



**CLIMATE &
CLEAN AIR
COALITION**

TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

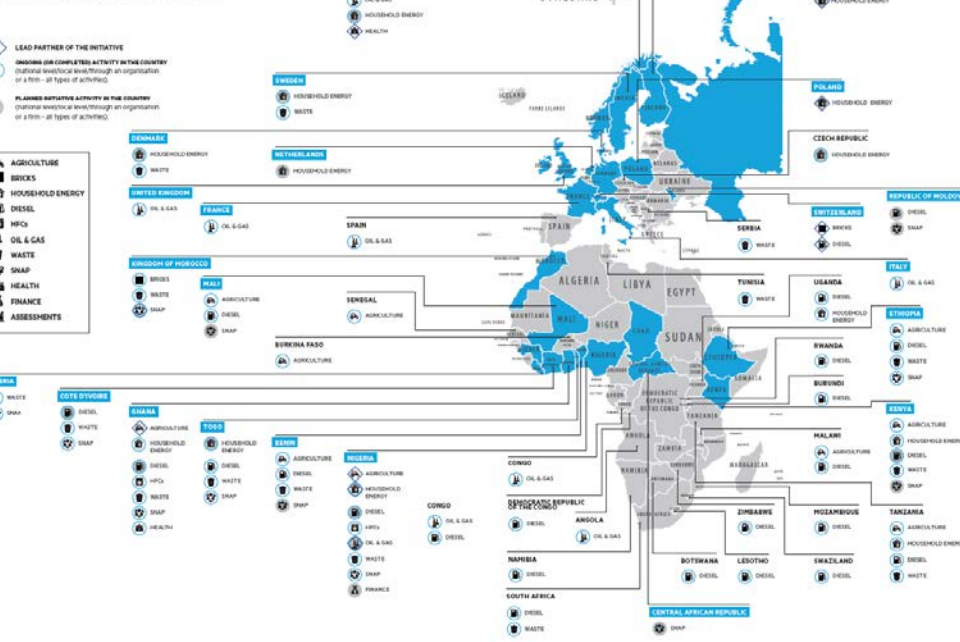
CCAC Initiatives

Nathan Borgford-Parnell

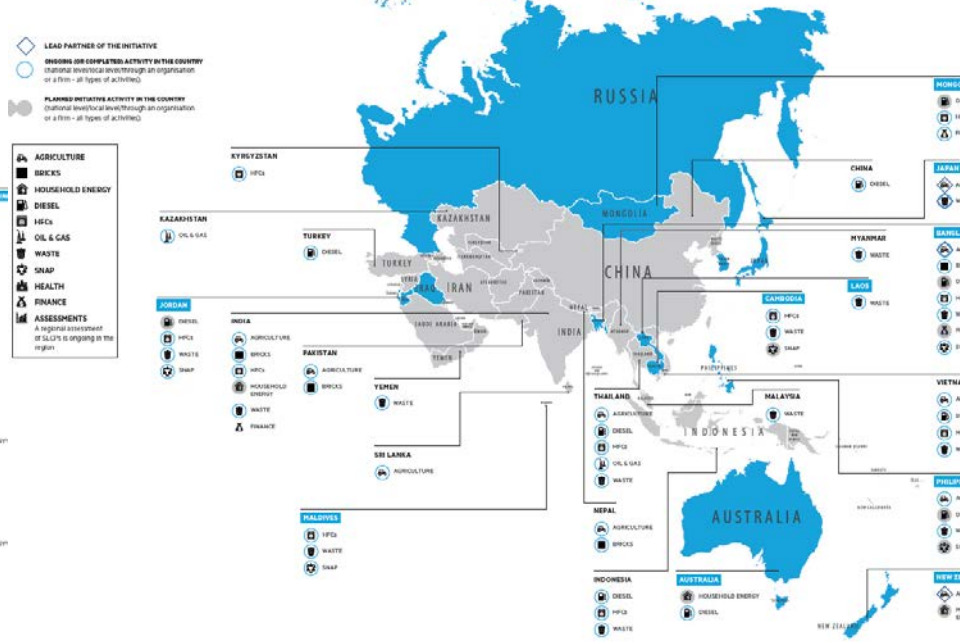
46th Session of the Task Force on Integrated Assessment Modeling (TFIAM)

Paris, France 02 May 2017

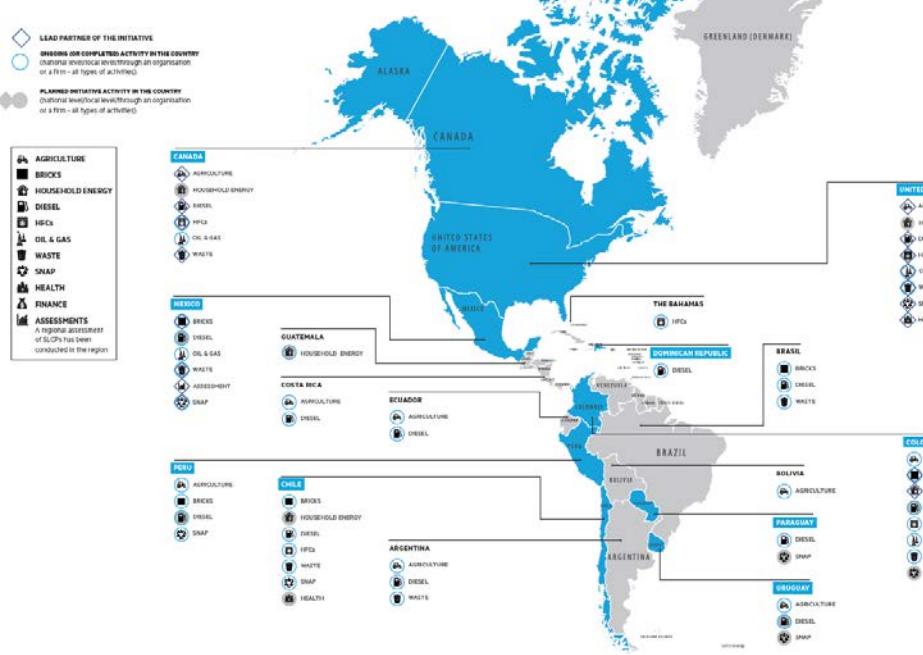
EUROPE AND AFRICA



ASIA AND THE PACIFIC



THE AMERICAS AND CARIBBEAN



TODAY

11 Initiatives

114 Partners

52 countries

17 IGOs

45 NGOs



7 Sectoral & 4 Cross-Cutting Initiatives



AGRICULTURE



BRICKS



COOKSTOVES



DIESEL



OIL & GAS



HFCs



WASTE



ASSESSMENTS



FINANCE



SNAP



URBAN HEALTH

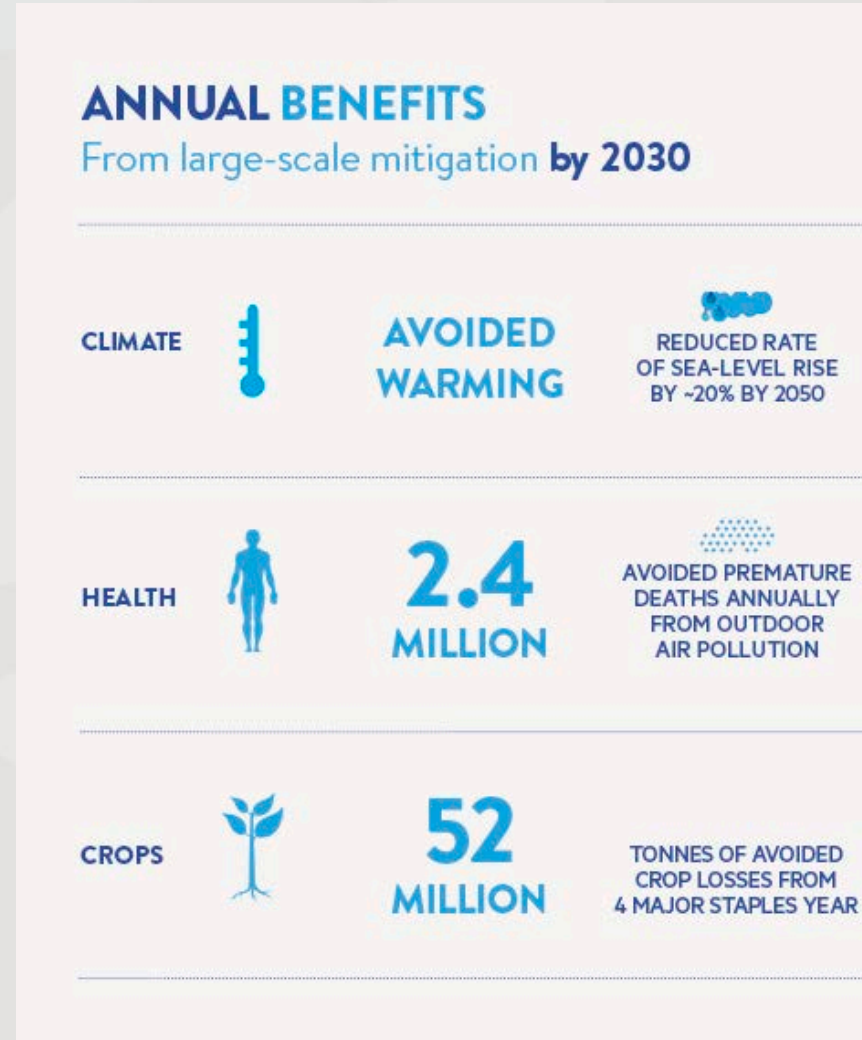


Key Strengths of the Coalition

High level political leadership - HLA providing political will for ambitious action

Robust scientific base - SAP guiding coalitions' actions and advancing knowledge on emissions, impacts and mitigation; advances on BC and co-pollutants. IPCC observer

Results-focused initiatives - awareness, information, assessments and guidance, helping showcase solutions and achieving policy shifts



5-Year Strategic Plan 2020

Key Objective

.....to assist in the development & implementation of policies, regulations and practices of Partners & stakeholders to deliver substantial SLCP reductions in the near- to medium-term.

“Partners in the CCAC demonstrate leadership by taking action on SLCPs both at home and internationally, and continuously measure and report the impact of its actions.”

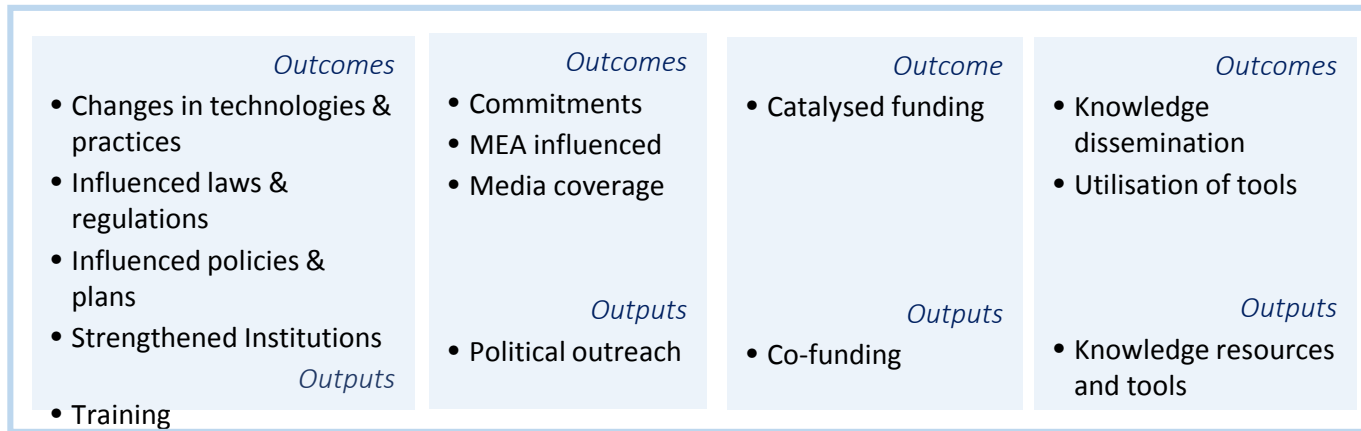
Key Strategies

1. Catalyse ambitious action
 2. Mobilise robust support
 3. Leverage finance
 4. Enhance science & knowledge
- Measure Impacts (indicators)

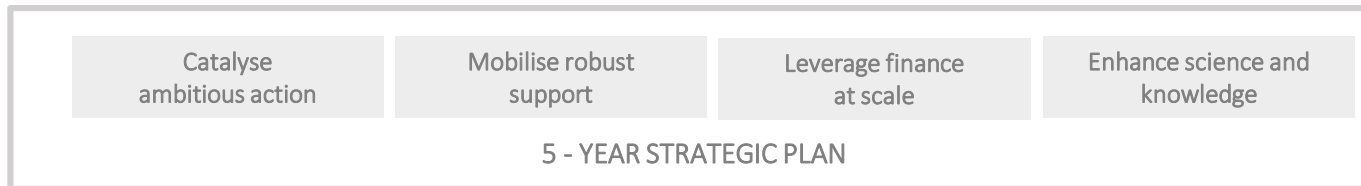
Demonstrating Impacts Framework

Health. Near term climate. Agriculture and ecosystem . Energy efficiency .
Changes in emissions

Demonstrating Impacts



Initiatives & other CCAC actions



A set of 19 standard indicators

⇒ Common currency to measure and track progress across all initiative and Partners

⇒ Common language to communicate on overall progress => headlines of our collective story



Impacts Indicators

5-Y Strategic Plan	Proposed Impact indicators
'Catalyse substantial SLCP emission reductions that will contribute to keeping global temperature rise below 2 degrees, improve air quality and achieve additional benefits'	<p>Quantitative qualification, supplemented with qualitative narratives, of projected and achieved:</p> <ul style="list-style-type: none">• Changes in emissions - for all relevant pollutants, present day and scenarios (through 2050)• Energy efficiency benefits - rate of improvement; energy input per output• Near term climate benefits – temperature and other climate benefits at a global, regional, and national scale• Health benefits – mortality, morbidity, DALYs• Agriculture and ecosystem benefits - agricultural productivity, food security

- Each initiative is responsible for specifying the detailed methodology used (choice left to initiative).
- Initiatives are invited to **coordinate SNAP** initiative (LEAP-IBC toolkit), especially on characterisation of emission factors, changes in emissions and energy efficiency to support impact quantification, help improve the SNAP toolkit and ensure compatibility across methodologies used.
- As per suggestion of MSW initiative during consultation, MSW initiative is also invited to report, as possible, on Job creation (in coordination with the cookstove initiative) and tons of waste avoided.

Science & Knowledge



HFCs



ASSESSMENTS



BRICKS



AGRICULTURE



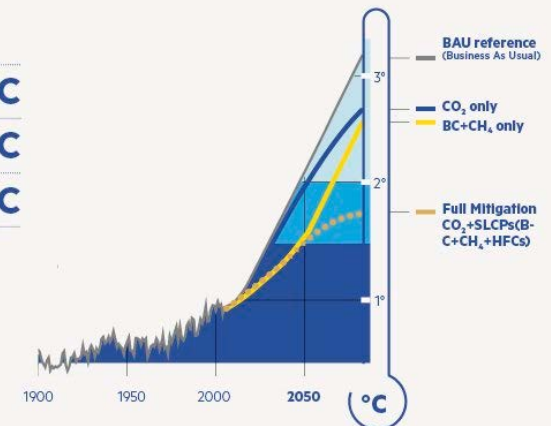
WASTE

- Regional Assessments
- Knowledge Platforms
- National Inventories
- Annual Science Update
- Science Policy Dialogue

SLCP CLIMATE BENEFITS

Avoided Global Warming by 2050

BC + CH ₄	0.5°C
HFCs	0.1°C
SLCPs	0.6°C



SIMULATED TEMPERATURE CHANGE UNDER VARIOUS MITIGATION SCENARIOS



Tools

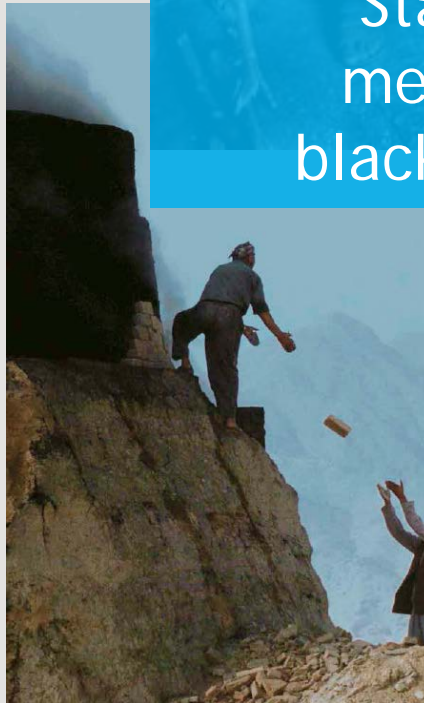


SNAP Emission Scenario and Benefit Assessment Toolkit to characterize national SLCP emissions & the potential benefits of mitigating

Standard protocol to measure efficiency & black carbon emissions



Global Open Burning Mapping updated monthly



A policy planning decision-support tool and Emission Quantification for solid waste management





Diesel Initiative

- 2016 Supported with ICCT, the globalization of the online Port Emission Inventory Tool (goPEIT)
- Developing with ICCT and SFC, a methodology for quantifying black carbon emissions from all major modes of freight transport.
- 2017 with ICCT study of black carbon measurement methods and emission factors from ships



Oil & Gas Initiative

Developed a series of 9 technical guidance documents for Partners in the Oil and Gas Methane Partnership (OGMP) with methodologies for quantifying methane emissions from specific core sources from O&G production operations



Climate Accounting, Measurement, Analysis (CLIAMA)

- Measurement instruments, RatNoze 1 and 2, have been delivered and deployed in India/Nepal (March 2016) and Colombia (August 2016) Measurements were done on kilns with and without stacks.
- The CLIAMA team has completed:
The Guidance Document (an overview of the challenges of measuring brick kilns, which includes a description of different ways that climate-relevant pollutants can be measured, including black carbon).

Sampling Protocol, which details how to conduct energy and emissions measurements.



Photo Credits:
Mountain Air Engineering





HFC Initiative

- In 2015 the HFC Initiative, with the help of UNDP, instigates national level inventories in 14 developing countries of current projected consumption of HFCs.
- 6 inventories completed in 2016: Bangladesh, Chile, Colombia, Ghana, Indonesia, and Nigeria.
- In 2016 the Montreal Protocol's Multilateral Fund made available funds for 129 additional inventories in developing countries using a standardized methodology.

CHART 8.4 Comparative sectoral breakdown of HFC consumption, five countries¹¹

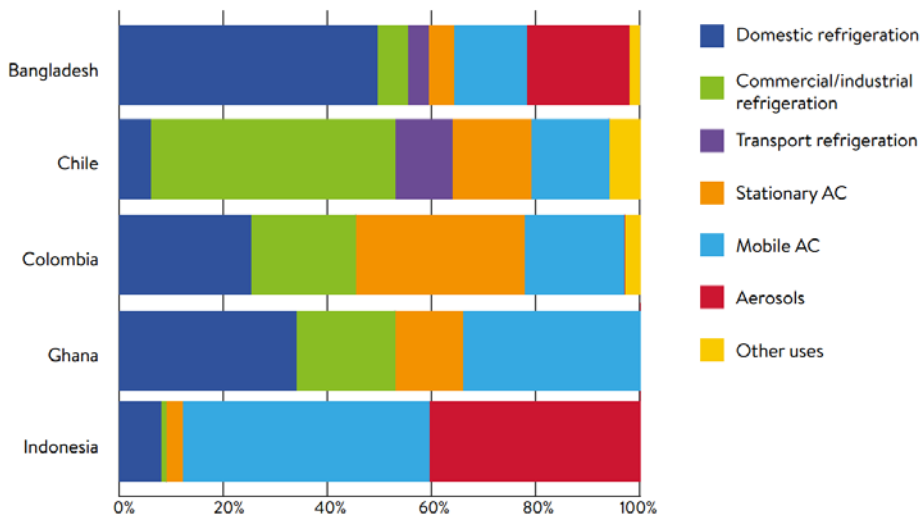
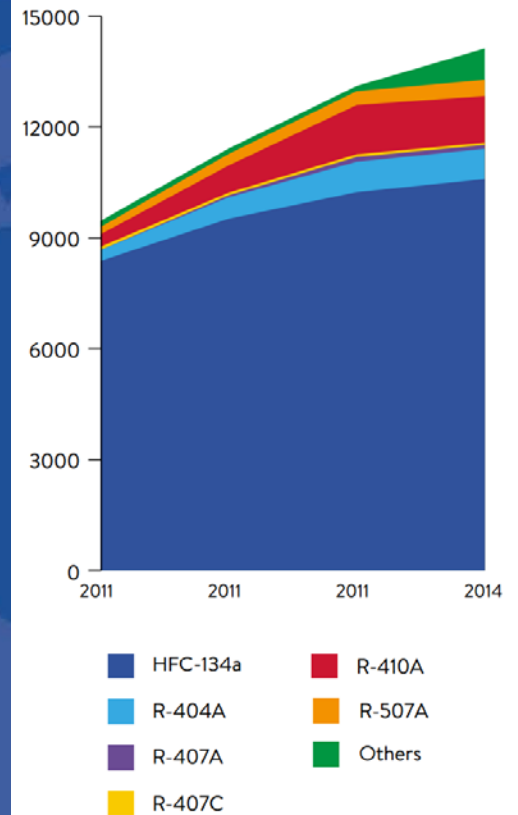


CHART 8.3 Aggregate HFC consumption by chemical, six countries, 2011-14 (metric tonnes)¹⁰





Supporting National Action and Planning on SLCPs (SNAP)

Long Range Energy Alternatives Planning system-Integrated Benefits Calculator (LEAP-IBC)

- 12 countries now participating in SNAP national planning using LEAP-IBC.
- LEAP-IBC training workshops already held for Bangladesh, Colombia, Côte d'Ivoire, Ghana, Nigeria, Peru, and Togo (plus Estonia and Nepal). Training for Chile, Maldives, Mexico, Morocco and Philippines to follow.
- Quote from Daniel Tutu Benefoh, EPA, Ghana:

“LEAP-IBC is a one stop shop. Rather than using multiple tools, I use LEAP-IBC which allows both energy and non-energy emissions from all sectors to be calculated with the added ability to assess impacts of mitigation scenarios. LEAP-IBC can easily be modified to capture the impact of specific activities a convenience you can't find in any other software. This means that LEAP-IBC can effectively serve the





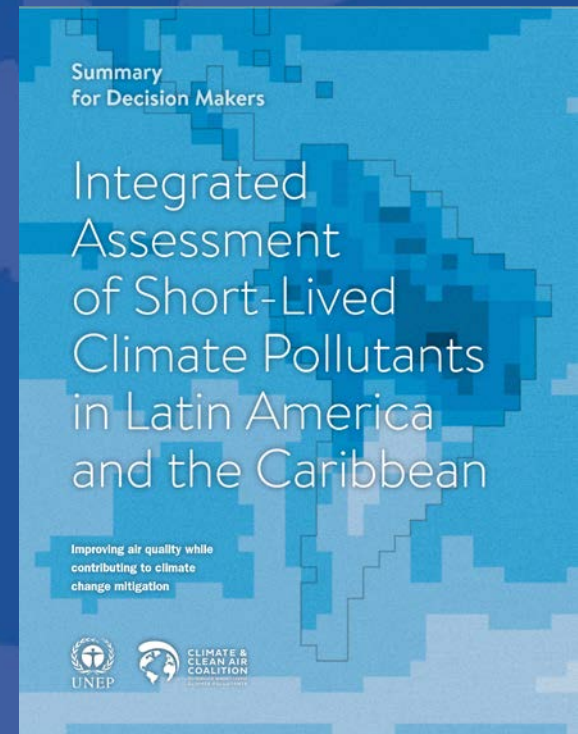
Regional Assessments

Goal: to develop scientifically robust and policy-relevant integrated assessment on SLCPs for key regions that will provide a framework for national action and underpin regional co-operation on SLCP emission reduction.

Assessment of SLCPs in Latin America and the Caribbean

- **Summary for Decision Makers published in 2016**
- **Full Assessment expected in Q3 2017**
- **Companion Technical Report on SLCP measures Q2 2017**

Assessment of SLCPs in Asia and the Pacific (underway)





The LAC Assessment



Country	Reported for:	SO2	NOx	NM VOC	CO	BC	OC	PM2.5	PM10	NH3	CH4	N2O	HFC
Argentina	2000	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Bolivia	2004	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Brazil	2010	Red	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Chile	2006	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Colombia	2004	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Ecuador	2007	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
El Salvador	2012	Red	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Honduras	2000	Red	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Martinique	2012	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Mexico	2010	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Paraguay	*)	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Peru	2009	Red	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Puerto Rico	2012	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Uruguay	2006	Green	Green	Green	Green	Red	Red	Red	Red	Green	Green	Green	Green
Venezuela		Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red

*) no information provided about the reference year

- National inventory provided and complete
- National inventory incomplete
- National inventory not provided



Marrakech HLA Communique – Nov 2016

[W]e recognize the importance of improving our understanding of the contribution of sources of black carbon emissions in order to prioritize actions and to track progress. The following Coalition State Partners resolve to commence development of or continue to refine by the end of 2017 black carbon inventories and projections including, as a first step, strengthening our capacities and efforts to do so (taking into account the guidelines under the United Nations Economic Commission for Europe (UNECE) Convention on Long-Range Transboundary Air Pollution), and to share information on existing or planned black carbon mitigation actions with the Coalition:

Australia, Bangladesh, Benin, Canada, Central African Republic, Chad, Chile, Colombia, Cote d'Ivoire, Denmark, Dominican Republic, Finland, Germany, Guinea, Ireland, Italy, Japan, Kenya, Luxembourg, Mali, Mexico, Moldova, Morocco, Netherlands, New Zealand, Nigeria, Norway, Paraguay, Peru, Philippines, Poland, Rwanda, Sweden, Switzerland, Togo, United Kingdom, United States, Uruguay



April 25-27 SPD3 and W G Conclusions

“Explore options for an appropriate body (supported by initiatives) to serve as a clearing house and provide systematic review of BC emissions factors, inventory methodologies, and strategies for improving inventories, with capacity building, and better data management.”

“ Work with interested Coalition Partner countries and other sources of data to ‘roadtest’ proposed near-term metrics with the goal of presenting the results by the fall Working Group meeting.”



Thank you!

LEARN MORE:



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