WASTE & ITS CLIMATE CONTEXT: INVESTING IN PREVENTION, REDUCTION & CIRCULARITY

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ccacoalition.org

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

The Climate & Clean Air Coalition

UNEP-convened since 2012

Global, voluntary partnership of committed countries & organisations

Dedicated to addressing short-lived climate pollutants (SLCPs)

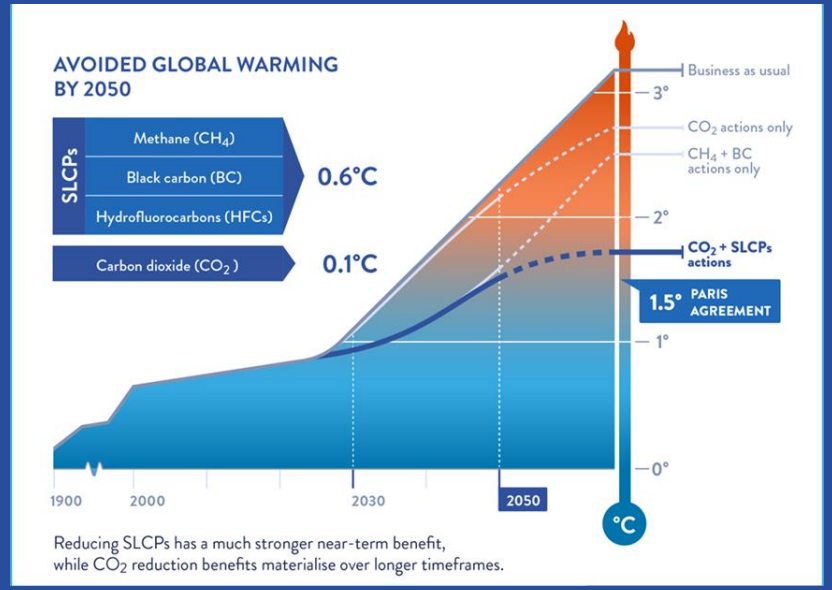
The CCAC Secretariat provides secretariat services to the Global Methane Pledge

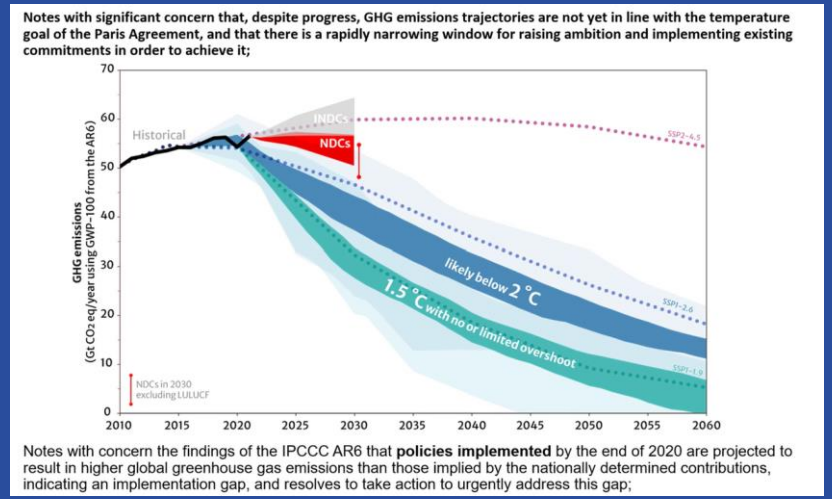
97
State partners

131
Non-State partners

Short-Lived Climate Pollutants (SLCPs)

- Consist of Methane (CH4), black carbon (BC),HFCs, tropospheric ozone and Nitrous Oxide (N2O)
- Powerful climate forcers responsible for half of global temperature rise
- Air pollutants that are harmful to people, ecosystems and agricultural productivity
- Present in the atmosphere for a few days up to a decade
- Increasingly important target given slow progress on decarbonatization & increasing concerns over health and air quality





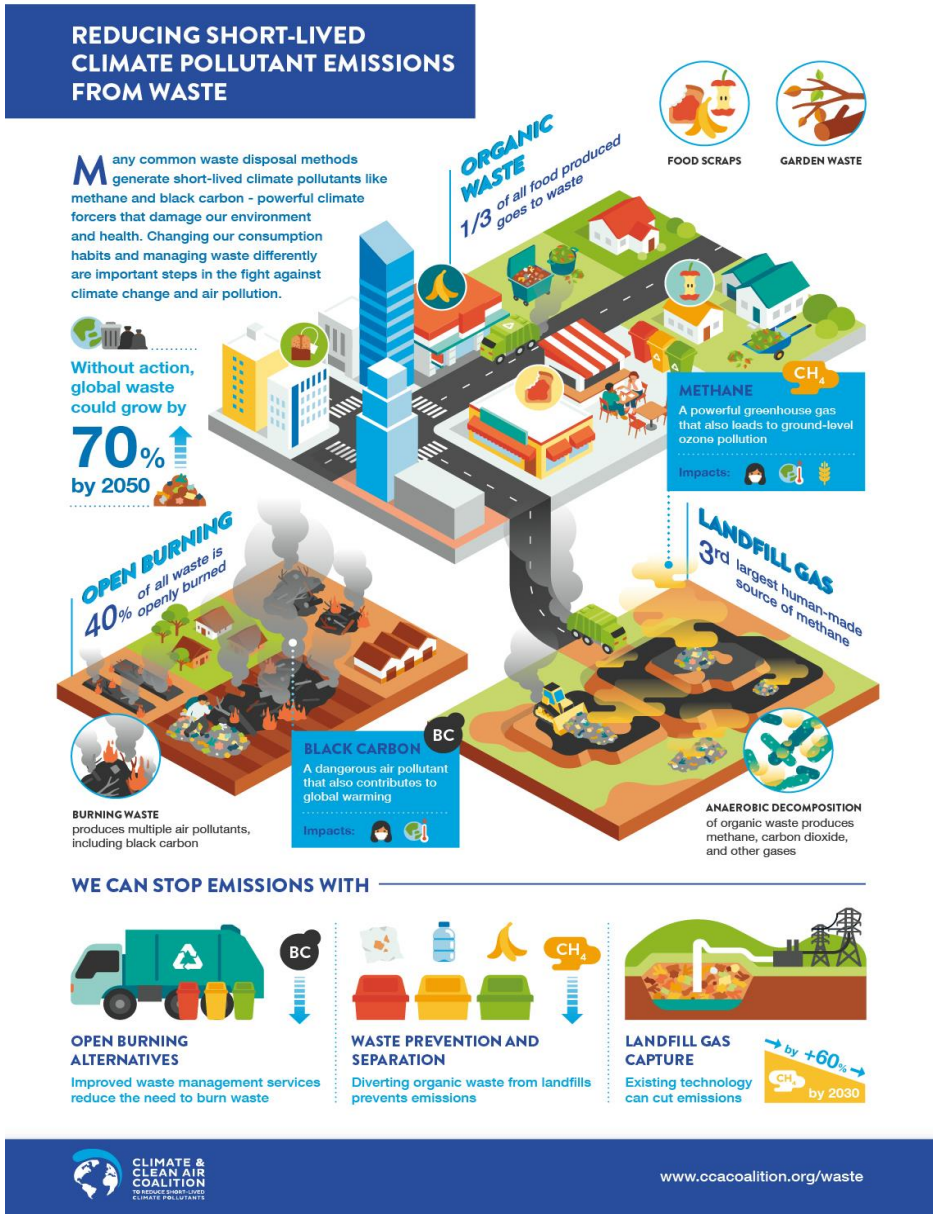
Waste and its Climate Impacts

Waste accounts for **20%** of anthropogenic methane emissions

1.5°C-consistent global reductions of **30-35%** below 2020 levels by 2030 and nearly **55%** by 2050

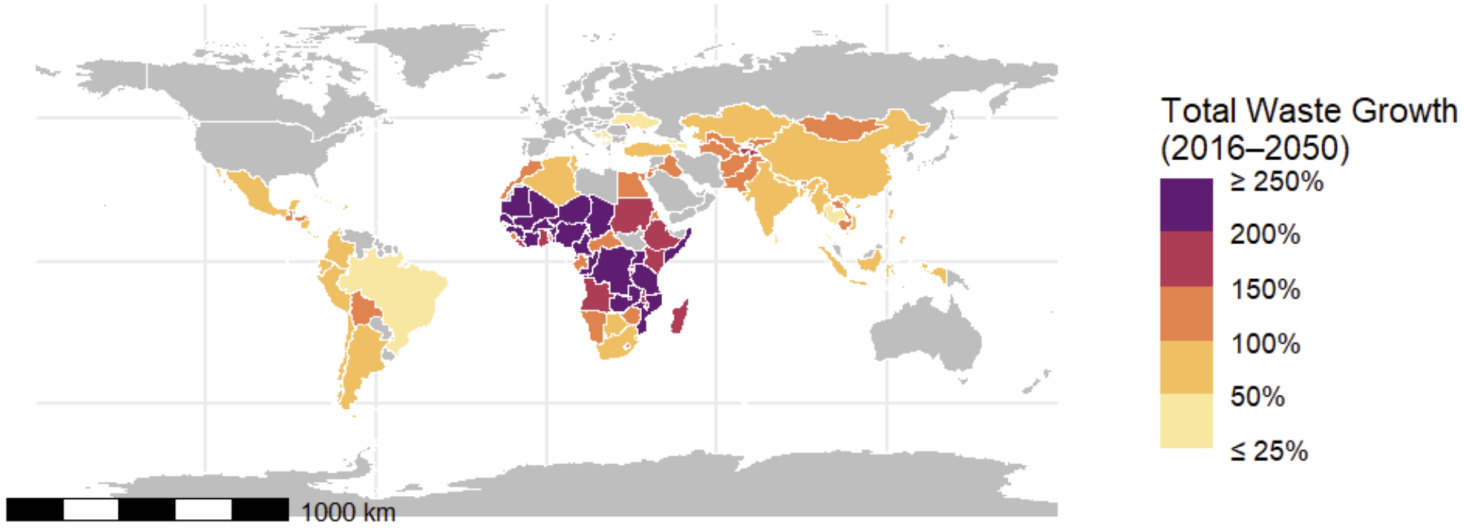
But, if current trends continue, the amount of waste will increase by over 70% to 3.88 billion tons per year by 2050 growing at 2.4%/year

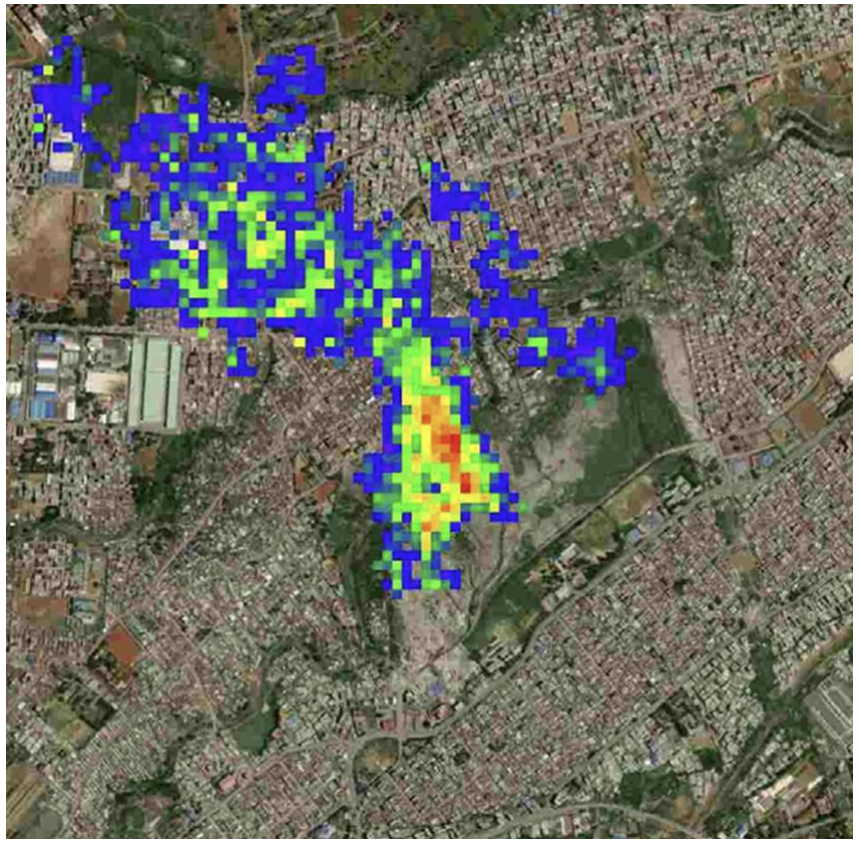
Emissions from waste will consequently double by 2050 compared to 2016.



PROJECTED GROWTH IN WASTE GENERATION BETWEEN 2016 AND 2050 *(SOURCE: AFD)*

- In low-income countries, waste production is expected to triple by 2050
- This primarily will be organic waste (short to medium term)
- Collection rates will likely increase as this is a national goal for many
- A continued reliance on large, deep unmanaged landfills





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AVOID, **D**IVERT, **V**ALORISE and **I**NVEST in INFRASTRUCTURE

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How Waste Actions Can Lead Global Climate Goals

- 90% of methane emissions from waste could be avoided by 2050 using existing technologies
- More than one strategy is critical to keep below 2 degrees
- Halving waste/diversion & treatment of organics/retrofitting landfills
- Next decade is critical to achieve CH4 reductions in line with the GMP
- Multi-stakeholder approach needed: regulation/economic incentives/social mobilisation

Hoy et.al (2023)

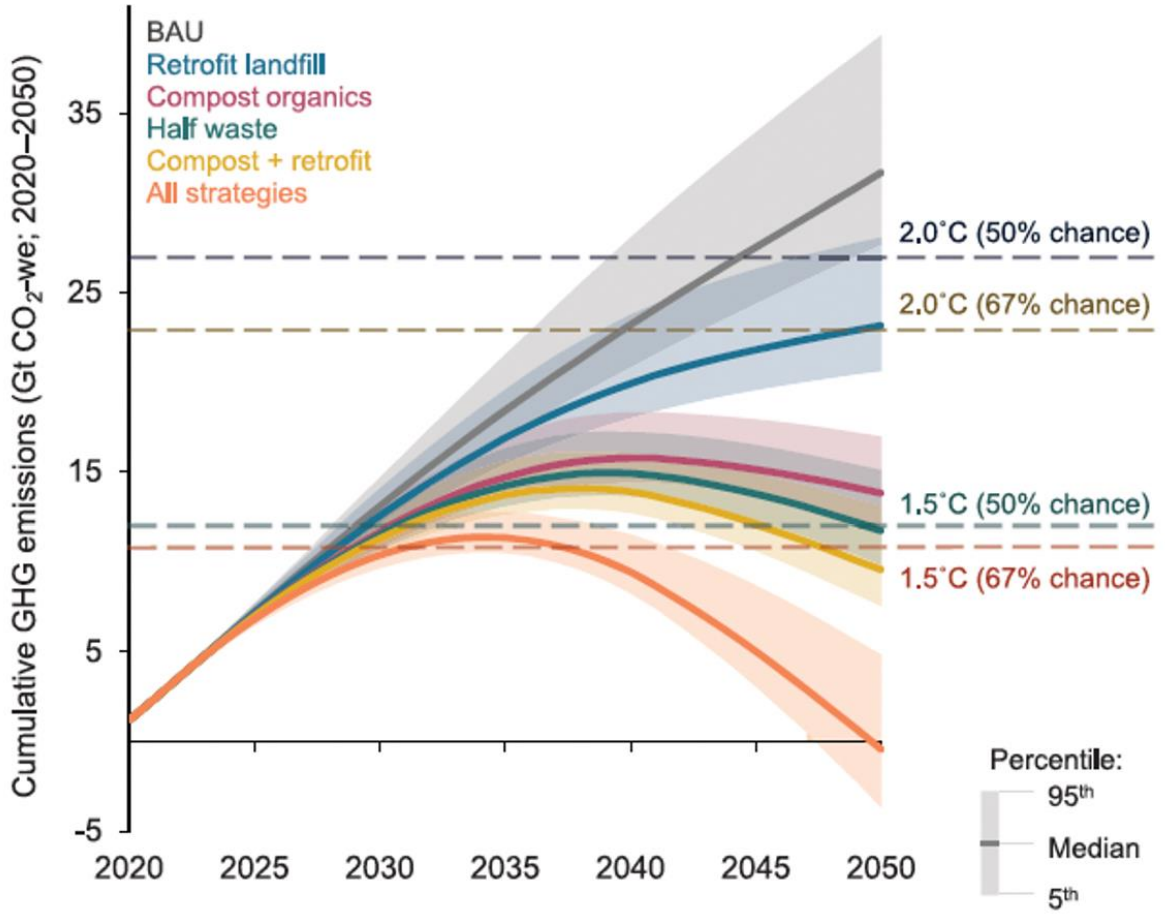


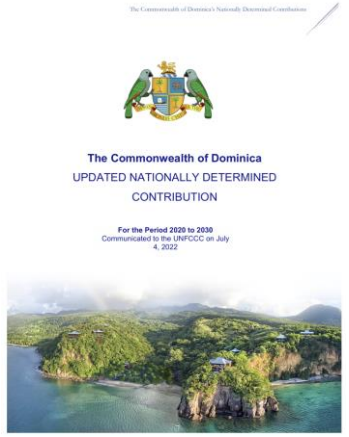
Figure 3. Impacts of waste sector methane solutions on cumulative emissions compared to 1.5°C and 2°C emissions budgets (2020-2050). Source: Hoy et al. 2023.

COP29 DECLARATION ON REDUCING METHANE FROM ORGANIC WASTE

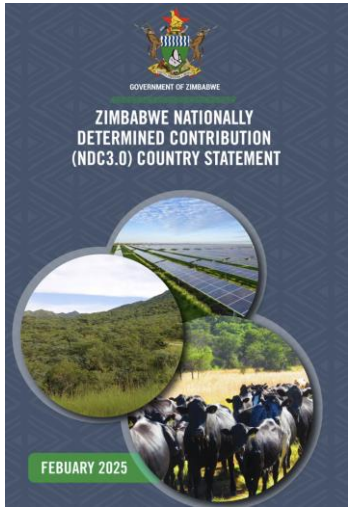
- At COP29, held in 2024, over 30 countries signed the COP29 Declaration on Reducing Methane from Organic Waste. **Today there are 65 signatories**.
- The Declaration calls on signatories — who represent nearly half of global methane emissions from organic waste — to set national targets, implement policies, and invest in technologies to curb these emissions
  - 1.5°C-consistent waste sector components informing the design of future NDCs
  - National and sub-national policies and actions
  - Stepping up finance
  - Data for action and transparency
  - Innovative partnerships
- Deliver in partnership with sub-national/municipal authorities (LOW-Methane)

Cutting Methane in the Waste Sector – Emergence in NDCs

- 122 countries (63 per cent) include policies/measures targeting major methane sources in their latest NDCs, a 30% increase compared with pre-2020 NDCs (90 countries).
- Of these, 100 countries (51 per cent) include measures addressing methane from waste



- **Venezuela:** National Sanitation Plan for 35 Landfills & control and capture and use of Methane (CH_4) generated. Actions will capture 17,134 Ton / year of CO_2 (eq).
- **Cameroon:** Strengthening waste management policies (by 2035, all major cities should have landfills with at least 70% methane capture). (UNFCCC, 2021)
- **Mexico:** Emission reductions for the waste sector by 28% in 2030. Actions are established in the "General Law of Climate Change" (LGCC). (Gobierno de México, 2024)
- **Nepal:** By 2025, 380 million litres/day of wastewater will be treated before being discharged, and 60,000 cubic meters/year of faecal sludge will be managed. Will reduce around 258 Gg CO_2 eq. (Government of Nepal, 2020)



THANK YOU & KEEP IN TOUCH!

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Resources and more information:
https://www.ccacoalition.org