

THE CLIMATE AND CLEAN AIR COALITION – OUR INVOLVEMENT IN THE BIOGAS SECTOR

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CLIMATE & CLEAN AIR COALITION

TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS

- The Climate & Clean Air Coalition is a global, voluntary partnership dedicated to addressing short-lived climate pollutants
- Network of 400+ governments, IGOs, financial institutions & civil society organisations

A unique action global partnership

69 countries

75+ international orgs & NGOs

More than 100 cities

Some businesses

→ Hosted by



FAST ACTION

QUICK RESULTS

MULTIPLE BENEFITS



Science based solutions

Leadership & awareness

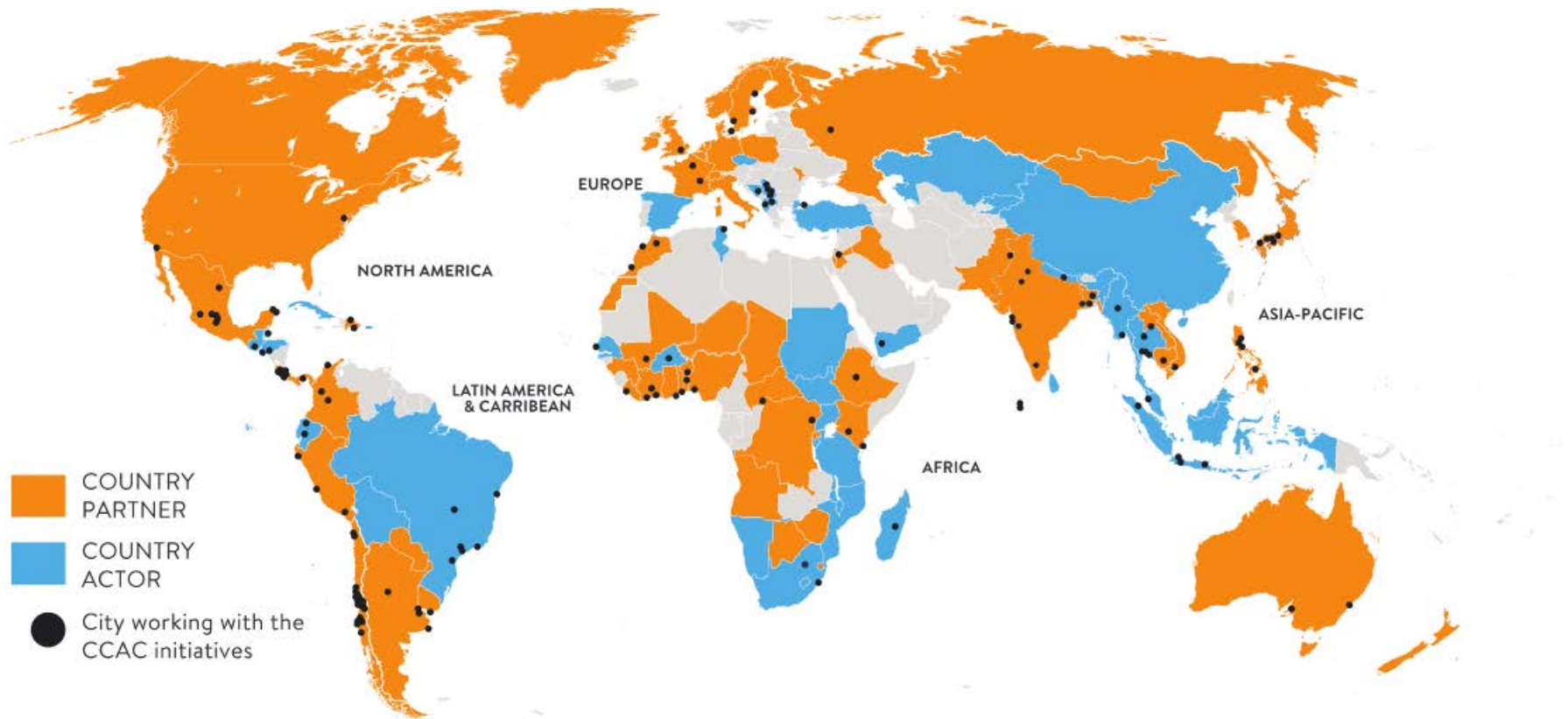


SHORT-LIVED CLIMATE POLLUTANTS

- Climate forcers many times more powerful than carbon dioxide
- Air pollutants that are harmful to people, ecosystems and agricultural productivity
- Present in the atmosphere for a few days up to a few years



WHERE WE WORK



ACTIVITIES



Training and capacity building



Expert assistance and resources



Support for developing regulations, laws, policies



Technology demonstrations



Science and research



Political outreach and awareness raising

CCAC MUNICIPAL SOLID WASTE (MSW) INITIATIVE

Objective

Reduce emissions of SLCPs across the municipal solid waste sector by providing a comprehensive package of resources, technical capacity building, and a global network of cities to facilitate the design and implementation of locally appropriate actions.

Mitigating SLCPs from municipal solid waste



SLCPS AND THE WASTE SECTOR

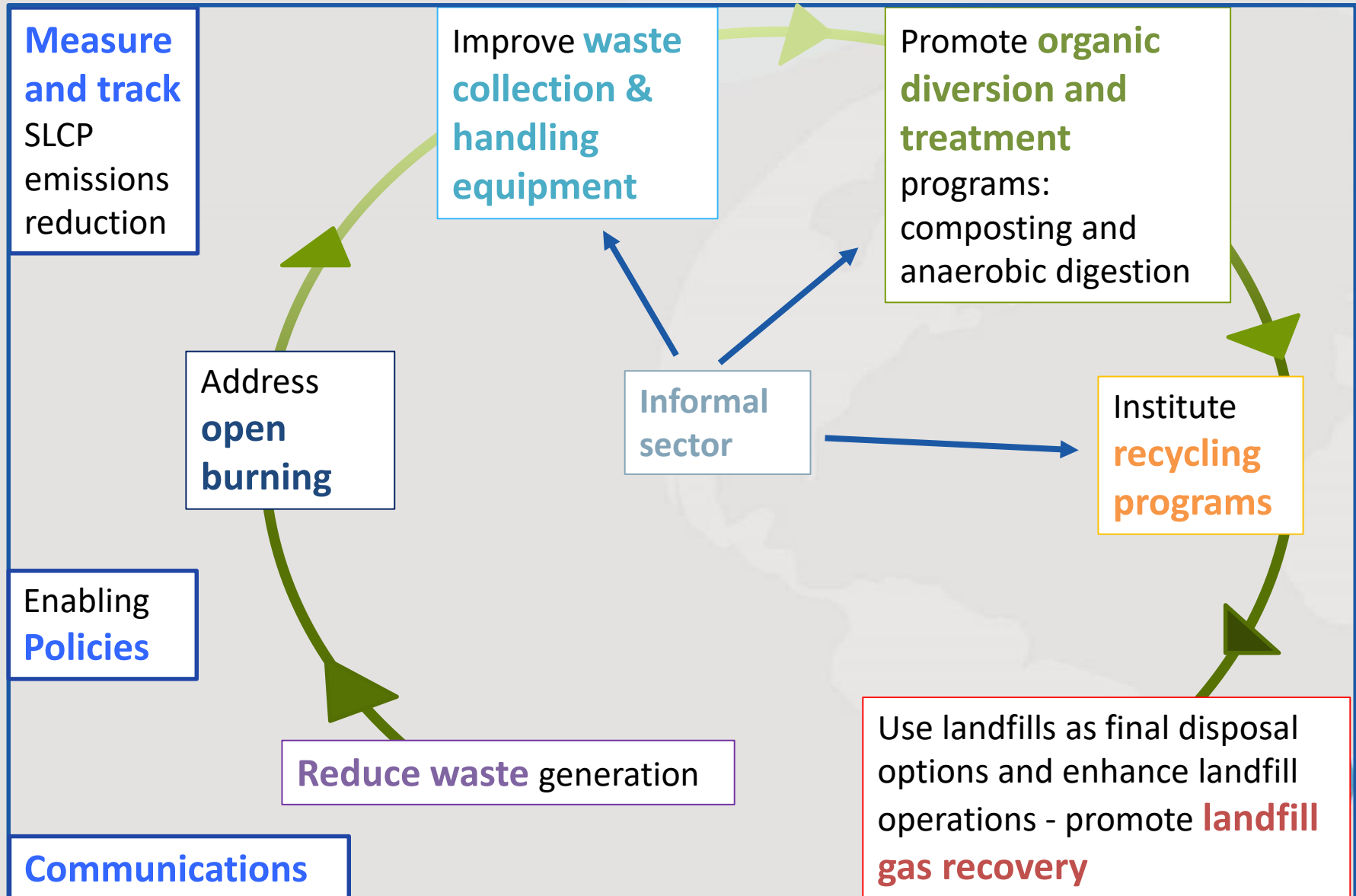
Solid waste sector is a substantial source of short-lived climate pollutants (SLCPs), particularly black carbon and methane

- Landfills are the third-largest source of global anthropogenic methane emissions
- Open burning of waste emits black carbon and other air pollutants
- Black carbon is also emitted by outdated and polluting vehicles used in waste collection and transport





Working with its partners promoting the waste hierarchy & circular economy



WASTE INITIATIVE



Organic Waste
Diversion



Landfill Gas
Capture and
Use

Open Waste
Burning
Prevention



Areas of Focus

CCAC Partners committed to implement and support each other (2017 High Level Assembly):
Actions by national, state, and local governments **to avoid and reduce methane emissions by diverting organic waste from landfills**, which includes **preventing and reducing food waste and partnerships with the private sector**. As well as adopting measures to **capture and use methane**

ASSISTANCE OFFERED

The Initiative brings together technical experts and policymakers from all levels of government to offer :



- **Direct technical assistance** for developing waste management master plans, waste assessments, and feasibility studies, and for identifying and promoting appropriate financing for waste projects



- **Training and capacity building** sessions for city officials, waste management staff, and other stakeholders



- **Tools and resources** that help cities and national governments track their emissions reductions, determine appropriate waste management solutions, and identify best practices



- A **Knowledge Platform** that compiles and organizes helpful resources such as case studies, guidance documents, and databases from partners and other organizations



- **Information exchange and networking opportunities** bring cities together to share best practices, highlight success stories, and encourage peer-to-peer learning and city mentoring



WASTE



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

WHERE WE WORK



waste.ccacoalition.org

Knowledge platform
to support cities and governments in
short lived climate pollutant reduction.

WORK ON BIOGAS/BIOENERGY 2020-2021

- With the Global Methane Initiative (GMI) - disseminating their biogas project risk analysis tools linked to our **NDC enhancement capacity building activities**
- **India** - Working to promote decentralized biodigestors in various cities
 - Collaborating with US EPA/GMI and TERI
 - Exploring what are the opportunities and challenges of the technology
- **Support underway for the sustainable closure of open dumps in Lebanon and Indonesia** – incl. assessing how much **biogas** is generated and proposing solutions to capture and use the **biogas** from the disposal sites
- Support to develop anaerobic digestion plants in the cities of **Naucalpan** and **Johannesburg** and to increase capacity of AD plant in **Rio de Janeiro**
- **Supporting cities to divert organic waste from landfills including set up separation at source of organic waste from diverse sectors.** Ultimately, if enough organic waste is effectively segregated, then anaerobic digestion projects can become viable in many cities.



CCAC AGRICULTURE INITIATIVE



LIVESTOCK
methane



MANURE
methane



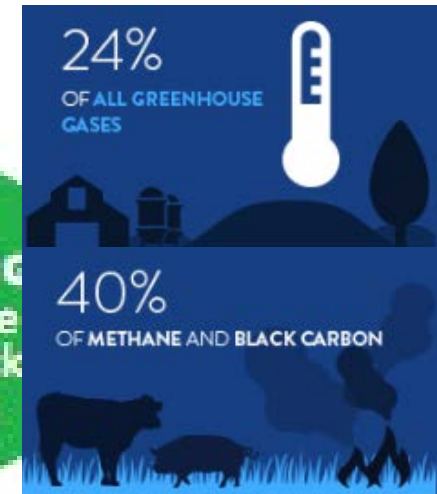
**STUBBLE
BURNING**
black carbon



RICE
methane



BIOENERGY
methane
and black
carbon



CCAC AGRICULTURE INITIATIVE STRATEGY

AIM: To catalyze the practice and policy changes that are needed now, and then to pass the mantle onto organizations such as, FAO and WB, with the clear mandate to expand and scale up this work

We do this through:

- **BUILDING POLITICAL WILL**- via a group of leaders in the field and raising awareness about the actions that can be taken now
- **ASSISTING COUNTRIES WITH TOOLS & CAPACITY BUILDING**- to identify increasingly ambitious actions, policies and targets
- **SUPPORTING STRENGTHENED COORDINATION** at the national level
- **MARSHALLING EVIDENCE THAT ENABLES LARGE-SCALE FINANCING** -To unlock the potential for scale-up



PROMOTING COST-EFFECTIVE SOLUTIONS & MARSHALLING EVIDENCE

EXAMPLE OF OUR WORK ON LIVESTOCK

We have funded work to show how low-cost strategies to reduce enteric methane emissions can contribute to short- and long-term social and economic development, as well as climate action.



MITIGATION OPTIONS FOR THE LIVESTOCK SECTOR

Methane mitigation potential from implementation of key livestock management measures in specific regions



MIXED DAIRY OECD	- 11% OECD countries
Fat supplementation	2.1 - 2.3%
Manure management	8.9%
BEEF CATTLE	- 47.5% South America
Improved feed quality	25.7%
Improved fertility and reduced mortality	21.8%
SMALL RUMINANTS	- 4.5% West Africa
Improved fertility and reduced mortality	2.65%
Improved feed quality	1.85%
MIXED DAIRY	- 2.8-10.9% East Africa
Improved feed quality	2.2 - 9%
Improved fertility and reduced mortality	0.6 - 1.9%
DAIRY CATTLE	- 38% South Asia
Improved feed quality	23.4%
Improved fertility and reduced mortality	3.3%
COMMERCIAL PIGS	- 20-28% South East Asia
Improved fertility and reduced mortality	17.1%
Manure management	15.4%

Our work with the FAO has shown the potential to implement strategies

PRACTICAL APPROACH-EXPERT ASSISTANCE SUPPORT

CCAC Solution Centre funding was provided to Vietnam to increase the potential for emissions reductions through their planned livestock emissions law, which relates to implementation of the country's INDC commitments.

The Solution Centre provides small-scale funding to help developing countries achieve a real outcome, such as a policy or other action that can lead to emissions reductions.

Overall ranking of different mitigation options at Farm level

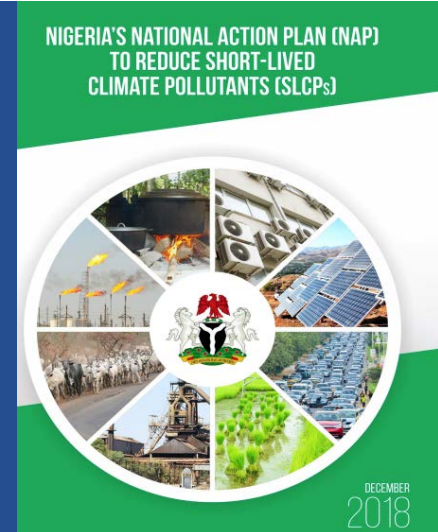
No	Mitigation option	Ranked by experts	Ranked by MACC	Ranked by total mitigation potential	Total ranked	Overall priority*
		(1)	(2)	(3)	(4=1+2+4)	(5)
1	Manure composting	3	1	1	5	1
2	Biogas system	1	2	2	5	1
3	Using biomat	3	4	3	10	4
4	Using bio-agents	5	-	-	-	-
5	Feed mix	2	3	4	9	3
6	Other	6	-	-	-	-

Overall ranking of different mitigation options at HH level

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3	Using biomat	4	4	3	11	4
4	Using bio-agents	6	-	-	-	-
5	Feed mix	2	2	4	8	3
6	Other	5	-	-	-	-

SUPPORTING STRENGTHENED COORDINATION AT THE NATIONAL LEVEL

Agriculture Institutional Strengthening Coordination is being supported in Nigeria and in Vietnam to sustainably increase the level of action to reduce SLCPs from the sector by further promoting coordination and scaling-up of activities at the national level



Blueprint for outscaling low-emissions rice farming in Vietnam



PROSPECTS FOR LINKING OUR WORK TO BIOGAS/BIOENERGY

- **Nigeria** - Potential assistance will be provided to build institutional capacity on restructuring a GHG inventory for the livestock sector, and improving **MRV data to use as a baseline to inform animal husbandry and sustainable livestock development policy** (including use of findings to evaluate potential biogas market).
- **India** - Support is underway for the development of integrated strategies for crop residue management and assessment of potential to produce energy from residues, and feasibility of bioenergy technologies.
- Potential interest to evaluate **anaerobic co-digestion of cow dung and rice straw for biogas in India**.
- **Integrated manure management** - past projects focused on improving management of manure and bio-slurry from household biogas plants through training of extension workers (**Malawi, Ethiopia**).



Thank you!

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LEARN MORE:



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