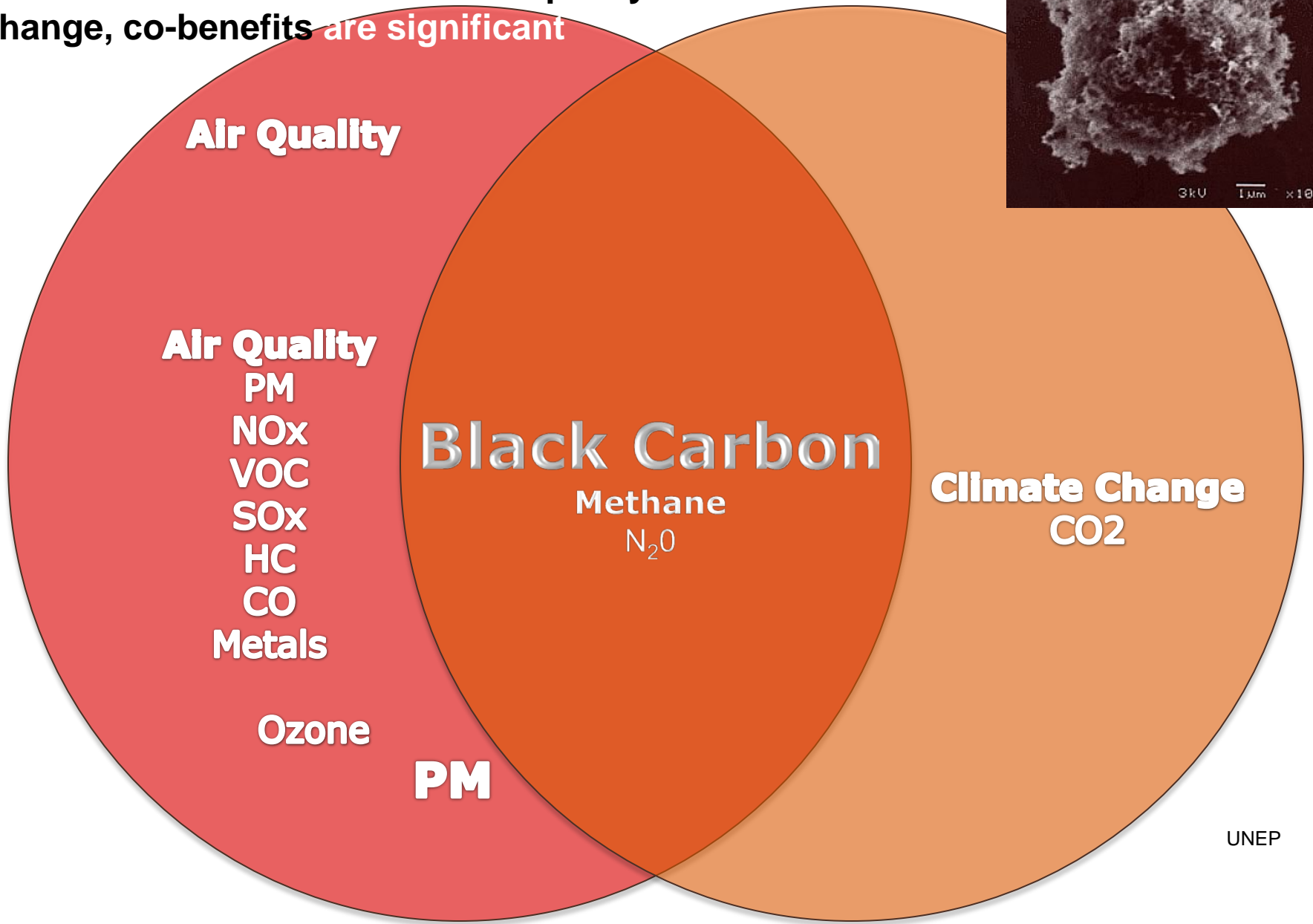
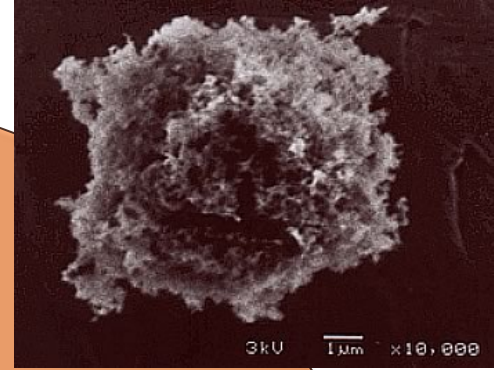
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|  Colombia |  Nigeria |
|  Cote d'Ivoire |  Norway |
|  Denmark |  Peru |
|  Dominican Republic |  Poland |
|  Ethiopia |  Republic of Korea |
|  Finland |  Republic of Maldives |
|  France |  Russian Federation |
|  Germany |  Sweden |
|  Ghana |  Switzerland |
|  Ireland |  Togo |
|  Israel |  United Kingdom |
|  Italy |  United States of America |
|  Japan |  The European Commission |
|  Liberia | |

Initiative: Reducing Black Carbon Emissions from Heavy Duty Diesel Vehicles and Engines

- Works to reduce the climate and health impacts of black carbon and particulate matter (PM) emissions in the transport sector
- An estimated **19%** of global black carbon emissions from transportation sector
- Heavy duty diesels are a major source of fine PM emissions (PM 2.5 or less)
- These particles are responsible for 3.2 million early deaths worldwide per year
- On vehicles without a diesel particulate filter, BC accounts for **50-80 per cent** of PM



Black Carbon at the nexus of air quality and climate change, co-benefits are significant



Fuel Quality/Emission Controls

Fuel Economy

UNEP

- By eliminating barriers to adoption of cleaner vehicle and fuel standards globally, potential for:
 - ❑ reduction of 2.7 million metric tons of fine particles
 - ❑ 1.9 metric tons of black carbon emissions from heavy-duty vehicles globally
 - ❑ up to 1.4 million fewer cases of premature deaths
- Potential black carbon savings equivalent to 6.1 gigatonnes CO₂-equivalent with a 20-year global warming potential

Heavy-duty Diesel Initiative: Structure and Work

- **Co-leads:** US, Canada, ICCT and UNEP
- **Partners:** Mario Molina Center Chile, Smart Freight Center, Clean Air Asia, Natural Resources Defense Council
- **Objective:** To virtually eliminate fine particles and black carbon emissions from new and existing heavy duty diesel vehicles and engines (including marine vessels) by:
 - Steadily reducing sulfur in diesel fuel...
 - Establishing more stringent emission standards with interested nations and parties...
 - Cleaning up existing fleets...
 - Cleaning up ports and marine transport
 - And developing a global Green Freight initiative

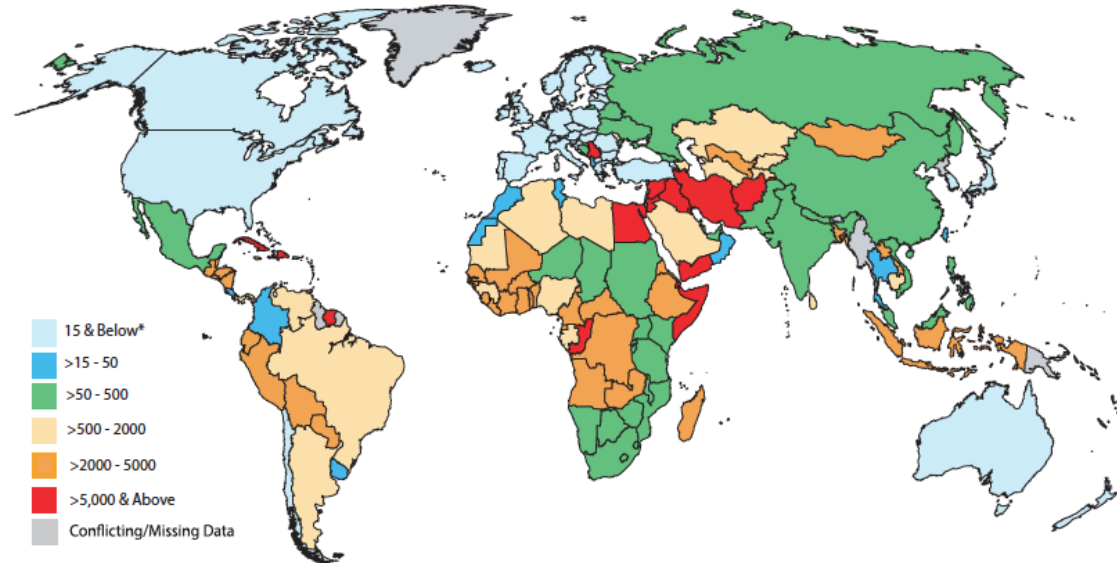
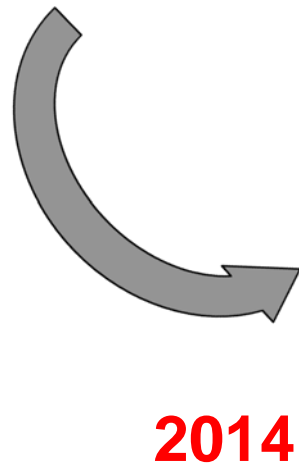
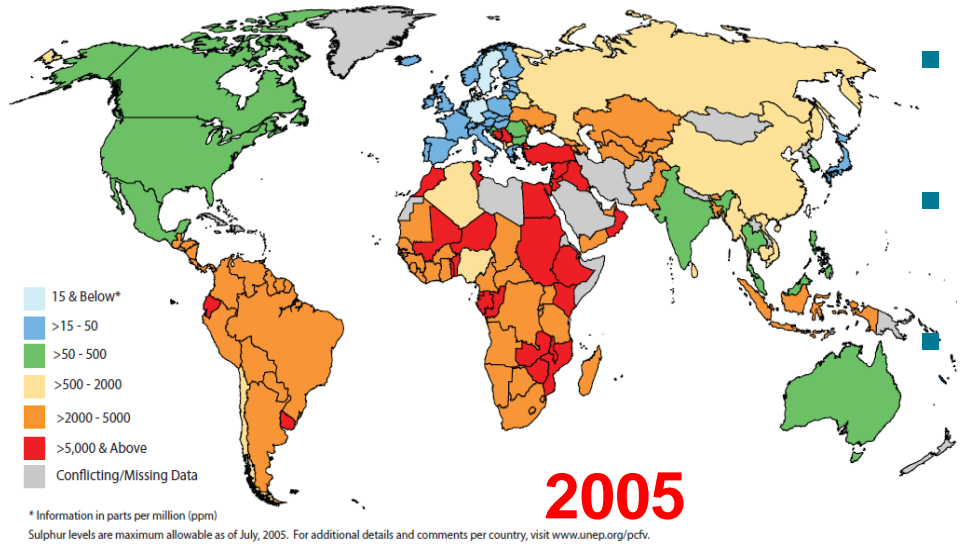
- **Current HDD activities funded by CCAC:**
 - **National and Regional Programs:** East, West, Southern Africa; Asia; Latin America; Indonesia; Mexico; China; Arctic
 - **Global Strategies:** Low Sulfur Fuel and Green Freight
 - **Marine Vessel and Ports Project:**
 - Jakarta, Indonesia
 - Chittagong, Bangladesh
 - Aqaba, Jordan
 - Valparaiso, Chile
 - Tema, Ghana
 - **CCAC financial support to date: \$3.5 million + co-funding from co-leads**

- Regional and country level
 - LAC
 - Chile, Peru, Mexico
 - Regional action plan
 - Africa
 - East Africa
 - Regional action plan
 - Asia
 - Indonesia, China, Vietnam, Bangladesh
 - ASEAN sub-regional action plan
- Global
 - Green Freight
 - Green Ports
 - Global Financing and Markets Sulphur strategy
- **First results:** countries adopt clean diesel strategies and standards; global recognition of problem – health & climate; development of global programs

Regional and National Implementation Case Studies: East Africa, Latin America

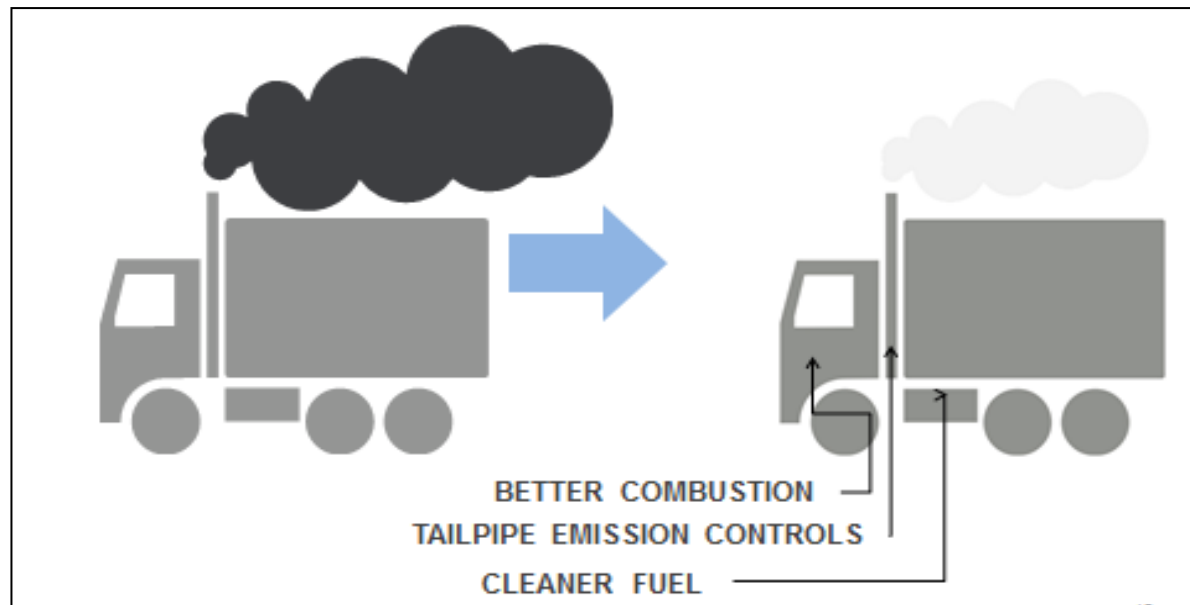
Countries World-Wide are Introducing Low Sulfur Diesel

- Major improvements in all regions
 - First developing countries with ULSD
- But much to be done and need to speed up



Clean Diesel Latin America, 2013 - 2015

- Development of HDD emission standards, Chile
- Black Carbon Inventory, Chile
- Clean Diesel Strategy, Peru
- Regional fuel quality and diesel standards harmonization through Latin America Environmental Ministers Forum
- Diesel filter demonstration, retrofits in Lima, Montevideo, Santiago de Chile



HDD Initiative Plans 2014 +

- Expand CCAC developing country membership in all regions, especially East Europe
- Complete low sulfur fuels transition: West Africa, Southern Africa
- Low sulfur adoption in Mexico City, Beijing
- Diesel retrofits programs in Latin America: Mexico City, Lima, Montevideo, Santiago de Chile
- Expand ports work in Asia, Africa, Latin America



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THANK YOU!

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