



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

# The opportunity for rapid action on near term climate change & air quality



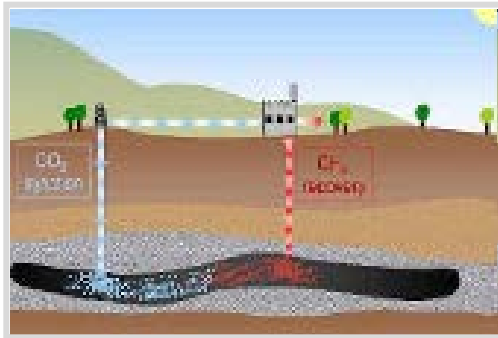
European  
Commission

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## Compelling scientific evidence:

- SLCPs, including BC and methane, are responsible for a substantial fraction of near-term climate change
- BC (soot), methane and tropospheric ozone (smog) are air pollutants with detrimental impacts on public health, agriculture and ecosystems
- Mitigating SLCPs brings multiple benefits to support climate, health/air pollution and development agendas.





**Methane**

- Degasification, recovery and use
- Recovery from municipal waste & wastewater treatment
- Reduce emissions from agriculture



**Black carbon**

- Improve stoves (biomass to LPG/biogas, wood to pellet)
- Upgrade brick kilns
- Use particle filters for diesel vehicles

**16 'win-win' measures:**

≈- 40% methane, ≈- 80% BC in 2030 (rel. to BAU)

No technical breakthroughs

Already implemented in many countries

Half reductions at low cost or cost-neutral

- Voluntary, Partner-led effort bringing together diverse governments, IGOs, NGOs and private sector entities to leverage high-level engagement and action
- Launched by 6 countries and UNEP in February 2012:
- Now has 61 Partners (32 State; 29 Non-State) – including the EC
- All Partners have endorsed meaningful action to address SLCPs
- 9 Initiatives for rapid implementation
- Complementary to global efforts to reduce CO<sub>2</sub>, in particular under UNFCCC



Reducing BC Emissions from Heavy Duty Diesel Vehicles and Engines

Mitigating SLCPs from the Municipal Solid Waste Sector

Mitigating BC and Other Pollutants from Brick Production

Promoting HFC Alternative Technology and Standards

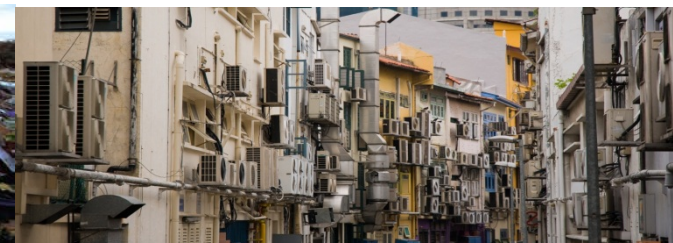
Accelerating Methane And BC Reductions From Oil And Natural Gas Production

Reducing SLCP Emissions from Household Cooking and Domestic Heating

Financing Mitigation of SLCPs

Supporting National Planning for Action on SLCPs (SNAP)

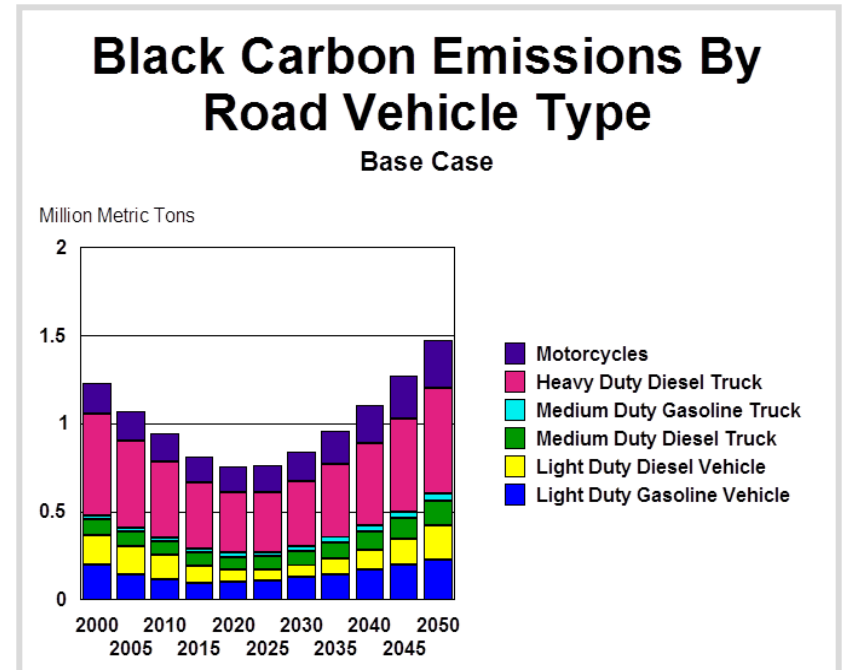
SLCPs Regional Assessments





# Heavy Duty Diesel Vehicles and Engines

- Nearly 1/5 of global BC emissions come from the transport sector, with a relatively large share coming from “super emitters”, heavy duty diesel vehicles.
- CCAC objectives:** Reduce BC/PM emissions within the freight transportation supply chain by engaging with the private sector; urban areas through the implementation of city action plans; and countries through the adoption of a range of measures for reducing sulphur in fuels and vehicle emissions.



(Michael Walsh, 2010)

## Municipal Solid Waste

- Landfills are the 3rd largest source of global anthropogenic CH<sub>4</sub> emissions and the practice of open garbage burning emits BC and other toxic compounds as well as GHG.
- **CCAC Objectives:** Reduce CH<sub>4</sub> and air pollution emissions across the MSW sector by convening and engaging key partners at the highest political levels and providing technical support and capacity building services to cities.



## Brick Production

- Brick kiln production is responsible for substantial air pollution in many developing country cities.
- **CCAC objectives:** Promote adoption of cleaner brick production technologies through technical assistance, cost-benefit analyses, awareness raising, capacity building and implementation of pilot projects.





- The oil and gas sector accounts for more than 20% of all anthropogenic emissions of CH<sub>4</sub> globally and is also a source of black carbon.
- **CCAC objectives:** Work with key companies and countries to design mechanisms and voluntary commitments to achieve substantial emission reductions from natural gas venting, leakage, and flaring.

## Oil and Natural Gas Production



## Household Cooking and Domestic Heating

- Recent study estimates that residential cooking and heating with solid fuels accounts for 20 % of the global BC emissions and latest burden of disease calculations show that there are over 3mn premature deaths due to indoor air pollution.
- **CCAC objective:** Create a high-level advocacy force, support for new finance mechanisms, new research, and development of standards and testing protocols for improved cookstoves, heatstoves and fuels.



## National Planning for Action on SLCPs

- Measures to mitigate SLCPs have been assessed at a global and regional level and now need to be incorporated into national policies and actions for large-scale implementation and impact.
- **CCAC Objectives:** Promote the integration of SLCPs into national planning frameworks and processes helping countries assess the scope of the SLCP issue, prioritize and mainstream policy options and measures and raising awareness.



## Financing Mitigation of SLCPs

- Multiple means of financing SLCP mitigation already exist but are not translating into high-enough levels of financial flows.
- **CCAC Objectives:** Work with governments, the private sector, donors, financial institutions, expert groups and investors' networks to address current knowledge gaps, barriers to financing of SLCP mitigation and identify existing and potential avenues and mechanisms to bolster financial flows toward SLCP reduction activities at the national and international scales.





# Regional Assessments of SLCPs

- Need to ensure that action on SLCPs is underpinned by a robust up-to-date assessment of relevant science.
- **CCAC objective:** Provide targeted scientific information needed by undertaking strategic assessments to support national planning and action and to accelerate and scale-up SLCP reductions .





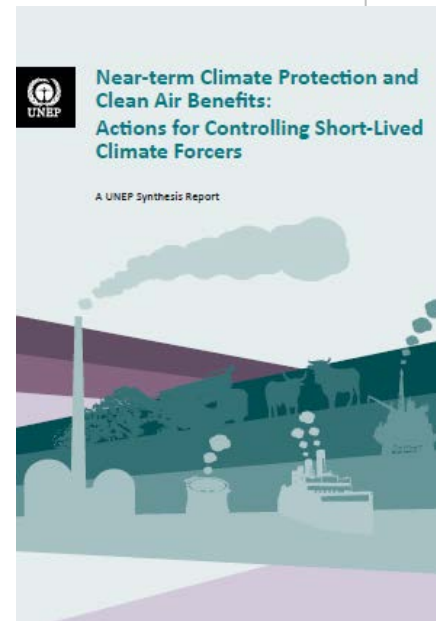
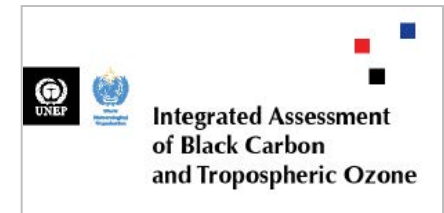
## CCAC Priorities 2013

- ❖ Increase broad based partnership in the CCAC
- ❖ Mainstream SLCP mitigation action in the health, agriculture and development communities
- ❖ Increase funding for SLCP mitigation including through MDBs, GEF and other sources
- ❖ Scale up the CCAC initiatives and deliver first results
- ❖ Promote, capture and learn from meaningful action of all Partner countries and institutions



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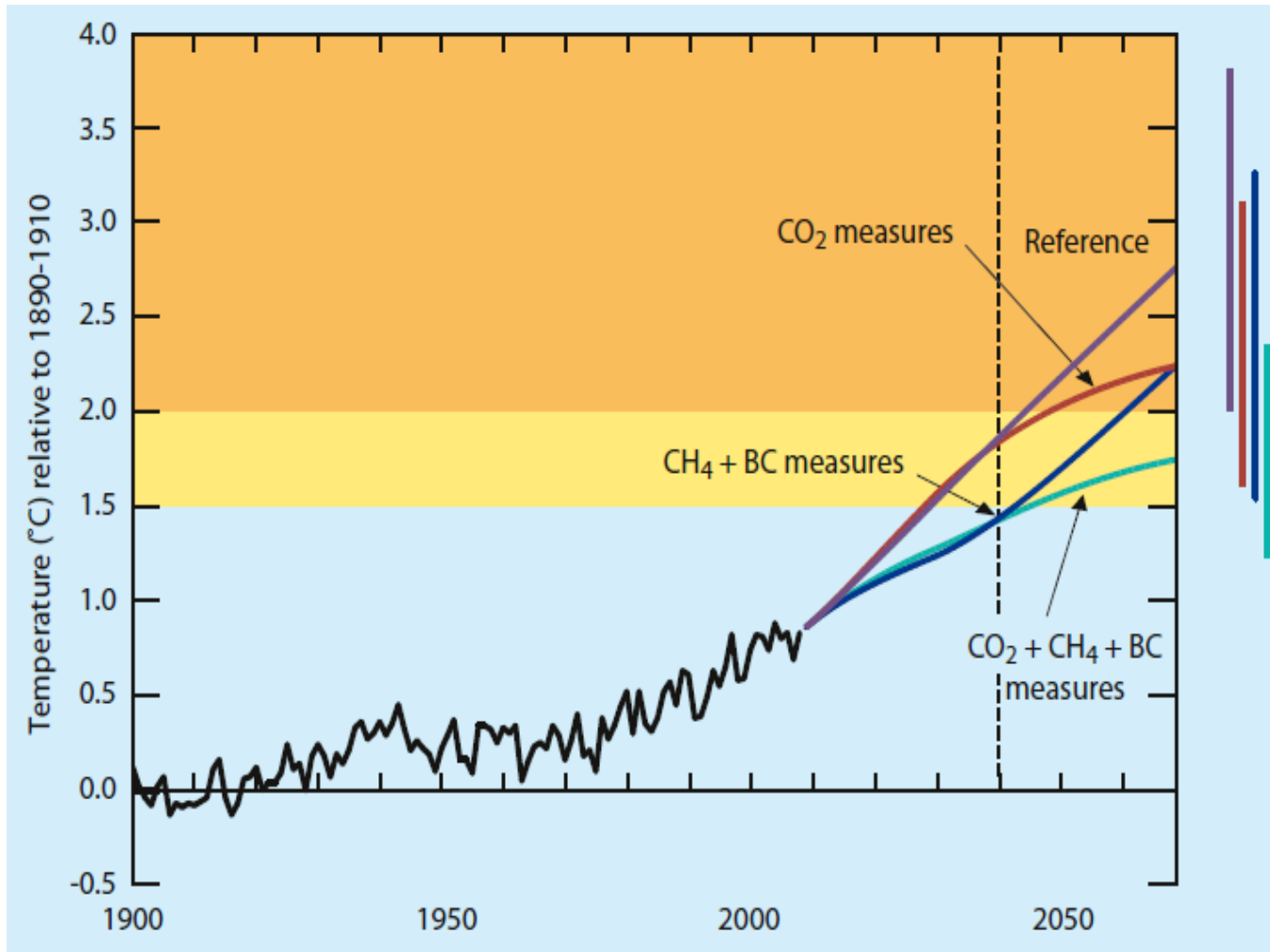




# Background Slides



# Complementing CO<sub>2</sub> actions



SLCP actions need to be complemented by deep and rapid cuts in CO<sub>2</sub> emissions if global mean temperature increase over the 21<sup>st</sup> Century is to be held below 2°C

# Imperative for action

## Health – SLCPs affect human health

- Household air pollution 3.5 million premature deaths annually
- Ambient outdoor particulate 3.2 million premature deaths annually

## Agriculture – SLCPs affect ecosystems

- Global annual yield losses due to ground level ozone exposure: 7-12% for wheat; 6-16% for soybean; 3-4% for rice; and 3-5% for maize

## Climate – SLCPs contribute to near term global and regional climate change

- SLCPs are responsible for a substantial fraction of the climate forcing experienced to date
- HFCs emissions are currently small but could rise to levels with an impact equal to nearly 20% of global CO<sub>2</sub> emissions by 2050
- BC and O<sub>3</sub> disturb rainfall and regional circulation patterns
- BC darkens snow and ice, exacerbating melting



## High Level Assembly

- High Level meeting of the Partners

## Working Group

- Oversees the activities of the Coalition

## Steering Committee

- Oversight support and recommendations to the Working Group and High Level Assembly

## Scientific Advisory Panel

- Keep abreast of changes in knowledge, respond to targeted questions, and inform policy discussions

## Secretariat

- Oversee and coordinate overall action, supports Partners and supports development and monitoring of initiatives
- Hosted by UNEP in Paris, also manages the Coalition Trust Fund