

COP29 Summit on Methane and Non-CO2 Greenhouse Gases – RINGO notes

Tuesday, November 12, 2024 8:08 AM

Dana Kahn

Emory University

COP29 Summit on Methane and Non-CO2 Greenhouse Gases

Tuesday, November 12, 2024 from 17:00 to 18:30

Patricia Espinosa – Former Executive Secretary of UNFCCC (Mexico)

- Framing the session
 1. Greenhouse gas (GHG) emissions are not coming down, and climate action isn't advancing for our 1.5C limit
 - i. 2024 is on track to be warmest year on record.
 2. Millions of people and ecosystems are experiencing devastating impacts of climate change.
 - i. Each year it gets worse.
 3. Methane and other gases account for over half of today's warming.
 - i. Lowering methane and non-CO2 GHGs is essential to meet goals of Paris Agreement.
- Co-hosts
 - o John Podesta: Senior Advisor to the US President for Clean Energy Innovation and Implementation + US Special Presidential Envoy for Climate
 - o Liu Zhenmin - China's Special Envoy for Climate Change
 - o Mukhtar Babayev – COP29 President Azerbaijan

John Podesta (US)

- Biden administration's progress on climate
 - o Ambitious climate agenda
 - o New actions for methane emission reduction
 - o Non-CO2 super pollutants
 - o Slashing these are fastest and cheapest way to slow down climate change
 - o China, US, and COP presidency – second time hosting this summit
 - o HFCs and methane
 - o 158 countries endorse global methane plan
 - Launched 3 years ago
 - \$2 million grant funding for financing
 - New satellites
 - Cost of methane abatement tech has gone down
 - Global Stocktake last year
 - o Net zero emissions no later than 2050 --- US target for all GHGs
 - o US progress
 - New regulation to reduce oil and gas emissions by 80%
 - Oil and gas waste emission charge – few on large emitters, IRA (Inflation Reduction Act)
 - Super emitter program portal – spot leaks for oil and gas companies to receive alerts – under EPA oil and gas
 - <https://www.epa.gov/compliance/methane-super-emitter-program>
 - Feed additive to reduce methane from livestock, deployed in 55 countries, cut 30% emissions
 - New landfill standards to reduce methane emissions in Washington state
 - <https://ecology.wa.gov/about-us/who-we-are/news/2024-news-stories/new-rule-to-decrease-landfill-methane-emissions>
 - US climate alliance – America Is All In coalition
 - <https://usclimatealliance.org/>
 - <https://www.americaisallin.com/>
 - Industrial nitrous oxide emission in half by early 2025
 - Global Nitrous Oxide Assessment - this COP
 - <https://www.unep.org/resources/report/global-nitrous-oxide-assessment>
 - Ozone assessment

Mukhtar Babayev (Azerbaijan)

- World's 2 largest economies are the US and China
- IPCC report shows that we need to cut emissions by 43% by 2030
- 1/3 of human GHG emissions are Non-CO2 gases
- Building on work of previous COPs
 - o Framework – Global Methane Pledge (GMP)
 - <https://www.globalmethanepledge.org/>
 - <https://www.globalmethanepledge.org/news/methane-cop29>
 - o 158 countries agreed – 30% by 2030

- Other countries need to sign up
- Must support ambition with tangible action
- Methane emissions have increased since pledge
- Climate & Clean Air Coalition (CCAC): To Reduce Short-Lived Climate Pollutants, UN Environment Programme – help countries include methane in NDCs
 - <https://www.ccacoalition.org/>
- Agriculture and organic waste emissions
- State Oil Company of the Republic of Azerbaijan (SOCAR) and other companies are collaborating with The Oil & Gas Decarbonization Charter (OGDC)
 - <https://www.ogdc.org/>
- Focus this year is organic waste
- 10% of GHGs come from food waste
- Set targets for methane emission in organic waste within NDCs
- Farming – Baku Harmoniya Climate Initiative for Farmers (will be launched at COP29 on November – partnership with FAO)
 - <https://www.fao.org/climate-change/fao-at-cop29/en>
 - <https://www.climateaction.org/news/engaging-the-business-community-at-cop29-agri-food-systems>
 - [https://www.fao.org/director-general/speeches/details/unga79-azerbaijan-side-event---enabling-climate-action-for-sustainable-future-through-cop29-global-initiatives-statement-\(5-min\)/en](https://www.fao.org/director-general/speeches/details/unga79-azerbaijan-side-event---enabling-climate-action-for-sustainable-future-through-cop29-global-initiatives-statement-(5-min)/en)
- Accessible guidelines for farmers applying for funds
- Transparency is key
- First Biennial Transparency Reports (BTR1) submitted by parties to the Paris Agreement
 - <https://unfccc.int/first-biennial-transparency-reports>
- Build concrete paths for Non-CO2 GHGs

Liu Zhenmin (China)

- All parties in UNFCCC are encourage to share initiatives with developing countries
 - So more countries can take action on Non-CO2 GHGs
- Benefits of reducing methane emissions
- Developing country like China has been late to control Non-CO2 gases compared to developed country partners
 - 1 year effort
 - China Methane Emissions Control Action Plan
 - Nov 7, 2023
 - 2024 working plan
 - Responsibilities for agencies for emissions control
 - <https://www.igsd.org/wp-content/uploads/2023/11/2023-CHINA-METHANE-EMISSIONS-CONTROL-ACTION-PLAN.pdf>
 - Building fundamental capacities
 - Emissions data for key industry and sectors
 - Monitor, reporting, step by step process
 - Research on methane – for monitoring
 - Enhancing policy and framework
 - Revise emission status – lowering coal mine gas emission from 30% to 80% - reduce methane emission at the source
 - Market based emission control
 - Global methane initiative – China has participated
 - <https://www.globalmethane.org/index.aspx>
 - Gas companies, waste water treatment, and coal mine have invested in emission reduction action voluntarily
 - Challenges
 - Lack of effective emission reduction tech
 - Accurate emissions control
 - Standard protocols
 - Need response from international community and collaborative action

Commissioner for Climate Action, Wopke Hoekstra

- Exchange new steps for reducing methane and other Non-CO2 gases
- 3 years ago – launched Global Methane Pledge – EU and US
 - Our efforts so far aren't sufficient
 - We have 6 years to turn our commitment into action
- Continued commitment and action/goals for including all GHGs in overall NDC target
 - Methane Abatement Partnership Roadmap (MAPR)
 - EU launched road with US, Japan, Canada, Italy, UK and OECD (Organization for Economic Co-operation and Development)
 - https://energy.ec.europa.eu/news/eu-steps-efforts-abate-methane-emissions-partners-cop29-2024-11-12_en#:~:text=The%20Methane%20Abatement%20Partnership%20Roadmap%20esta

[blishes%20a%20critical.first%20step%2C%20signatories%20must%20commit%20to%20decisive%20action.](#)

- https://energy.ec.europa.eu/document/download/1978e73b-0158-4593-87a5-c051bc0ec714_en?filename=Methane%20Abatement%20Partnership%20Roadmap.pdf

o EU commitment

- EU Methane Regulation – 1st in world to regulate emission also in imports
 - https://energy.ec.europa.eu/news/new-eu-methane-regulation-reduce-harmful-emissions-fossil-fuels-europe-and-abroad-2024-05-27_en
- Set requirements and transparency tools for accurate info while we transition away from them
- Methane observatory
 - <https://www.unep.org/topics/energy/methane/international-methane-emissions-observatory>
- Japan partnership – energy importers
- Fluorocarbon emissions – HFCs phase out by 2050 in EU
 - Feasible and low cost
 - Adopt more ambitious phase out of HFCs under Montreal Protocol
 - SF6 – currently used in electrical switch

Ajay Banga - President of the World Bank Group

- 15 national program that slash CH4 emissions in the World Bank
 - o Rice CH4 emissions - 45% reduction
 - Promote use of seeds with greater yields that use less water
 - o Beef CH4 emissions - 98% reduction
 - o All available online
 - o 15 countries, 40 projects
- Livestock projects – 12 countries (including China, India, Brazil)
 - o Incentive farmers for best practices on raising livestock
- Waste management systems
 - o Improve collection and sorting
 - o Anaerobic digester
- Next phase of the World Bank methane reduction plan (Methane Reduction Blueprint launched at COP28)
 - o Expand to other sectors within these countries and start new projects in other countries
 - o Monitor emissions
 - o <https://www.worldbank.org/en/news/factsheet/2024/11/12/methane-reduction-blueprint#:~:text=We%20announced%20an%20initial%20commitment%20to%20launch%2015,lifespan%20of%20projects%20and%20benefit%20150%20million%20people.>

Zulfiya Suleimenova – Advisor to the President of the Republic of Kazakhstan – Special Representative on International Environmental Cooperation

- Global climate pledge – urgent and shared commitment
- Last year, president of Kazakhstan joined global methane pledge
- Zero partnership - COP28 – national oil company
- Gas leak detection
- Projects on coal mine methane
 - o EPA project
- Observations
 - o Need transparency for effective plans
 - Agriculture is a major methane emitter
 - Methane is 80% of national emissions for Kazakhstan
 - Energy sector (oil, gas, and coal) - largest share of methane emissions
 - o Venting from oil and gas sector produces lots of emissions
 - Reduction of gas flaring
 - Venting became major source of CH4
 - Developing regulations of methane
 - o Costs to support global methane pledge
 - o Enforcement of regulation and monitoring of methane emissions
- 0.2 degrees C by 2030 – global methane pledge

Commission for climate action from EU spoke

Ed Miliband - Secretary of State for Energy Security and Net Zero

- The world is way off track in emission reductions
- New UK government is committed to show global reduction in emissions
- CO2 reduction is the marathon while CH4 is the sprint
- 30% reduction globally in methane emissions
- We need to do more and more quickly
- Domestic energy sector – 80% between 1990 and 2022

- Need to do more in waste and agricultural sectors
- Support other countries in CH₄ reductions
 - \$5 million new funding program
- All oil and gas companies need to rise to standards
- COP30 focus is on agriculture

Cho Hong-sik - Special Envoy for Climate Change for Republic of Korea

- IPCC 6th assessment report shows non-CO₂ gas drive global warming
- Reducing methane emissions
- Methane mitigation project launching in November
 - Craft methane policy
 - <https://forourclimate.org/research/547>
- In July 2023, Korea joined the US, EU, Australia and Japan
- Clean initiative for methane
- Joint report published last October
- Cut methane emission by over 30% by 2030

Ambassador Majid Al Suwaidi, Director-General and Special Representative of COP28 (UAE)

- Last year at COP28, they raised profile of methane issue
- Global GHG charter
- \$255 million to world banks, global flaring, and reduction fund
- UAE endorse COP28 for reducing organic waste emissions

Brazil Deputy National Secretary of Climate Change

- 29% of GHG emissions in Brazil are from CH₄
 - From livestock and waste mostly
- Addressing specific actions on targets
- Brazil is part of global CH₄ pledge
 - Reduce CH₄ emissions from urban waste
 - Finalizing national strategy for organic waste management
 - Reduce food waste for composting
 - Action in new legislation – fuel of the future (biomethane in natural gas)
- Investing \$5 billion in next years for new technology – reduce 700 million tons
- New index and system to progress standards

Dr. Nkiruka Maduekwe – Director-General/Chief Executive Officer of the National Council on Climate Change (NCCC) in Nigeria

- Climate and Clean Air Coalition
- Nigerian government – strength methane reduction
 - 2016, world bank
 - Global methane initiative
 - 2018, produced national plan for reducing methane emissions in oil and gas industry
 - Environmental regulation for midstream and down stream
 - Requires monitoring and controlling methane emissions
 - Leak detection
 - 2023, updated 201 regulations to include gas flaring
 - Nigeria is placing critical efforts for reducing methane emissions in oil and gas sector
- Nigeria works with EU and UN environment programme – Nigeria methane emission reduction program
 - Baseline study
 - Goal – enable those who have mandate for methane emission reduction
 - <https://www.ccacoalition.org/news/nigeria-cements-methane-guidelines-and-its-role-african-climate-and-clean-air-leader#:~:text=In%20Nigeria%E2%80%99s%20Nationally%20Determined%20Contribution%20%E2%80%94%20or%20its,previous%20goals%20with%20the%20support%20of%20the%20CCAC>
- Developing country, need to ask what do they do apart from the dialogue
 - Quality material data
 - Invest in state of the art equipment and structure that detects and monitors methane leaks
 - Capital intensive infrastructure and tech
 - Satellite monitoring and drones that help identify methane emission hotspots
- How will we finance this?
- US government – took Nigerian regulators to US to learn about methane abatement
- Invest in training programs for methane detection, measurement reduction

Steven Guilbeault – Minister of Environment and Climate Change (Canada)

- Methane – Recyclo Organicos in Chile and 21 countries in Latin American
 - https://www.recycleorganicos.org/wp-content/uploads/2023/03/CASE_STUDIES_CHILE2_ENG.pdf
- Canada is large oil and gas producer – 4th largest

- New CH4 regulations by 40-45% by 2025
- 75% emission reduction in oil and gas sector from methane
- Monitor domestic and international – better measurements and detection by methane
-

Fatih Birol - Executive Director of International Energy Agency (IEA)

- Global Methane Tracker
 - Companies and countries – tracks current policies and pledges to reduce emissions
 - <https://www.iea.org/reports/global-methane-tracker-2024>
- Focus on methane is easier than CO2
 - Tech point of view – minimize CH4 emissions – make pipes tighter
 - Much more cost effective
- If targets are met, we would reduce methane emissions by 2030 by 50%
- In March, they will release number by every country and sector
 - What is said vs what they actual emitted

Alvaro Lario - President of International Fund of Agricultural Development (IFAD)

- Global Methane Assessment
 - Most of emissions are from livestock and rice cultivation
 - Better livestock management and sustainable rice
 - Major emitters
 - Reducing agricultural methane program – global methane hub and US state department
 - <https://www.globalmethanehub.org/>
 - Integrate agriculture into NDCs, invest in projects in methane in food systems, and sharing best practices
 - Population growth and growth in meat production and consumption
 - Don't leave behind small scale farmers
 - Measures are well understood
 - <https://www.ccacoalition.org/resources/global-methane-assessment-full-report#:~:text=The%20Global%20Methane%20Assessment%20shows%20that%20human-caused%20methane,rise%20to%201.5%20degrees%20Celsius%20%281.5%CB%9AC%29%20within%20reach.>

Afghan Isayev – VP of SOCAR

- 1.5 years ago, enhance methane emission strategies
- COP28 – oil and gas company charter
 - <https://unclimatesummit.org/cop28-explainers-2/global-decarbonization-charter-at-cop28/>
- 2030, 2035, and 2050 targets, net zero by 2050
- One target of oil gas
- 2035 target
- Methane abatement decarbonization program
 1. Organizing power of business
 2. Approve operating model
 3. Getting into new low carbon business
 - i. By 2035, energy company with balanced portfolio
 - ii. 2050, net zero
- Low hanging fruit – methane abatement
- International Methane Emissions Observatory (IMEO)
 - Helps identify massive leaks
 - Leak detection and repair programs
- Identify massive leaks, deploy drones
- Oil and gas charter partnership 2.0
 - Report based on new international standards
- Teamed up with consulting group
 - Launched and deployed
 - Trial period – share experience in COP29
- Methane AI tool – report data
 - Transparent dashboard
- Launching Caspian AI
- MDPS – national development banks
- EDF joint effort

UN special advisor

Head of UNFCCC

- US and China have set aside differences to advance methane ambitions
- 50 companies represent oil production
 - Aim to achieve net zero of scope 1 and scope 2 emissions
 - 2030 – no gas flaring
 - Global CH4 pledge – more countries are committing
 - 157 participant countries – account for half of global CH4 emission in 2023

- Need clearly defined pledges for tangible results
 - Robust verification
- Next round of NDCs will be important to define commitments

Photos by Dana Kahn





