2024 Climate and Clean Air Conference (CCAC2024) Meeting Summary

Contents

WEDNESDAY 21 FEBRUARY 2024

Day 1: Economic Opportunities and the Cost of Inaction

([*Link to recording*])

Day 1 of Climate and Clean Air Conference 2024 emphasized the opportunities that come with adopting a holistic approach for climate and clean air action. In light of recently released research on the likelihood of hitting 1.5 degree warming within the next five years, representatives of state and non-state partners called for bolder action on mitigating Short-Lived Climate Pollutants (SLCPs). Making the economic case will help with accelerating action and speaking to priorities of different constituencies. In each sector, we have economically viable options that need to be rolled out at scale.

The opening plenaries focused on using SLCP mitigation to reduce the triple threat of climate change, biodiversity loss and air pollution, as well as the economic opportunities and cost of inaction on SLCP mitigation across sectors. The second half of the day comprised of science-policy dialogues, as well as the meetings for CCAC NGO Partners and CCAC National Consultants.

Discussions highlighted:

- The need to integrate both quantitative and qualitative dimensions into mitigation strategies, ensuring comprehensive action that addresses economic opportunities, health impacts, gender equity, and sustainable development;
- That national planning processes are a crucial aspect of SLCP mitigation efforts. Representatives from various countries shared experiences and insights into accurately assessing sectoral contributions to SLCP emissions and implementing effective mitigation measures. This underscored the importance of investing in capacity building and supporting governments in developing robust national plans;
- Science-Policy Dialogues on the topics of: (i) Science to Action through National SLCP Plans; (ii) the Agriculture/Food System Assessment and N_2O Assessment; (iii) Strategies for Fast-Tracking Clean Air Action; (iv) Black Carbon; and
- The role of advocacy in mobilizing action by key stakeholders.

Opening Plenary:

Reducing the triple threat of climate change, biodiversity loss and air pollution by mitigating short-lived climate pollutants: driving action through the Global Methane Pledge, Clean Air Flagship and Kigali Amendment

Inger Andersen, Under-Secretary-General of the United Nations and Executive Director of the United Nations Environment Programme noted that this meeting taking place in Nairobi was a coming home: the first assessment on black carbon and tropospheric ozone launched 13 years ago led to six countries coming together to found the CCAC, with a clear vision of creating cleaner air for everyone. Superpollutants are important because of the powerful potency that they hold and impact millions of lives. Taking action can bring down both climate and health costs and are a key to solve the triple planetary crisis. She noted that we need to push harder

and faster on superpollutants: “Just as you need a superhero to defeat a supervillain, we need super solutions to face down super pollutants. And we need you to mastermind these solutions.”

Peter Dery, Director responsible for the Environment Division at the Ministry of Environment, Science, Technology and Innovation, Ghana and CCAC Co-Chair, noted the importance of advancing ideas and plans for a CCAC Africa Clean Air Programme, as called for in the CCAC Africa regional assessment launched 1.5 years ago. Africa can lead the way to take an integrated approach via a programme by the end of this year that will contribute to real action on the ground, and across the continent. He noted that funding will be critical, and appealed once more to generous funders to upscale their support to the CCAC and called on others to also come on board.

Ibrahim Auma, County Minister for Green Nairobi spoke on behalf of H.E. Sakaja Johnson, Governor of Nairobi, noting the importance of education as a key to fostering awareness, as this will also ensure continued collaboration in accelerating climate action at the local, national and global platforms. He also spoke about initiatives in Nairobi including a workshop on cities and climate action, as well as a commitment to ensure investment in cleaner air, water and food systems, decreasing pollution from systems and other sources. No single entity can solve the climate crisis on their own.

Elizabeth Wathuti of the Green Generation Initiative highlighted that our commitment to air quality and climate change is a fight for our existence and life, and that youth are most affected by climate change issues, with their development being impacted. She reflected on the importance of nature-based solutions, and urged participants to reflect on their own clean air action.

Martina Otto, Head of the CCAC Secretariat, reflected on the CCAC's achievements in 2023. She thanked the partnership and noted that we are where we are thanks to collective effort, highlighting some key examples of CCAC-funded successes in Kenya, Nigeria and Pakistan. It has been a banner year for 2023 project funding, with 46 requests for policy support fulfilled. Moving forward, we will continue to work towards our goal, including work on the Methane Roadmaps, supporting countries on the NDC updates and COP29 as the Finance COP, with more to come. To maintain support to countries, she noted that that further investment is needed for the CCAC Trust Fund.

Kimber Scavo, U.S. State Department, spoke on the upcoming UNEA resolution, noting the importance of increasing regional cooperation and sharing information so that governments will have the resources and information to build up air quality management systems, and elevating the need for this. On addressing air pollution, CCAC’s Clean Air Flagship will be an opportunity to discuss working better together to ensure nobody is left behind, and also to use the new platform to better share information developed over the last years among the community.

Plenary Panel:

Economic opportunities and the cost of inaction from short-lived climate mitigation across sectors

The following panel was on economic opportunities from mitigating short-lived climate pollutants across sectors. As the CCAC embarks on its Assessment on this topic, it is becoming evident that quantitative models

might not capture all crucial aspects, prompting a need for qualitative assessment. This session served as an opportunity to delve into these additional dimensions that models may overlook. The panel discussion aimed to highlight qualitative aspects related to health, gender equity, sustainable development, food security, technology, innovation, and private sector engagement in SLCP mitigation efforts.

Drew Shindell, Chair of the Climate and Clean Air Coalition Scientific Advisory Panel, provided an overview of the CCAC Economic Assessment and Cost of Inaction, setting the stage for the subsequent discussions. There has been much discussion from industry and the labour force on the cost of action, e.g., in the electric vehicles industry, but not on the cost of inaction. Typically, the economic community has methods for doing one or the other, but not both together in an internally consistent way. The aim of the report is to build a new methodology allowing economic assessments to account for climate and clean air impacts, look at the impacts of economic damages, and how that will affect long term economic growth. This will be a project to bring together different modelling themes and produce analyses. He encouraged participants to reflect on their own costs of inaction as a concluding point.

Panellists were asked how their respective communities or stakeholders engaged with SLCP mitigation topics and which messages resonated most effectively. Discussions focused on identifying areas where the CCAC could enhance engagement with various stakeholders and how to tailor messages for maximum impact.

Each panelist shared their community's definition of the costs of inaction regarding SLCP mitigation. Participants explored ways in which the CCAC could better account for these costs in its assessments and strategies. The session provided valuable insights into qualitative dimensions of SLCP mitigation, offering perspectives from diverse stakeholders. It underscored the importance of holistic approaches that integrated both quantitative and qualitative assessments to effectively address the challenges posed by SLCPs and advance global sustainability goals.

Key messages included:

- From the private sector perspective, partnerships with experts, governments, and other stakeholders is the way forward and it is already working;
- The importance of health professionals, ministries and the health sector on communicating mutually and having a shared understanding on the effects of SLCPs on health;
- The importance of supporting smallholder farmers to transition to low emissions systems;
- The importance of collaboration as the core in innovation and in making this transition happen;
- The importance of pertinent messaging and awareness raising towards different communities and stakeholders represented, as well as the importance of food banks to close gaps between food waste and need;
- The need to continue working on the Kigali Amendment together with the Ozone Secretariat;
- Participants explored ways in which the CCAC could better account for these costs in its assessments and strategies.

Emmanuel Marchant, Vice-President Africa Milk Sustainability, Danone, spoke on Danone’s sense of responsibility on this topic: while the mission of the company is health through food, but it is also about how this is done and the social and environmental consequences. Their goal is food security, and methane mitigation. From the private sector perspective, partnerships with experts, governments, and other stakeholders is the way forward and it is already working.

Heather Adair-Rohani, Air Quality and Health Unit Head, World Health Organization, noted the importance of a "3+1 approach". Health professionals need to be able to speak to their patients about SLCPs and their effects, as well as to governments to advocate for clean air and health, and ministries also need to have these discussions on health. The health sector also needs to provide this information and share this broader understanding.

Isabelle Baltenweck, Development Economist, ILRI, noted the importance of understanding the needs and behaviours of livestock communities, and that livestock is a resilience asset. It will be important to support smallholders' transition – how can we support them to transition to low emissions systems? We need the right practices and policies for transition, including new breeds of stock; and to balance climate impacts with stock as a food source.

Sophie Punte, sustainability innovator, noted the importance of collaboration as the core in innovation and in making this transition happen. Generally, many businesses will only look at SLCPs from a regulatory perspective and only take action when there is a business case for them, in terms of profitability. Those conditions are not met in most parts of the world. It will be important to understand their needs and show how this can be done in practice. Speaking to people from their perspective, about the effect of these on their own lives on a personal and health level, will be important – to get the passion and will to change. Policymakers will also require the confidence to make these policies to improve the lives of people and their constituents.

Ana Catalina Suarez Pena, Strategy and Innovation Senior Director for the Global Foodbanking Network noted that when we waste food, we waste nutrients on a global level, which makes populations vulnerable to disease and the impacts of climate change. She also noted the importance of food banks, which can help to close such gaps between food waste and need, and which are also increasingly developing data, including on mitigation benefits. We will need to better measure what we do as well as the progress made, and raise greater awareness with appropriate messaging.

Meg Seki, Executive Secretary, Ozone Secretariat spoke on phasing out substances under the Montreal Protocol, which helped significantly in climate change mitigation, with 1 Centigrade of warming already being avoided in this way. The cooling sector is important to the food industry and agriculture, and the Kigali Amendment is one of the Ozone Secretariat's main links to the CCAC. By 2047, the Kigali Amendment will phase down more than 80% of controlled HFCs – this concerns not just the consumption and production of these substances, but their emissions as well.

Rose Mwebaza, Regional Director and representative of the African Regional Office, and moderator of the session, asked panellists what more the CCAC could do going forward. Suggestions from panellists included:

- Better quantifying morbidity of air quality impacts;
- Connecting messages that one of the best ways of working on climate change is by working on air pollution;
- The importance of how we lower emissions in the livestock sector in practice, and supporting smallholders in the transition;
- Supporting the system to keep smallholder farmers onboard and the use of local solutions as appropriate;
- Increasing funding for initiatives;
- Bringing together private sector, communities and government;

- The use of the BreatheLife campaign and framing messaging in a way to protect future generations as the "economic" framing of the issue may not speak as much to people;
- Using local solutions;
- Supporting a toolkit for policy options for building energy efficiency;
- Supporting countries by collecting information on policy options that are out there and create the enabling environment;
- Working on the problem of dumping of old technologies and equipment, particularly in Africa;
- Working with the Montreal Protocol Multi-Lateral Fund (MLF) to further work on the Kigali Amendment;
- Working on the existing business case to improve resilience to climate change, and the synergies that come from working on these topics.

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Science Policy Dialogue:

Science to action through National SLCP Plans

In this session, we delved into the critical importance of national planning processes in addressing Short-Lived Climate Pollutants (SLCPs). Representatives from Kenya, Thailand, and the Central American Integration System (SICA) shared their experiences, highlighting the value of accurately assessing development sectors' contributions to a country's SLCP profile. We discussed opportunities and barriers in implementing mitigation measures identified in national/regional plans.

Key messages:

- The importance of national plans as a policy tool that:
    - identifies policies and measures with the potential to achieve both air pollution and climate change benefits; quantifying the air pollutant, short-lived climate pollutant (SLCP) and greenhouse gas emission (GHG) reduction potential of these policies and measures;
    - evaluates the public health benefits (avoided premature deaths) from the potential implementation of these measures; and
    - identifies different barriers to their implementation and evaluate the impact of these barriers in reducing the speed and effectiveness of the emission reductions and other benefits from their implementation.
- The importance of scientifically robust and policy-relevant framework to identify and assess priority measures that maximize the multiple-benefits for air quality and climate at the regional level.
- The recipe for success to scaling up implementation based on country examples from Kenya, Thailand and Colombia, include:
    - stakeholder ownership and engagement from the beginning of the planning process until the end;
    - public awareness on SLCPs and data requirements for monitoring SLCP mitigation process; and
    - working side by side with the private sector and academia that can offer innovative approaches.

Science Policy Dialogue:

Demystifying methane and N_2O mitigation in the agriculture sector

The session provided an insightful overview of agricultural emissions of methane and N_2O. Discussions covered nitrogen and methane pollution from agriculture, emphasizing science-driven sustainable agricultural practices. Participants engaged in dialogue to address key gaps and barriers, aiming to provide evidence for effective mitigation strategies in the sector. The session was moderated by Laura Cramer, ILRI, with speakers including:

- Kevin Hicks, Stockholm Environment Institute
- Leilani Dulguerov, WMO
- Bruno Brasil, Brazil
- Bernard Kimoro, Kenya

Key messages:

- GHG, SLCP and air pollution emissions from agriculture have significant interactions with each other, causing a variety of environmental impacts.
- Three behavioural changes, reducing food waste and loss, improving livestock management, and the adoption of healthy diets (vegetarian or with a lower meat and dairy content) could reduce methane and nitrogen related emissions significantly.
- CCAC is about to start the Agriculture and Food Systems Assessment and are also working on starting an N_2O Assessment in the next two years. There is lots of crossover between major CH_4 and N_2O emitting sectors.
- Agriculture is a key emitter of N_2O, the world's forgotten greenhouse gas. N_2O is not short-lived, is in the Kyoto basket of gases, and also depletes stratospheric ozone, which plays an important role in protecting human health and has an impact on food security as it impacts vegetation.
- There are measures that can be implemented for agricultural burning which will bring multiple benefits and wins for a range of pollutants – but how do you encourage this behaviour change?
- If you're investing in the agriculture sector, we need to see the business case for the regulatory framework in that country, as not everywhere has the regulatory framework.
- We need to reframe our thinking about waste, which should be seen as a resource.
- Increased efficiency by enhancing animal and soil health, and better understanding the nutrient requirements of livestock and crops, can bring benefits to farmers and the environment.
- It is time for a step change in overcoming barriers to implementation.
- In Brazil, agriculture is majorly impacted by climate change. We are looking for a triple win – solutions that are economically viable, resilient and contribute to mitigation.
- It is important to consider national circumstances as part of the solution. For example, when we talk about food systems, there are different framings: developing country emissions mainly come from land use and food production – when the population is growing and becoming more middle class. For developed countries, there are more emissions from transport and waste, with the latter being a major issue. It will be important to have understanding related to the demand side to identify appropriate measures.
- It is important to reach a large variety of stakeholders when doing the Assessment.

Science Policy Dialogue:

Strategies for Fast-tracking Clean Air Action

This roundtable discussion focused on the Clean Air Catalyst's approach to scaling up city-level action to reduce air pollution in Nairobi and other cities. Improving monitoring and data collection were highlighted as critical steps in addressing air quality challenges. The imperative to achieve meaningful reductions quickly necessitates action even before the installation of equipment, emphasizing the importance of science and engagement activities. The session was moderated by Jessica Lewis from USAID, with speakers including:

- Waziri Ibrahim Auma Nyangoya, Green Nairobi Minister, Nairobi City County Government
- George Mwaniki, WRI Africa Air Quality Director / Project Lead, Clean Air Catalyst Nairobi
- Priya Shankar, Lead for Clean Air, Climate and Environment Program, Bloomberg Philanthropies
- Sean Maguire, Director of Partnerships, Clean Air Fund
- Soraya Smaoun, Coordinator - Air Quality Pollution and Health Unit, UNEP
- Orlando Cabrera Rivera, Commission for Environmental Cooperation
- Sandra Cavalieri, Hub Manager, Climate and Clean Air Coalition Secretariat

Key messages:

- When starting the Catalyst, the team realised that there was a lot of pre-existing work done by different organisations, but this was not coordinated. The Catalyst brought stakeholders together to discuss air pollution and what needs to be done.
- The Catalyst programme has played a big role in creating an emissions inventory.
- Local studies will provide valuable insights for realistic policy decisions, and local awareness will further drive the importance of these issues.
- More partnerships are welcomed, as well as collaboration on air pollution alerts and forecasting.
- We must be intentional about integrating cross-cutting climate, gender, equity and health objectives. Moving forward, it will be important to use data-to-action strategies and see how that can be used to inform the city, communicate widely beyond policymakers, and rank potential clean air actions.
- It is important to start with data and science, and focus on the root cause rather than focusing on symptoms.
- Funding will be very important in overcoming the challenges, so aside from the technicalities, we should also have discussions about budget and monitoring.
- It is important to work on cities because that is where the people are, and pollution is; and that is also where you have political leadership. By 2050, 2/3 of the world's population will live in cities, so we will need real commitment to climate action in cities around the world.
- On the CCAC Clean Air Flagship, we will reinvest in the BreatheLife campaign – there is a real opportunity to take this public awareness campaign; drive the momentum; convene a series of Ministerials to bring together the necessary sectors.
- It is well-established that the healthcare community are strong messengers – when they engage on air quality as an issue with community and media, it does raise awareness as a political issue and can help with policymakers. There is good health data, but not yet fantastic air quality data.
- Air quality monitoring should also be done with an equity lens on – monitoring and understanding where there are problems rather than in places where there aren't.

Science Policy Dialogue:

Black Carbon

The session aimed to provide participants with an overview of current scientific knowledge on Black Carbon (BC), including updates between AR5 and AR6. Following the presentation, a dialogue ensued to discuss potential venues and opportunities for black carbon advocacy in 2024 and 2025, and what more can be done to accelerate black carbon emission reductions, capturing climate, air pollution, health and development perspectives. The session was moderated by Sean Maguire, Clean Air Fund, with speakers including:

- Drew Shindell, SAP Chair
- Tom Grylls, Clean Air Fund
- Gunn-Eva Nordheim, Norway
- Rolf Rødven, AMAP
- Heather Adair-Rohani, WHO
- Kimber Scavo, US State Department
- Chen Meian, IGDP

Key messages:

- There is an evolution of understanding of black carbon and to think about the value of it. The number one source of black carbon is household energy.
- Black carbon is a unique driver for climate and clean air, and has a unique role in terms of climate and health. It has fallen between the gaps of climate and clean air policy, potentially due to lack of ownership on this topic.
- What we're doing at the moment isn't driving the emissions reduction that we need to see, or is aligned with the Paris Agreement target.
- There is a key question on how we best use opportunities – spotlighting a pollutant at a time is a useful approach to consider, e.g., methane, which has recently catalysed much funding.
- Philanthropy also has an important role to play for black carbon.
- The cryosphere is critical; the Arctic Council has done a lot of work on black carbon, and the question now is how to pick up the baton on this issue.
- In China, there is a lot of policy that may not have been designed with black carbon specifically in mind, but has helped to reduce it as a co-benefit. There are challenges in black carbon inventories, insufficient emissions data and uncertainties related to mitigation pathways and potential. There also needs to be stronger awareness in China's policy communities. It will be important to talk about to co-benefits that black carbon can bring from the public health and air quality perspectives in China's policy communities.
- The WHO Air Quality Conference is a significant event where it will be an opportunity to spotlight this topic.
- It may be interesting to look at the Gothenburg Protocol and where to take that next; to get a sense of the appetite of Member States to address black carbon, and whether that would mean binding targets.
- Things that may be useful in driving black carbon up the agenda include:
    - Science presentation about how important reducing BC could be for overall health benefits of PM2.5.
    - Demystifying black carbon and having better education around it being a low-hanging fruit with immediate benefits for climate and health.

- For China, taking the opportunity with its current policy and institutional framework to create opportunities for black carbon reduction, for example pilot programmes at city level.
- How science is communicated to policymakers – in particular, that while we say it is short-lived, the effects are not short-lived and that it is important to remember this.

CCAC NGO Partner Meeting

NGO partners convened to collaborate and coordinate efforts in addressing environmental challenges. The focus was on objectives and milestones for 2024. There was a briefing on the ongoing efforts related to the Year of Clean Air and CCAC Clean Air Flagship initiative, noting the prioritization of key areas of action, including the air quality management platform, communications, and advocacy.

Participants were encouraged to join the NGO listserv to facilitate communication among CCAC-affiliated NGOs, as it serves as a platform to share successes, questions, and coordinate efforts. NGOs were also encouraged to add their activities and events to the CCAC 2024-2025 SLCP Events Planner.

The importance of simplicity, targeted messaging, and strategic communication was highlighted in the discussion on messaging and communication strategies. Strategies discussed included combining narratives of impacted communities with air quality data, leveraging innovative methods like storytelling and artwork, and utilizing data for advocacy and communication.

Suggestions were made to incorporate more interactive formats and peer learning opportunities in meetings. Participants encouraged organizations to identify a window of opportunity for in-person collaboration, potentially during conferences, to plan and work together effectively. Participants suggested creating objectives for regional forums and defining them through the network to reduce email use and increase interaction. CCAC's potential to facilitate engagements and cooperation in the agriculture sector was highlighted.

Importance of utilizing in-person gatherings like this for meaningful interaction and knowledge exchange was emphasized to increase communication and collaboration within CCAC. The group discussed the value of coordinating efforts and sharing best practices, particularly through platforms like the Clean Air Task Team, to ensure that everyone is working towards common goals and maximizing impact.

The importance of building relationships within Communications teams to effectively promote initiatives was also highlighted. Speakers emphasized the importance of connecting dots and building a bigger bridge to achieve collective impact. Members highlighted the importance of providing useful communication toolkits and resources, such as draft press releases, talking points, and social media materials, tailored to the specific needs of different organizations.

The importance of NGOs pushing governments to do more than what they're willing to do, including being more direct and harder hitting in their asks for clean air standards was emphasized and the importance of bringing clean air to the forefront and reducing pollutants was highlighted.

CCAC National Consultants Meeting

Fifteen CCAC national consultants came together at the conference. CCAC supports capacity building within partner governments by recruiting local experts to support national planning and policy efforts.

National consultants are responsible for fostering inter-ministerial collaboration and engaging stakeholders at the national level to effectively integrate short-lived climate pollutants into national policy. They sit within the government, working in close collaboration with the CCAC Secretariat and our government focal points to advance the implementation, financing, and monitoring of short-lived climate pollutant mitigation strategies.

Our national consultants engaged in an interactive exchange on the Methane Roadmap Action Programme (M-RAP) and 2024 priorities and opportunities. The objective was to align efforts and maximize impact in addressing methane emissions. There was a discussion on Science to Policy by Kenza Khomsi and Fayez Abdulla from the CCAC Scientific Advisory Panel, highlighting the importance of science being involved in policymaking whenever policymakers need help in finding solutions, as well as the importance of communication on science.

The meeting focused on their roles and priorities for the upcoming year. During the roundtable, national consultants gave updates on the state of work in their respective countries. The need for training for national consultants on data availability, tools and methodologies was highlighted, and the possibility of an M-RAP webinar series on this was raised.

THURSDAY 22 FEBRUARY 2024

Day 2: Scaling Up Implementation

(Link to recording of Morning Plenary; link to recording of Afternoon Plenary)

Day 2 of the Climate and Clean Air Conference 2024 highlighted the pressing need to accelerate efforts for large-scale emission reductions within the decade. With a focus on mitigating short-lived climate pollutants (SLCPs) and addressing air pollution, stakeholders emphasized the critical importance of immediate action to meet international climate targets and safeguard public health.

Discussions centered on the imperative to build political support and mobilize finance across various sectors, including Multilateral Development Banks (MDBs), philanthropy, cities, and national governments. Stakeholders underscored the necessity of scaling up financial resources to drive SLCP mitigation efforts and achieve global sustainability goals.

The conference showcased holistic approaches to SLCP mitigation, integrating both quantitative and qualitative dimensions into strategies. Collaborative efforts between subnational governments, philanthropies, and development agencies were highlighted as essential for driving investment in SLCP mitigation and fostering sustainable development.

In today's sessions, there was a pressing call to expedite efforts to achieve significant emission reductions to meet international climate targets and address the detrimental impact of air pollution on public health. The day

emphasised the critical need for concerted action and financial mobilization to tackle climate change and air pollution.

Plenary Panel 1:

Scaling Up Subnational Action for Global Impact

The first plenary panel discussion had experts from philanthropy, development agencies, and subnational governments discussing leveraging finance to scale up SLCP mitigation efforts, with a focus on subnational actions. The panel was moderated by Sean Maguire of Clean Air Fund. Panellists shared insights and experiences, addressing questions on the role of subnational governments in mitigating methane and black carbon emissions and the significance of subnational networks in leveraging finance.

Subnational entities have an important role to play in addressing climate and air quality issues, including being part of international conversations/negotiations and leveraging finance to support implementation of SLCP mitigation. Political commitment, incentives for businesses, and engagement and clear communication with citizens while working with national governments are necessary for success.

Wade Crowfoot, Secretary of Natural Resources, State of California, highlighted California's leadership in setting science-based targets and mobilizing subnational governments. He noted that it is important to have cities as part of the conversation, as cities are at the forefront of climate change. 7% of California has been victim to wildfire in the last 3 years. It passed its first state law to reduce carbon pollution over 15 years ago, and aim to achieve carbon neutrality by 2045, as well as passed a law to reduce methane by 2030. Over half of California's methane comes from dairy and livestock and 15% comes from our oil and gas sector while we are transitioning to clean energy. California has specific regulations for industry in each of these areas, as well as financial incentives. He also spoke on California's carbon trade programme. We can make important progress on SLCPs, and we have to if we are going to stabilise our climate.

Lorraine Gerrans, Director of Environmental Management, Cape Town, elaborated on Cape Town's efforts towards carbon neutrality and the role of subnational networks in leveraging finance. Cape Town has pledged to be carbon neutral by 2050, ahead of the national target; there is also an air quality management programme for the Western Cape. She noted the difficulties of sometimes being constrained by national-level policies. She also spoke on Cape Town's energy strategy, which is starting to look at how Cape Town can be more energy independent; it is currently carbon-heavy and there is not a big drive at this stage to change that. She noted that financing of projects is also not just about money, but also about building a sustainable pipeline of projects that can be financed – which can be challenging.

Malick Haidara, Senior Climate and Energy Advisor, USAID, discussed USAID's support for subnational governments and the importance of political support in raising finance for mitigation. USAID is working extensively with many countries to integrate methane mitigation, and those governments play a very key role in making that happen. He noted that one thing that is particularly important for subnational governments, is that political will is critical to attract more funding. We will also need the private sector to play a role, and have regulatory frameworks. He noted that an estimated over 1 billion USD has gone into methane projects since COP27, just from bilateral aid agencies, with nearly 3.5 billion USD from international financial institutions. That has been big progress compared to before COP27. Methane is being addressed as a co-benefit for development projects, with many bilateral aid agencies not having methane mitigation as a key objective.

Plenary Panel 2:

Country Experiences on Scaling Up Implementation of SLCP Mitigation

Representatives from Nigeria, Vietnam, Chile, Ghana, Morocco, and Côte d'Ivoire shared invaluable insights on how the CCAC has influenced SLCP mitigation in their respective countries. Discussions ranged from compliance measures in the oil and gas sector to incentivizing private sector investments and quantifying health benefits from Nationally Determined Contribution (NDC) implementation.

Asmau Jabril from Nigeria spoke on the national action plan to reduce SLCPS, which was approved by the highest policymaking body in Nigeria, including the president and national ministers. Nigeria is an oil and gas-based economy, and they were able to develop methane emissions reduction guidelines for this sector; and are working on immediate implementation. Part of the implementation strategy includes stakeholder sensitisation and capacity-building.

Tran Dai Nghia from Vietnam noted that most emissions from the agriculture sector are considered as SLCPs. He noted that in working with the CCAC, Vietnam receives a lot of support. With more than 10 million farmers in Vietnam, there is a big challenge in implementing GHG reduction measures and it is important to prioritise the technical and economically feasible ones. The burden cannot be placed on smallholder farmers.

Camila Labarca from Chile spoke on their work on their black carbon inventory and also their work in decarbonising in their clean air plan. They put these two things together and included black carbon in their NDC; the next step will be to develop sectoral mitigation plans.

Juliana Bempah from Ghana spoke on the support that Ghana has received from the inception stage from the CCAC to look at their emissions profile. SLCPs could come from different sectors, so with CCAC support, a country can develop a national action plan. In Ghana, a key focus was cookstoves and energy efficiency, which aligned well with its NDC.

Abdelali Dakkina from Morocco spoke on their national action plan to reduce SLCP emissions, noting that they started with regulation first, for e.g. the air pollution law in Morocco which identifies and details what emissions are not authorised. In leveraging lessons from the CCAC, the work and analysis allows a precision of different co-benefits for health, agriculture and well-being, and working on SLCPs gives more sense to their NDC.

Benjamin Brida from Cote d'Ivoire spoke on the work on air pollution, sharing their experience in how working with the CCAC shifted not just mitigation, but opportunities. Collaboration helped to assess key assumptions but also different mitigation pathways, which has helped build up their work. Cote d'Ivoire now has a new NDC that is very robust, which also makes Cote d'Ivoire one of the first countries to highlight SLCPs in their NDCs. It is important to create necessary political buy-in, as well as address health issues on the local level.

CCAC support to national governments on integrated climate and clean air planning have been necessary and helpful for developing national SLCP strategies and sectoral strategies for implementation, leading to more ambition in many developing countries NDCs. Working with relevant government agencies, stakeholders and industry were key in the successful adoption of the SLCP measures identified in the SLCP plans. Considerations for the next NDC update and recommendations for scaling up implementation were key takeaways for further action.

Breakout Session 1:

Methane roadmap development in the African region: leveraging success for catalytic action in 2024 and beyond

In the breakout sessions on Methane Roadmap Development, speakers and participants from around the world came together to drive action on reducing methane emissions and enhancing Nationally Determined Contributions (NDCs) and Biennial Transparency Reports (BTRs).

In the M-RAP in Africa session, country representatives from Nigeria, Cameroon, and Côte d'Ivoire shared their plans for including methane and other SLCPs in their revised NDCs and new BTRs.

Nigeria spoke on the importance of methane national roadmaps. It has developed specific commitments and reduction targets in methane through a Methane National Planning Framework. SLCPs have been integrated into Nigeria's NDC and national plans, and they shared on measurement, data, technology, and collaboration to sustain commitment, resource mobilization and capacity building efforts.

Cameroon provided a sector breakdown, noting that it is good to start with a key sector. They are linking their roadmap to more ambitious NDCs. They want to integrate SLCPs into policy frameworks and present their methane roadmap at COP30. They also noted issues in alignment between the M-RAP and NDC review systems.

Cote d'Ivoire shared their experience of methane mitigation planning and implementation. In 2019 their first national methane assessment supported NDC revisions. They also developed 18 measures and launched their priority sectors in May 2023. They noted challenges such as cross-sector coordination, implementation pathways, time and cost, as well as the need for expertise and resource mobilization.

The importance of methane roadmaps, and their role in enhancing NDC ambition and national plans were highlighted. Panellists called for support for methane roadmap implementation, including the need for increased expertise and resource mobilisation. Further discussion on methane roadmap implementation focused on the need for coordination mechanisms linking planning to finance, the role of public engagement and advocacy, and the need for regulatory frameworks.

The following key messages were noted from the discussion: there is a need for robust data; a coordination mechanism linking planning to finance; public engagement and support; sharing of info across countries on what's working; and the need for regulatory frameworks.

Breakout Session 2:

Methane roadmap development in the Asia-Pacific and LAC region: leveraging success for catalytic action in 2024 and beyond

The objective of this session was to raise awareness about M-RAP; get countries focused on methane inclusion into their BTRs and NDC Enhancements; and create a sense of community with countries all working together to meet the GMP. Speakers from Cambodia, Chile and Colombia discussed their experiences and challenges in

integrating methane and SLCPs into their climate action plans, and shared insights into strategies for methane inclusion in NDCs and BTRs.

A key message emerging from the session was that climate action is a collective and iterative achievement, and that there is no one sector or stakeholder that can do the job for everyone else; everyone must do their part.

Chile is developing methane mitigation sectoral plans that build on their national climate change law with a carbon budget for each sector. This process has supported intersectoral coordination across the Ministry of Health, Agriculture, Energy and Public Works. Mandatory targets are being set for each sector and each region and municipality is currently developing actions plans aligned to sectoral plans. It will be developing indicators for monitoring methane mitigation against its NDC commitments. The next phase will focus on developing regional plans.

Colombia has incorporated methane mitigation measures for agriculture, waste, and energy in its NDC that contributes to the national carbon budget and the GMP. It will articulate the reduction of black carbon across its NDC mitigation measures. A national methane roadmap is underway with the support of an intersectoral committee with the ambition of developing intersectoral and local action plans, commitments by law and ambitious national climate targets. The status of the roadmap development process is in the picture.

Cambodia is enhancing its NDC by 2025 and plans to consider both mitigation and adaptation measures through its methane roadmap development process, with the drafting of a work plan that will be endorsed by the government. The roadmap is firmly embedded in Cambodia's climate change policy and is sustained with political support from the government.

The session emphasized the need for collaboration and support to accelerate progress towards meeting methane reduction goals and enhancing transparency in reporting. Discussions focused on identifying opportunities for scaling up action, leveraging successes, and advocating for increased ambition in methane mitigation efforts.

These breakout sessions served as a platform to raise awareness about the M-RAP and foster a sense of community among countries committed to addressing methane emissions. The discussions underscored the urgent need for collaborative action to achieve the goals set forth in the Global Methane Pledge.

Launch of Framework for Gender-responsive Livestock Development

FAO, ILRI, IFAD and the World Bank launched a new report "A framework for gender-responsive livestock development: Contributing to a world free from hunger, malnutrition, poverty and inequality " with the aim of supporting the planning and implementation of gender-responsive policies, projects and investments related to the development of the livestock sector. It provides an overarching framework to support the formulation of action plans and guidance documents contributing to gender equality and women's empowerment through livestock development.

Agriculture Hub Session

This session delved into critical discussions on advancing methane mitigation in livestock systems and the rice sector, and underscored the importance of collaborative approaches, innovative solutions, and knowledge exchange in addressing methane emissions and building resilient agricultural systems.

In Part 1, a key takeaway is the need to reduce emission intensity and increase agricultural productivity. It is also important to understand farmer behaviour and decision-making, and learn from farmers as critical agents of change. It was noted that data on the global south is lacking, and the revised NDCs and first BTRs will provide a stronger data set. It is hoped that the latter will help provide better informed and targeted policies and investments. Holistic actions can have a positive impact on emissions, with examples of the former being supporting farmers directly, focusing on feed management, and focusing on soil health for feed production and herd and manure management.

In Part 2, a key takeaway was that while rice accounts for 10% of agriculture emissions worldwide, it also offers high mitigation potential (e.g. through alternate wetting and drying); farm practices and certain "climate-smart" varieties can cut as much as a third of methane emissions. Across the value chain, rice waste is significant, and can be as much as 33%. Management and re-use of rice straw, as an alternative to burning, is also an opportunity to avoid GHGs. Rice producers face climate stress, and significant impact on livelihoods – it was noted that a rice crisis would seriously undermine the SDGs. The discussion called for greater research into climate resilient rice systems, and the global sharing of such research. Solutions must have co-benefits to avoid burdens being placed on particularly small farmers (almost 70% of producers in Vietnam). It was also suggested by Ghana that there should be investment in training of trainers in this sector, as well as development of manuals and illustrative publications. Ghana is exploring opportunities for enhanced action through Article 6 and the use of carbon credits.

Cooling Hub Session

Part 1 of the session focused on creating awareness of the session participants on lifecycle management of refrigerants (LRM) and environmental dumping of inefficient cooling appliances with obsolete chemicals to developing countries. According to 2022 research by EIA, NRDC and IGSD, emissions of 90+ billion tonnes CO2e of ozone depleting substances and HFCs currently contained within equipment, or is expected to enter the market by 2100 can be avoided through LRM.

Part 1 of the session also shared results of a studies by CLASP in Africa and Southeast Asia showing that most of the imported refrigeration and air-conditioning (RAC) appliances are inefficient and contain high-GWP, soon to be banned refrigerants under the Montreal Protocol. A case study from Ghana which already has updated its MEPS show that even with policies in place, high-efficiency cooling appliances are not easily accessible in the market.

Part 2 focused on financing of SLCP and GHG mitigation in the cooling sector. The Multilateral Fund of the Montreal Protocol is the main funding institution that supports countries in meeting their phaseout and phasedown obligations for controlled substances under the Montreal Protocol, and projects and activities eligible for funding were shared. Windows for funding for LRM, energy efficiency and sustainable cooling are also opening up, but discussions are still ongoing in the Executive Committee.

Meanwhile, other options for financing HFC mitigation projects were also explained, which included the voluntary carbon market, the Paris Agreement Article 6 and Japan's Joint Crediting Mechanism.

Fossil Fuel Hub Session

Part 1 addressed opportunities and tools to build capacity in the fossil fuel sector, with presentations from UNEP's IMEO MARS, Carbon Limits on their MIST Tool and CATF on their CoMAT tool, followed by a country roundtable with representatives from Iraq, Mexico and Nigeria. The discussion highlighted four main factors: (1) We need more data; (2) Transparency is critical to ensure commercialization; (3) It's important to integrate satellite data into national inventories; (4) There is a need to make sure there is sufficient financing and think about how satellite data can be applied to agriculture and waste (e.g. MethaneSAT will also be used for agriculture).

Part 2 began with a pre-recorded video from IEA on their Regulatory Map and Toolkit, and then the EU, Uganda and Colombia presented their policy and regulatory framework. The Q&A that followed highlighted that countries are focusing on engaging their stakeholders, ensuring that their NOCs are commercially viable, and how various elements of methane mitigation work together, from onsite measurements, improving inventories and policy development and international cooperation.

Media Session on Climate and Clean Air Reporting

The report on Used Heavy-Duty Vehicles and the Environment was launched at a press conference, followed by a dialogue session where journalists and scientists from various countries discussed cleaner air and climate mitigation.

Held alongside the Climate and Clean Air Conference 2024 in Nairobi, preceding the UN Environment Assembly, the event addressed the urgent issue of air pollution, emphasizing the need for enhanced media coverage to raise awareness about its health and environmental impacts. The dialogue aimed to foster collaboration among scientific, policy, and media communities to better communicate the complexities of air quality and climate issues to the public. This event served as a precursor to a comprehensive certificate course on climate and clean air reporting designed for journalists by the UN.

DAY THREE: FRIDAY 23 FEBRUARY 2024

Day 3 Theme: Looking Forward to 2025

(Link to recording)

Day 3 of the Conference looked forward to the future in different sectors, as well as continuing with the discussions per sector in waste, heavy-duty vehicles & engines, and household energy. The day saw the announcement of the call for new CCAC transformative action projects; calling for advancements in gender responsive SLCP policies; highlighting champion countries; and looking forward to 2025 for the revised NDCs and implementation of the Global Methane Pledge and Clean Air Flagship.

Opening Plenary:

Looking Forward in the Sectors

In the opening plenary, Mike Lurie, Senior Advisor, Office of the Special Presidential Envoy for Climate, U.S. Department of State, highlighted the resolve in this meeting, and the momentum of the movement on super pollutants: new countries continue to join the GMP; the first ever methane regulation in the fossil fuels sector in the EU; the Global Stock Take raising the bar for NDCs and highlighting the importance of including methane and other SLCP cuts in NDCs to keep 1.5 degrees C alive. He called upon partners to use the tools and resolve in the room, to redouble our efforts and turn back the tide.

Mary Muthoni Morrison, Co-Founder and Coordinator of EcoEngage, and COP28 Youth Climate Delegate spoke next, focusing on how youth can engage with these efforts and the need for collaboration across sectors to work on climate and air pollution concurrently. Youth can bring new ideas solutions and unflinching resolve; she called on all to work together and be innovative, as efforts can only work if implemented in a coordinated manner.

The opening remarks were followed by a panel discussion on looking forward in the different CCAC sectors, moderated by Martina Otto, Head of CCAC Secretariat.

Panellists shared their varied experiences. Anje Schwetje (Germany) shared the German experience on waste, how we can stop methane generation and reduce methane generation in the sector over the long run, and how to stop “feeding the beast”, e.g. by preventing food waste and diverting organic waste from landfill. Bruno Brasil (Brazil) noted that sustainable agriculture must place farmers’ needs at the core of policy design to make them our main allies. Rob de Jong (UNEP) noted that the global north and south must go together in the shift to zero emissions mobility, and while we roll out e-mobility solutions, we also address older vehicles, with the spirit of shared responsibility.

Benjamin Heras (Carbon Limits) spoke on decarbonisation of the carbon sector and the need to understand financing and access to mitigation in that sector. Makoto Kato (Japan) spoke on the continuing importance of work on and financing for cooling, touching on the ongoing work on the MOP, the Global Cooling Pledge at COP28, the work of the CCAC Cooling Hub and the relevance of carbon markets. Ed Brown (MECS) noted that clean cooking continues to be an important issue, highlighting the increasing recognition that financing is insufficient and that it also connects carbon and health issues.

Heavy-Duty Vehicles and Engines Hub Session

Part 1 of the session commenced with the launch of the UNEP Report titled "Used Heavy-Duty Vehicles and the Environment: A Global Overview of Used Heavy-Duty Vehicles: Flow, Scale, and Regulation". Rob de Jong from UNEP provided insights into the report's findings and highlighted the recommendations, which include promoting minimum quality standards (Euro 4), regional harmonization and incentivizing green technologies. The discussion after touched on managing the impacts of the transition, which nevertheless is important and needed.

A country roundtable discussion followed, featuring representatives from Morocco, Cambodia, Paraguay, and Uruguay who reflected on their countries' objectives regarding mitigating black carbon emissions from heavy-duty vehicles and engines. Key questions included the background of the HDVE market in their countries, barriers faced in regulating used vehicles, and how the CCAC could support their agendas. Morocco touched on the evolution of fuel standards over the years and other policies. Cambodia spoke on implementing emissions standards for vehicles, use of cleaner fuel, its clean air policy, and the challenges of enforcement. Paraguay noted the political, social, economic and environmental factors it considers in policy implementation, including unions and taxes. Uruguay described the push towards renewable energy as a factor, and their Euro 5 standards for new imported vehicles.

Governments have seen the need to move towards cleaner HDVs, linking it to renewable electricity. Some barriers are political, social and economic. Suggested additional support that could be provided by the CCAC included: more technical assistance and capacity building in implementing regulations and standards; need for data, capacity and more funding.

Part 2 focused on scaling up green freight programs in India and the Northern Corridor in Africa. Presenters discussed the environmental and economic implications of increasing CO2 emissions from the freight and logistics sector, particularly in India and the Northern Corridor.

Progress on the development of regional Green Freight Programs in South Asia and East Africa, as well as initiatives to reduce vehicle emissions, was shared. This included insights into the Smart Freight Shippers Alliance and the implementation of the Global Logistics Emissions Council (GLEC) Framework. Mehul Khandelwal, Smart Freight Centre presented on the new green freight program in India. Emmanuel Imaniranzi, Northern Corridor Transit and Transport Coordination Authority, shared progress on green freight in the Northern Corridor.

The session concluded with a moderated panel discussion and audience Q&A, providing valuable insights into tools for capacity building and standardizing green freight practices.

Household Energy Hub Session

The session focused on accelerating the transition from kerosene to alternative fuels, considering the significant health and environmental impacts associated with kerosene use.

Part 1 focused on how to accelerate the switch from kerosene to alternative fuels. Heather Adair-Rohani from WHO presented the global status of kerosene use for cooking, lighting and heating and impacts on public health. In 2018, Ministers of Health, Energy and Environment from the LAC region came together to commit to eliminate kerosene still used by 75 million people in the region. This is “low hanging fruit” for eliminating an extremely potent source of black carbon to improve public health and reduce regional climate impacts.

James Knuckles from the World Bank then presented the ASCENT Program (Accelerating Sustainable and Clean Energy Access Transformation). ASCENT is a Multiphase Programmatic Approach out to 2030 with $5 billion IDA that covers 3 pillars of activities – 1. Regional and National Platforms to Accelerate Energy Access; 2. Expanding Grid Electrification; 3. Scaling Distributed Renewables and Clean Cooking Solutions (covering all clean fuels and technologies, electricity).

The presentations were followed by interventions by Fred Onyai from Uganda and Prudence Lihabi from Kenya who explained the barriers households face in switching from existing fuel and technology – in particular the high costs required initially to purchase new clean stoves; as well as barriers governments face in promoting alternative fuels, the support needed to overcome these barriers, and the role of CCAC in scaling up efforts to eliminate kerosene use in homes.

Participants agreed that lack of finance and lack of access are the key barriers for households. Participants then had a chance to connect in smaller groups to discuss these barriers and potential solutions in detail, and then shared back to the larger group.

Part 2 focused on scaling up e-cooking. A panel discussion moderated by Ed Brown from MECS addressed the linkage between scaling up e-cooking and eliminating kerosene use, as well as the role of CCAC in scaling e-cooking efforts. The session delved into scaling up e-cooking as an alternative to kerosene, emphasizing the need for policies to reduce end-user tariffs to make electrification cost-effective. Presentations explored innovations in microgrid e-cooking business models, creating markets for e-cooking appliances, leveraging IoT technology, and utilizing carbon finance for e-cooking initiatives.

Sam Grant from CLASP presented “Accelerating Microgrid E-Cooking Through Business and Delivery Model Innovations”; Meredith Muthoni from BURN presented “Creating the market for e-cooking appliances; Geoffrey Kimiti from PowerPay presented “The potential of IOT in e-cooking"; and Lindsay Umalla, Clean Cooking Alliance presented “E-cooking through carbon finance: example from Nepal”. These presentations underscored the growing movement to e-cooking, and highlighted the difference between private sector driving the change in Africa, and government driving the change in Nepal. An example was shared regarding Indonesia, which is switching from subsidizing LPG to e-cooking because subsidizing LPG is too expensive – countries in the room were encouraged to learn from the Indonesian example.

These sessions underscored the urgency of transitioning to cleaner cooking solutions and the importance of collaborative efforts to achieve this goal.

Waste Hub Session

The session kicked off with an introduction by Donovan Storey from CCAC, highlighting key initiatives aimed at accelerating actions on methane and air quality. Among these initiatives is LOW-Methane, launched at COP28, which strengthens multi-level governance to address methane emissions. The session also focused on methane mitigation solutions utilizing organic waste, particularly highlighting Black Soldier Fly technologies. Additionally, advancements in data innovations, including satellite data, were discussed to support action. The session concluded with reflections on key priorities for the CCAC Waste Hub in 2024/2025.

The session on clean air and open burning of waste session explored the crucial link between waste management, air quality, and the harmful effects of open burning. Panellists examined persistent drivers of open burning and highlighted progress regarding commitments to eliminate open burning, particularly in Africa. Country and municipal experiences were showcased, focusing on practical measures to combat air pollution from waste. The sessions provided valuable insights and strategies to address methane emissions and air pollution from waste, emphasizing the importance of collaborative efforts and practical solutions.

In Part 1 of the session, which discussed new initiatives in waste, Stefan Diener (eclose) provided entrepreneurial perspective on black soldier flies (BSF). BSF provide unique opportunities to valorise waste chains--including food waste, animal waste, and even human faeces – as animal feed and fertilizer. Facilities can vary from small scale and low tech to very high tech that can process 700 tons/day.

BSF have high potential in low- and middle-income countries. Kenya is a hotspot for BSF production with 1200 operations. These facilities create job opportunities (especially in lower tech operations), increase soil health, provide local feed for animals, and reduce impact from landfills and their associated methane emissions. Some obstacles to uptake are the need for regulatory frameworks, waste sourcing (quantity, quality, reliability, and cost), and competition for waste (e.g., BSF should not compete with established value chains like pig feed).

Ilse Aben (SRON TROPOMI) demonstrated how satellite monitoring can transform waste management through data. By combining publicly available data from two satellites, TROPOMI and GHGSat, SRON was able to detect 3000 super-emitter plumes in 2021 across the coal, oil and gas, and urban waste sectors. By working with GMH, GHGSat, and local governments and partners, SRON has been able to monitor and identify 60 urban hotspots with 150 super-emitter sites. They are now working with ten cities to support them in mitigating emissions from their landfills over the next three years.

Gisela Provasi provided an overview of the LOW-Methane Partnership, which was launched at COP28. Its mission is to cut 1 million tons of emissions per year while working with sub national jurisdictions to unlock $10 billion in private and public sector finance. The key to transformative action is collaboration to avoid duplicative effort, and solutions need to deliver benefits to communities, build green jobs locally, and deliver clean air.

In Part 2, Andriannah Mbandi (Global Waste Lead, UNHLC) situated open burning as an ongoing waste, health and environmental crisis. The session focused on global and national momentum, but also situated open burning as highly local with needed engagement at community level.

Sub Saharan Africa contributes a small percentage of global waste production, but a high percentage of that is organic waste. A big opportunity to make a difference, as 19 of the world's 50 largest dump sites are in sub–Saharan Africa.
In low-income countries, waste management is 20% of the municipal budget, twice that of high-income countries. Improved waste management provides an opportunity for economic growth, while also improving livelihoods through better jobs and better air quality.

Fatou Ndoye (Deputy Regional Director, UNEP-Africa) framed the session by reflecting on the AMCEN resolution, its context, ambition and what lessons others can draw from this commitment and process. Only 11% of waste goes to managed landfills, the rest is burned or dumped. Improved waste management could contribute $8 billion dollars of economic benefits. The AMCEN and UNEA dialogues are big opportunities to create the policy frameworks for addressing the waste challenge.

Beatriz Cardenas (Global Director of Air Quality, WRI) highlighted that we have been working on the issue of open burning for decades. One of the constant sources of pollution is waste burning. Integrated approaches help drive the narrative, for example by linking Nairobi's waste burning to impacts on Nairobi National Park. Mexico City was able to control its air quality challenges from waste pollution since it was the most polluted city

in the world in the 1990s. This improves health outcomes, as waste burning releases heavy metals, dioxins, and black carbon.

Shyvonne Henry (Africa Lead, Practical Action) highlighted Practical Action's success through community engagement in Senegal. Dakar doubled waste production between 2008 and 2018. Practical Action is focusing on health. Informal workers are marginalized and poor, no access to personal protective equipment, and spend 50% of income on health.

Rapid urbanization in Africa creates opportunities and challenges, such as sustainable waste management. "Focusing on people inspires action." It will be important to take a whole systems approach, including all stakeholders (national, cities, development partners) to pilot innovative approaches.

Key activities are early detection tools related to air quality from open burning waste, providing workers with PPE and health insurance, and waste recovery and reduction. In all our work in this sector, we need to support and respect the dignity of informal waste workers.

Hibrahim Otieno Nyakach (CEO for Environment, Nairobi City County Government) reflected on the progress Nairobi has made. People burn in order to extract resources, for example tires. Incinerators exist in Nairobi but do not have the capacity to clean the fumes. Nairobi County has released a clean air act to ban open burning and partners with many institutions to implement it.

Francesca Calisesi (UN-Habitat) provided an overview of how UN-Habitat coordinates SDG 11.6.1, which looks at urban solid waste management. UN-Habitat collects primary data to compile a global baseline. A positive note is that 84% of urban waste is collected and over 60% is managed in controlled facilities, but only 15% of waste in sub-Saharan Africa is managed in controlled facilities. Action plans for cities help identify infrastructure and financial gaps. There is a need to work with waste recyclers and processors to formalize the sector, while also involving community-based organizations.

Closing Plenary:

Highlighting champion countries - Looking forward to 2025 for the revised NDCs and implementation of the Global Methane Pledge, Clean Air Flagship and Kigali Amendment

The closing plenary session, facilitated by Martina Otto, Head of the CCAC Secretariat, was a culmination of insightful discussions, featuring prominent voices from champion countries and organizations at the forefront of climate and clean air action.

Izabella Teixeira, former Minister of Environment from Brazil and currently UNEP-IRP Co-chair, set the tone with thought-provoking insights on super pollutants, and the importance of mobilising and increasing access to climate finance – crucial to our success in tackling climate and clean air issues. She spoke on the need to negotiate a new global ambition, which will need to have a new process and open conversation about targets, as well as the need for better understanding and coordination of responsibilities and innovation in our approaches to public health and the climate transition.

Panellists from Brazil, Chile, Ghana, Morocco, Nigeria, and Vietnam shared their countries' experiences and aspirations regarding the 2025 revision of the Nationally Determined Contributions (NDCs), as well as on the Global Methane Pledge and Clean Air Flagship. Led by Isaac Valero, Head of International Energy Relations, the discussion delved into the tangible benefits of integrated climate and clean air planning to their respective countries, which included: new perspectives on problem-solving; energy efficiency; reduced emissions of refrigerants; using international cooperation to leverage the work across ministries; resilience to climate change; efficiency of dealing with two issues together; helping to achieve NDC targets; technical support to move away from fossil fuels while achieving better air quality.

Panellists also noted the importance of good data and measurements; of collaboration and partnerships; of taking immediate action and fast implementation to move forward; and of tailoring solutions to specific regions.

Martina Otto, Head of CCAC Secretariat, concluded the session by highlighting the importance of the integrated approach over the past three days, data driving action, informing policies and reporting back on results, and the need to give ourselves the means to take action, including stepping up the capacity and technical support and making climate and clean air solutions part of the real economy. She called on partners to reach out to the Secretariat with their needs and what might be most helpful in the process. On key initiatives going forward, she noted the need to mobilise finance on SLCPs, the Clean Air Flagship (including components such as the African Clean Air Plan and BreatheLife) and the CCAC-TEAP.