APPROVED ENGAGEMENT STRATEGY FOR THE WASTE SECTOR

1. Context

Improving waste management is critical to reduce short-lived climate pollutants — in particular methane — and deliver local environmental, economic, and health benefits. Municipal solid waste is the third-largest source of anthropogenic methane emissions globally, due to dumped and landfilled **organic waste**. In developing countries, over 50% of municipal solid waste is organic. Landfills and waste management make up about 20 per cent of global anthropogenic methane emissions[i].

The waste sector is also a significant source of black carbon in many countries and cities due to the open burning of waste, and is a contributor to local air pollution due to the methane and black carbon emissions. About 5 per cent of global anthropogenic black carbon emissions are attributed to the waste sector.

2. CCAC's niche for this work

Because of the focus on methane and black carbon emissions, the CCAC's niche in waste management is a *component* of the overall waste management strategies of national and sub-national governments and municipalities. Because methane arises from organics, the CCAC's main niche is ***organic waste management.*** ***Open burning***, because it is the source of black carbon, is the second niche area for the CCAC. It is recognized, however, that efforts to reduce emissions in these two areas need to be cognizant of and complementary to the wholistic integrated waste management plans being developed within countries and by municipal governments.

As with other areas of the CCAC's work, an important niche of the CCAC is engaging national governments in the mitigation activities, and helping to build the political support and enabling environment that can advance enhanced action, including at the sub-national and local levels. CCAC's other niche is advancing the concept of multiple benefits — that is, that SLCP reductions achieve climate mitigation, improved air quality and attendant health benefits, as well as economic and development benefits. These CCAC niche aspects are particularly relevant for the waste sector.

3. Goals and Milestones

Methane. The main goal of the CCAC Engagement Strategy for Waste is that by 2030 all CCAC countries have taken action in the waste sector to reduce methane to a level that is consistent with a 1.5°C pathway, and have reflected this goal in a nationally-appropriate way in the NDCs and other planning and strategy documents. Given the nature of the sector, this will require significant municipal and sub-national engagement and collaboration, as well as private sector engagement and collaboration in many instances. In many developing countries, this also includes collaborating with the informal sector of waste management.

The focus to achieve this goal will include: 1) Preventing organic waste, as well as diverting it from landfills and open dumps; 2) Collecting and using or flaring of gas from existing landfills to mitigate the methane already generated; and 3) Developing economic uses and facilities for organics, such as composting or waste-to-energy facilities at various scales.

Black Carbon. Preventing and eliminating the open burning of waste, at all scales from household to large scale, to prevent black carbon emissions. This too may require engagement and collaboration from local to national.

The focus to achieve this goal will include: 1) Increasing waste collection coverage and quality of service for all covering marginalized, peri-urban and rural areas; 2) Establishing proper monitoring and incentive schemes to stop open burning; and 3) Awareness raising and education targeting general public and school children.

4. Key Activities

National Government Engagement. The Waste Hub will engage with CCAC national government partners to support the waste-related SLCP mitigation measures and actions in their sub-national governments and municipalities. In addition to working with the governments to ensure that waste sector emissions are reflected in inventories and that estimates of the mitigation potential (and potential non-climate benefits and costs are estimated), and that the sector is appropriately captured in the NDC, action with the national government will be directed towards:

- Advocating for action on waste and convening cities and municipalities in the effort;
- Creating a supportive policy and regulatory environment at the national level, including identifying the necessary delegated legal and regulatory requirements at the local level; this could include bans or other control instruments on land-filling organics or burning refuse, or other national standards, and could also include standards and other approaches to diverting organic waste for productive uses;
- Assisting developing strategies to prioritize financing for methane abatement in the waste sector, and in providing for access to international climate finance and development assistance, as appropriate, as this is most often accessed through national governments;
- Assisting in developing strategies to engage the private sector, including the informal sector, in terms of waste-management (e.g., collection and sorting), processing facilities, or waste-to-energy or similar projects.

Priority will be given to CCAC partner countries engaged in CCAC Planning & Policy work, CCAC partner countries who have committed to the new Global Methane Pledge, and CCAC Partner countries where sectoral activities at the city/municipal level have already commenced/been supported. See Annex for summary details of past engagement.

These actions will include both methane and black carbon, as appropriate. The actions will be coordinated with the CCAC Planning & Policy hub. Early and regular engagement with the Planning & Policy in-country efforts will be pursued, as will supporting Planning & Policy efforts to advance work on implementation as well as planning.

Cities and Local Government Engagement. The Waste Hub will engage with cities and local governments in a planning and policy capacity, based on science-based and data-driven approach, that will focus on:

- Prevention and reduction of organic waste generation;
- Increased diversion of organic waste from landfills;
- Market development for organic waste products (e.g., compost, digestate), and collecting and utilizing methane collected from waste;
- Enhanced organic waste recovery or utilization including commercial food waste, and other commercial organic waste;
- Elimination of open burning of waste;
- Logistics planning (organic waste separation/collection), including private-public partnerships);
- Facilities and land use planning;

- Financial planning, including financial training and capacity building for local government officials and other key stakeholders, and also including accessing climate or development financing, climate-market financing (voluntary markets or Article 6 arrangements), local charges or fees, government support, private sector investment.

These activities will be coordinated with actions at the national level, and integrated into Nationally Determined Contributions, Sustainable Development Goals, and Low-carbon Development Strategies.

Networks and Peer-to-Peer Engagement. The Waste Hub will support regional networks to foster robust knowledge exchanges addressing regional priorities for mitigation of SLCPs from the organic waste sector.

The program will serve to transfer specific know-how and exchange experiences and best practices, including by interacting with experts and practitioners on peer exchanges. The Waste Hub will also increase coordination with other initiatives and programs dealing with the waste sector generally, including C40 Cities, Global Methane Initiative, Waste Wise Cities Campaign of UN-Habitat, ICLEI, Covenant of Mayors, the Organization for Economic Co-operation and Development (OECD), UNEP, IGES Centre Collaborating with UNEP on Environmental Technologies (CCET), and Household Waste Partnership of the Basel Convention, the United Cities and Governments (UCLG), the Under 2 Coalition, etc. The Waste Hub will also seek support and cooperation with other climate initiatives and development organizations.

A particular focus of the networking will be with respect to national, sub-national, and project-specific practices for emission monitoring, reporting, and verification (MRV) in the waste sector.

The Waste Hub will also seek to lever existing platforms and resources to provide training and complementary support. For example, The Global Methane Initiative is developing a best practices guide and an online training platform. Likewise, the Hub will work with other CCAC partners such as Canada, Japan, and Germany, that are also developing resources on MRV. In addition, in relation to SDG 12.3, the Hub will ensure that the work with any country that is interested in measuring their food waste will be coordinated with the UNEP, given the indicators and methodology that have already been developed for measuring food waste (Food Waste Index).

In addition, as noted above, the Waste Hub will coordinate and cooperate with the National Planning and Policy and Implementation hub, as well as other CCAC sectoral hubs, and the CCAC Methane Flagship Programme, to achieve relevant goals as well as to work on inter-sectoral issues. The Hub will also engage with SAP to enhancing the science of the emissions and impacts of black carbon from the waste sector in communities. In particular, the Waste Hub will work with the cooling hub and agriculture hub to reduce food loss and waste by improving the cold chain. Engagement in CCAC discussion around financing SLCP mitigation will also be important, as well as exploring how the CCAC could engage in global level discussions to ensure that methane and black carbon reductions are systematically reduced in relevant development cooperation projects.

Annex 1 - Status of CCAC Support on Waste

(Status as of June 2021)

Requested support					
National SLCP plans with targets on the waste sector	**Waste Initiative National level support**	**Action Programme Support**	**Waste Initiative supported regions**	**Waste Initiative: municipal level support - countries (*non-CCAC country)**	
Methane - Bangladesh - Côte d'Ivoire - Mexico - Nigeria *Black Carbon* - Bangladesh - Côte d'Ivoire - The Maldives - Ghana - Togo - Nigeria	- Kenya - Philippines	- Peru	- Central America - South America & Mexico - India - Francophone Africa - Sub-Saharan Africa - Southeast Asia - Southeast Europe	- Albania* - Bangladesh - Benin - Bosnia Herzegovina* - Brazil* - Burkina Faso - Cambodia - Cameroon* - Chile - Colombia - Congo, DR - Costa Rica - Côte D'Ivoire - Dominican Republic - Ecuador* - Ethiopia - Ghana - Guatemala* - Honduras* - India - Indonesia	- Jordan - Kenya - Lebanon* - Madagascar* - Malaysia - Mali - Mexico - Montenegro* - Morocco - Myanmar* - Nigeria - Pakistan - Panama - Peru - Philippines - Russian Federation - Serbia* - South Africa* - Tanzania* - Thailand - Togo - Turkey* - Uganda - Vietnam

[i] United Nations Environment Programme and Climate and Clean Air Coalition (2021). Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions. Nairobi: United Nations Environment Programme.