



EESI

Environmental and
Energy Study Institute

Materials will be available at:

www.eesi.org/102424cop

Tweet about the briefing:

[#eesitalk](#) [@eesionline](#)

Methane Mitigation on the Global Stage

What Congress Needs to Know about COP29

Thursday, October 24, 2024

About EESI



Non-partisan Educational Resources for Policymakers

A bipartisan Congressional caucus founded EESI in 1984 to provide non-partisan information on environmental, energy, and climate policies



Direct Assistance for Equitable and Inclusive Financing Program

In addition to a full portfolio of federal policy work, EESI provides direct assistance to utilities to develop “on-bill financing” programs



Commitment to Diversity, Equity, Inclusion, and Justice

We recognize that systemic barriers impede fair environmental, energy, and climate policies and limit the full participation of Black, Indigenous, people of color, and legacy and frontline communities in decision-making



Sustainable Solutions

Our mission is to advance science-based solutions for climate change, energy, and environmental challenges in order to achieve our vision of a sustainable, resilient, and equitable world.

Polycymaker Education

Briefings and Webcasts



Live, in-person and online public briefings, archived webcasts, and written summaries

Climate Change Solutions



Bi-weekly newsletter with everything policymakers and concerned citizens need to know, including a legislation and hearings tracker

Fact Sheets and Issue Briefs



Timely, objective coverage of environmental, clean energy, and climate change topics

Social Media (@EESIOnline)



Active engagement on Twitter, Facebook, LinkedIn, and YouTube



What Congress Needs to Know about COP29

4

What's on the Table for the Negotiations

Methane Mitigation on the Global Stage

U.S.-China Engagement and International Climate Diplomacy
Friday, October 25, 12:00 – 1:00 PM



Signup for our COP newsletter here: eesi.org/signup
Briefing RSVP here: eesi.org/cop29-briefings



EESI
Environmental and
Energy Study Institute

What did you think of the briefing?

Please take 2 minutes to let us know at:

www.eesi.org/survey

Materials will be available at:

www.eesi.org/102424cop

Tweet about the briefing:

[#eesitalk](https://twitter.com/eesitalk) [@eesionline](https://twitter.com/eesionline)



Thursday, October 24, 2024

Methane mitigation: pulling the emergency break on climate change.

Marcelo Mena, CEO



The Global Methane Hub



- **Philanthropic effort** to align funding on **methane mitigation** in the **energy, agriculture, and waste sectors**.
- Supporting **Global Methane Pledge** signatories and potential signatories in meeting the pledge and **going beyond**.
- Drive **coordination and collaboration** on methane advocacy while granting **ideas with the highest impact**.

Cutting methane emissions is the fastest, most effective way to reduce the rate of global warming and contribute to limiting temperature rise to 1.5°C

40% of
methane
comes from
fossil fuel
extraction



60% of methane
comes from



**Food
production**



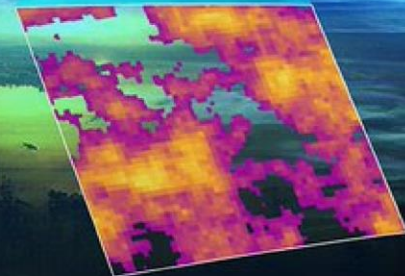
**Food
waste**

Policies, plans and regulation

COP28 SUMMIT ON METHANE AND OTHER NON-CO2 GREENHOUSE GASES



Data, measurement and accountability



MethaneSAT™

**CARBON
MAPPER**

Buenos Aires landfill methane plume

28.6 tons CH₄ / hour

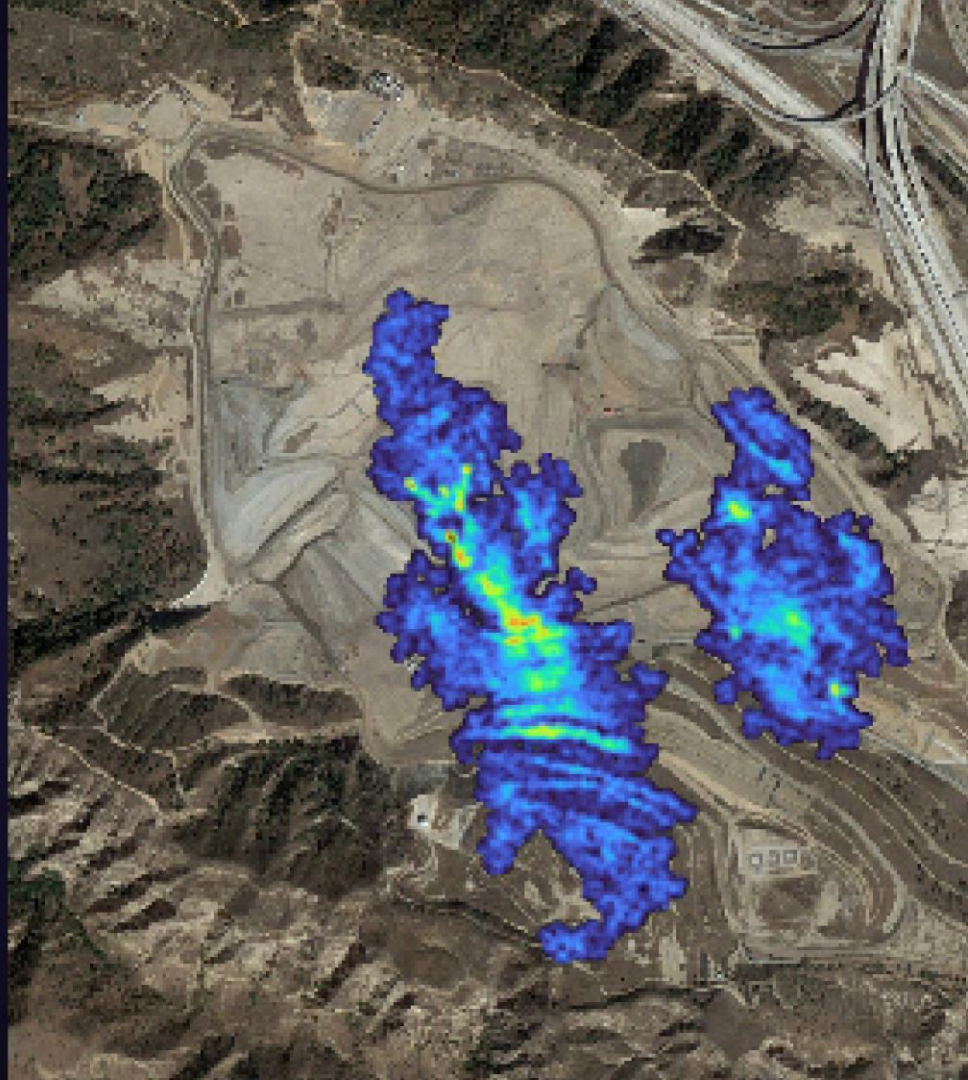
An aerial photograph of a landfill site in Buenos Aires. A large, elongated plume of methane gas is overlaid on the image, extending from the landfill towards the bottom left. The plume is color-coded, with the highest concentration shown in bright orange and yellow, transitioning to purple and blue as it moves away from the source. The surrounding area includes green fields, roads, and some buildings.



**1 Landfill =
~ 1.4 Million cars**

The Sunshine Canyon Landfill

(March 2017)



The Sunshine Canyon Landfill

(March 2017)





CANARY MEDIA

Clean energy journalism for a cooler tomorrow

Landfill methane is a big climate problem. Here are some easy solutions.

The methane released by U.S. landfills could be cut in half in the next 25 years if the EPA adopts policies that some states have now, a new study finds.



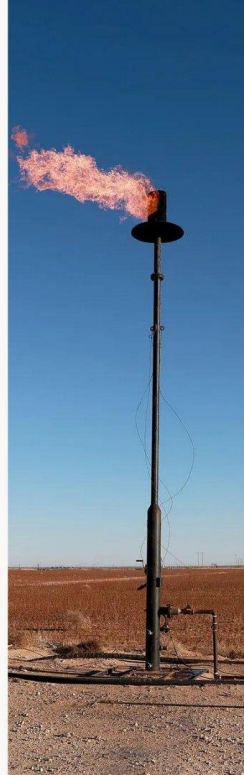
By **Keaton Peters**
22 October 2024



The New York Times

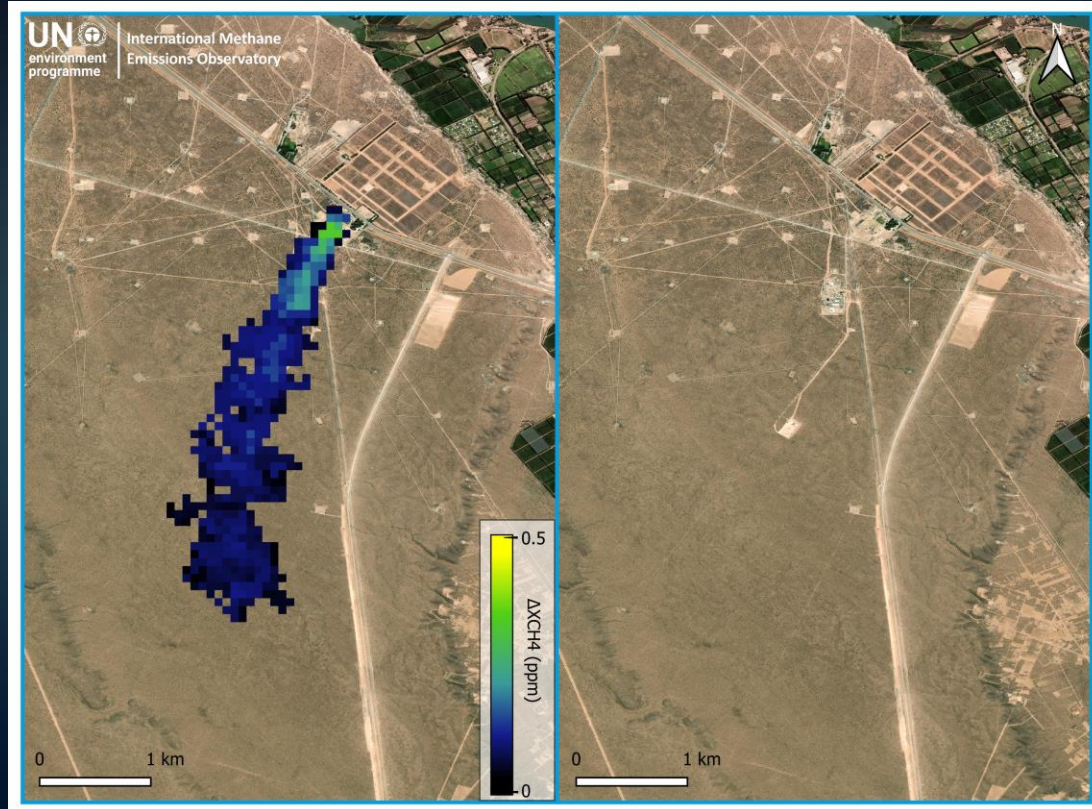
Leaks Can Make Natural Gas as Bad for the Climate as Coal, a Study Says

The bottom line: If gas leaks, even a little, “it’s as bad as coal,” explains RMI’s Deborah Gordon, “It can’t be considered a good bridge, or substitute.”



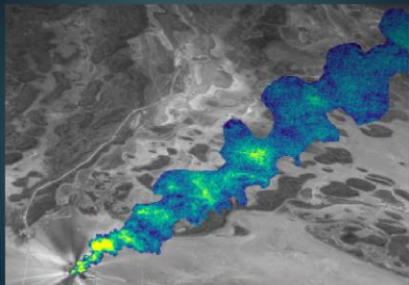


Methane Alert and Response System (MARS)



Data, measurement and accountability

Scientists say they've detected a huge methane leak in Kazakhstan



Bloomberg

Turkmenistan in Talks With US to Tackle Giant Methane Leaks

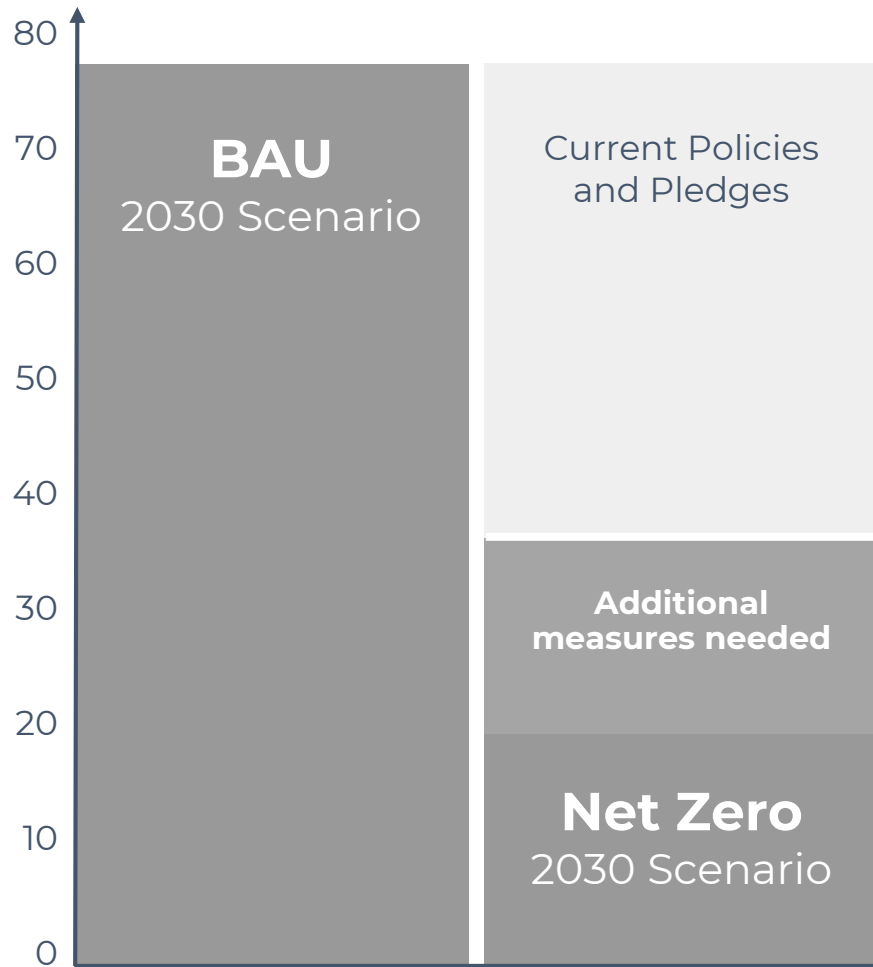


Bloomberg

Big LNG buyers and producers tighten methane monitoring



Financial Times



We are here

- Current policies and pledges can significantly reduce oil and gas emissions. We need 75% reduction by 2030. If pledges are reality we are 70% there.
- Expanding approaches such as EU import standards can help drive even more ambition, influence even more jurisdictions.

THE SINGLE LARGEST

Anthropogenic source of methane



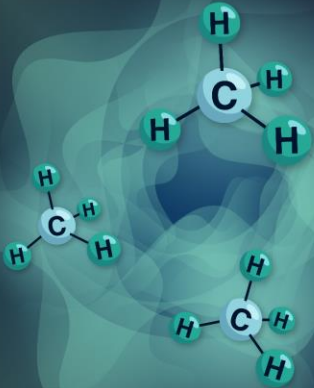
**Capacity
building**



5X

**More
emissions**





Enteric Fermentation R+D Accelerator

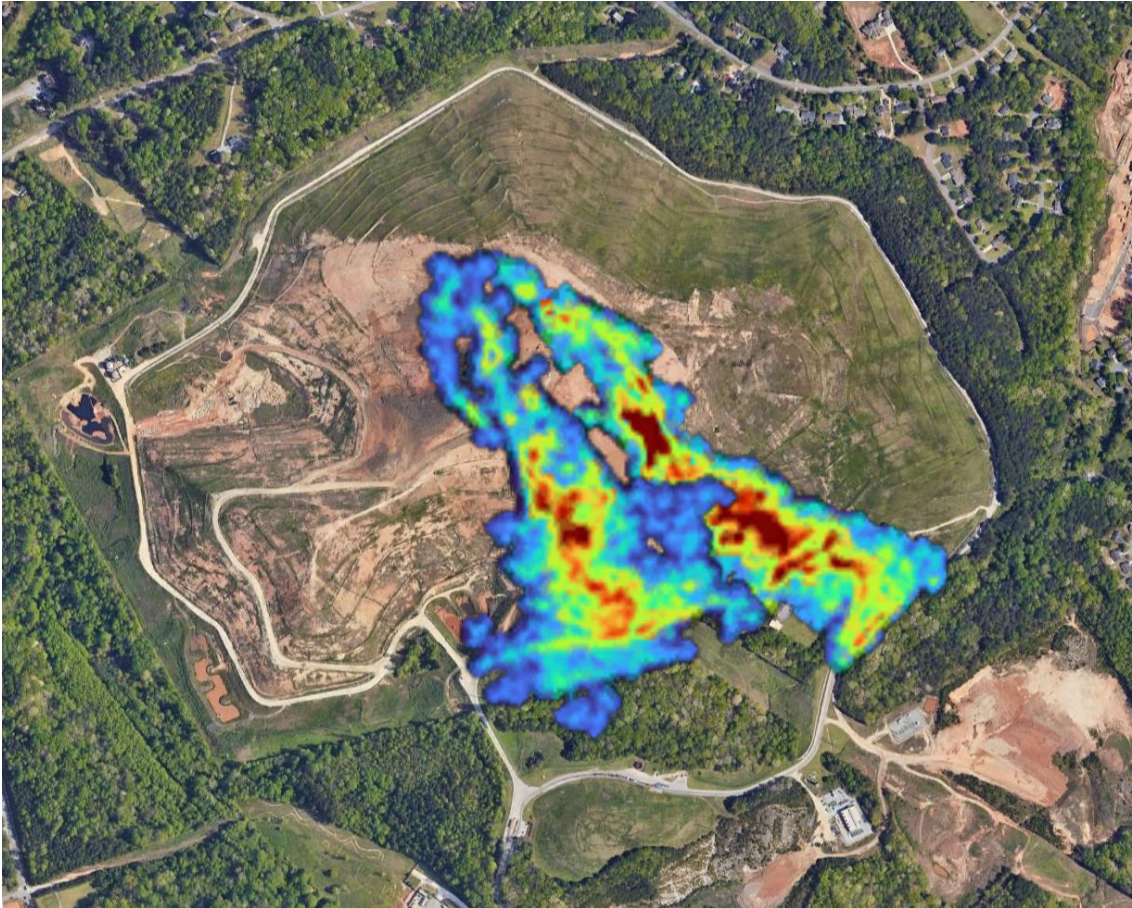


WASTEMAP

Detecting & Reducing Methane Pollution in the United States

Tom Frankiewicz
RMI Waste Methane
Subject Matter Expert

Emissions visibility is rapidly improving



Source: Carbon Mapper
WASTEMAP

Through BIL & IRA, the U.S. is making progress toward the Global Methane Pledge

**NATIONAL STRATEGY TO
ADVANCE AN INTEGRATED
U.S. GREENHOUSE GAS
MEASUREMENT,
MONITORING, AND
INFORMATION SYSTEM**

A REPORT BY THE GREENHOUSE GAS MONITORING AND
MEASUREMENT INTERAGENCY WORKING GROUP



**Biden-Harris Administration
Announces \$117 Million in
Grants Available to Advance
Recycling Infrastructure and
Prevent Wasted Food**

**EPA, DOE Announce \$850 Million
to Reduce Methane Pollution from
the Oil and Gas Sector**

**NATIONAL
STRATEGY FOR
REDUCING FOOD
LOSS AND WASTE
AND RECYCLING
ORGANICS**

JUNE 2024



**Waste Emissions
Charge (WEC)**



GHGRP Subpart W

**Biden-Harris Administration
Invests \$775 Million from
Investing in America Agenda
for States to Plug Orphaned
Oil and Gas Wells**

A Comprehensive Approach to Reduce Landfill Methane



Prevention
Avoid landfill
methane
generation

Waste reduction &
food donation

Organics recycling

Mitigation
Reduce methane
from waste-in-
place

Smart landfill design
& operations

Advanced leak
detection & repair



Prevention strategies keep organic waste out of landfills through **source reduction, edible food donation, and organics recycling** to **prevent future methane generation**

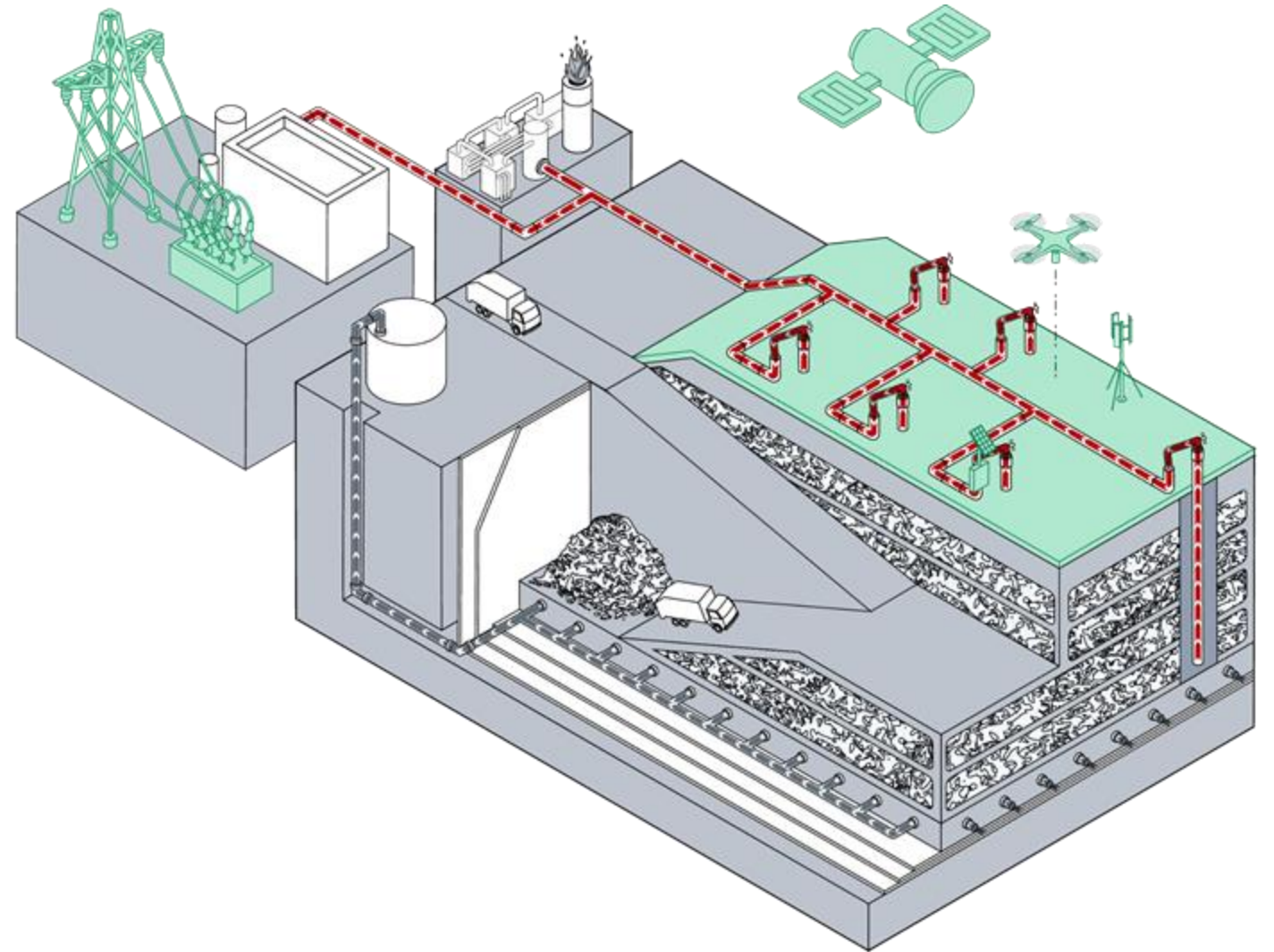


Wasted Food Scale

How to reduce the environmental impacts of wasted food

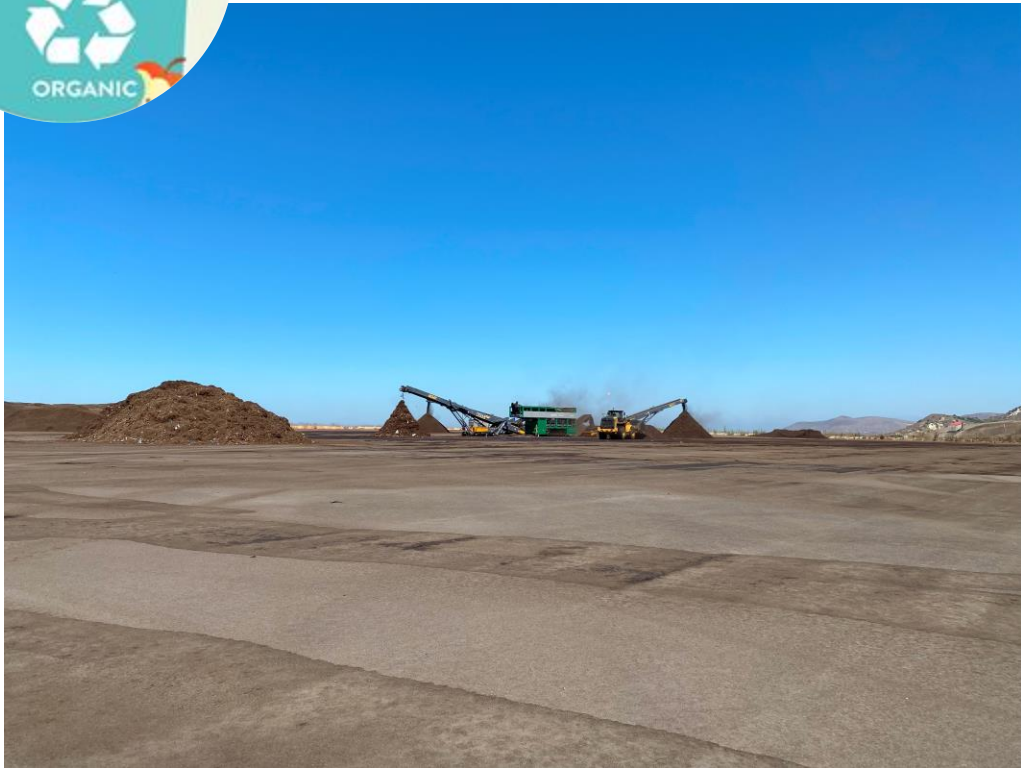


Mitigation strategies optimize landfill **design, monitoring, and operations** to increase methane capture and reduce fugitive emissions from waste-in-place.



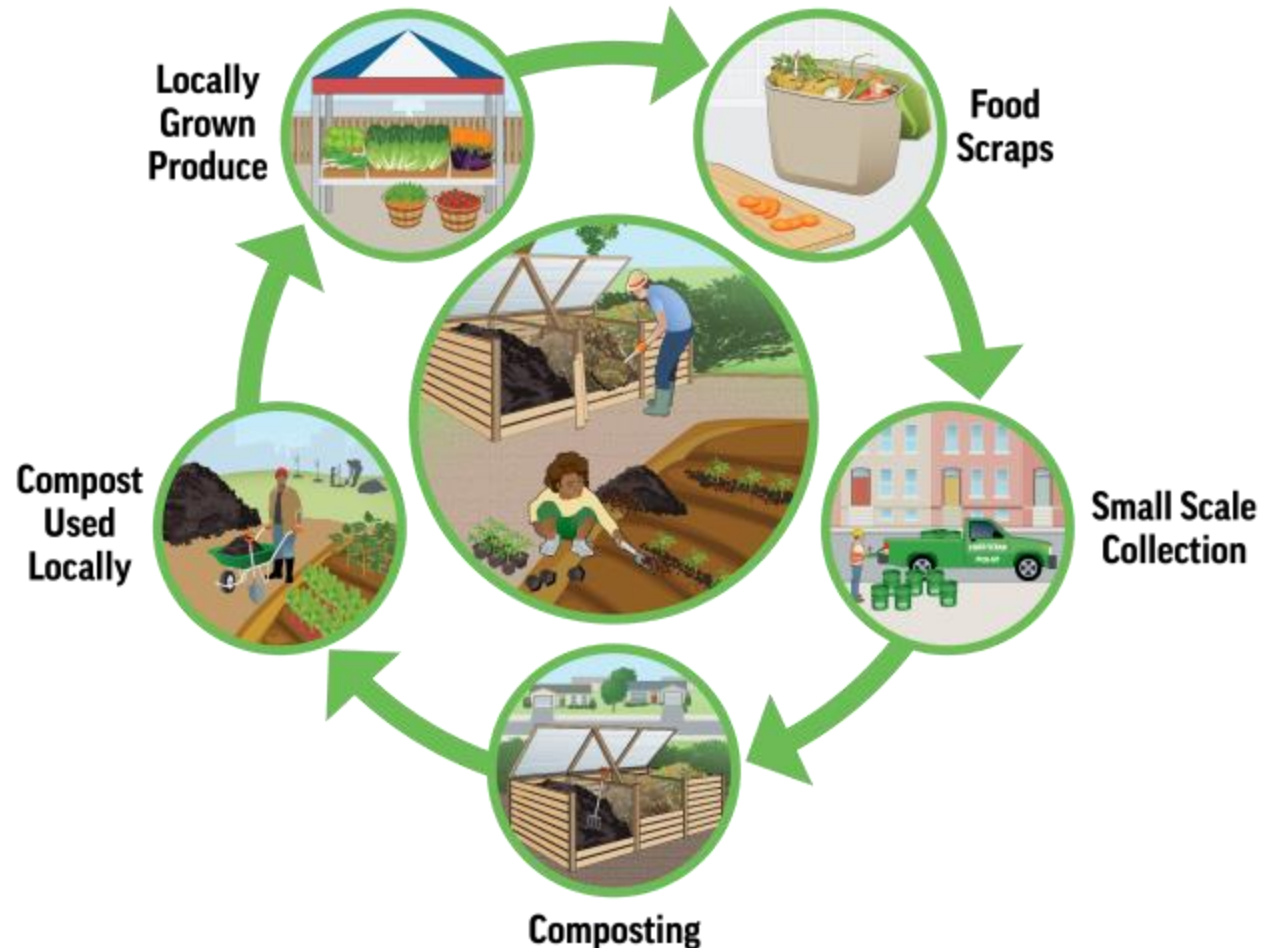


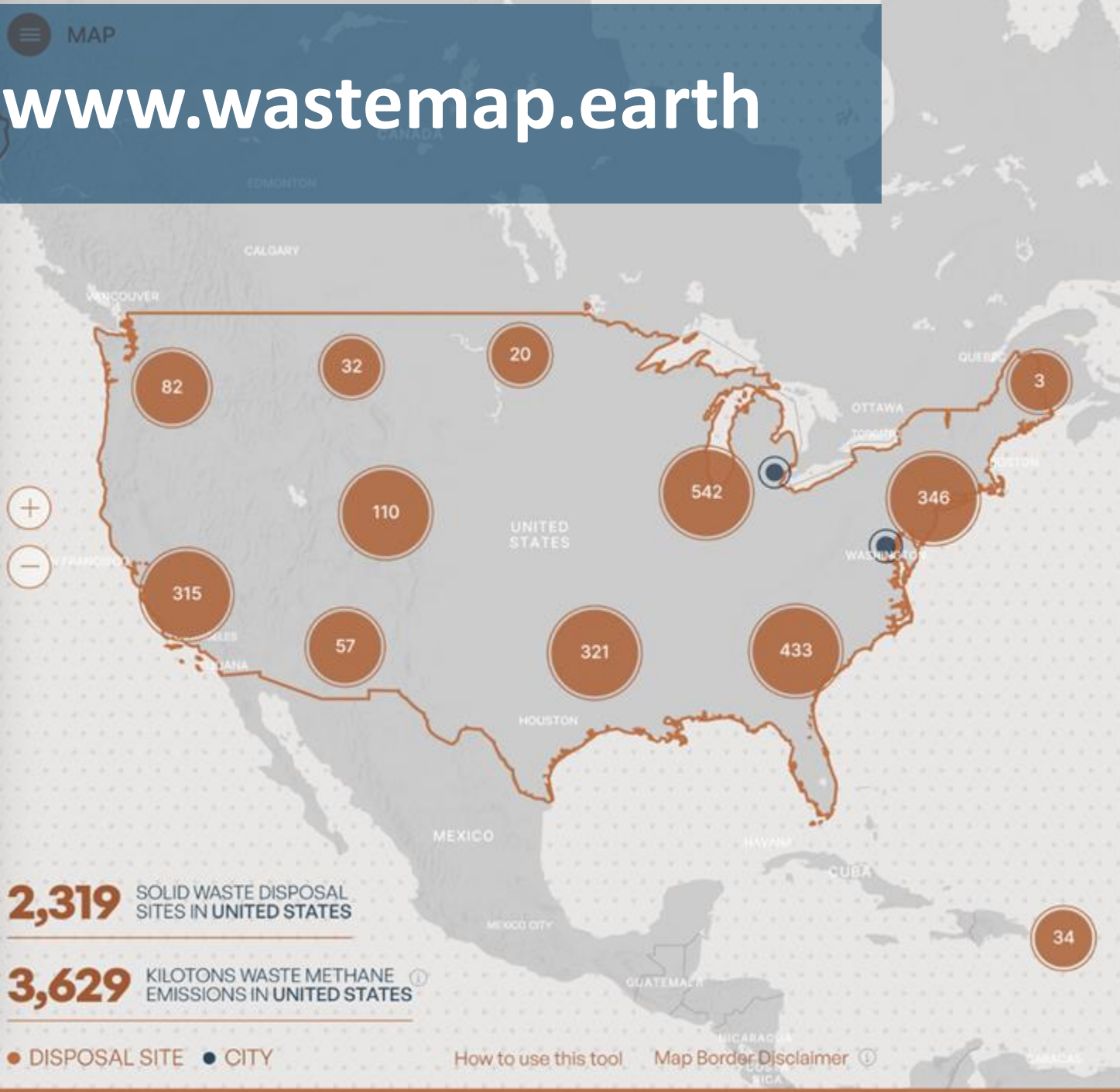
Waste &
Recycling
COUNTY OF ORANGE



Global and local benefits

- Slow near-term warming
- Improve air quality
- Protect public health
- Invest in healthy soils and food systems
- Create jobs





Deploying Advanced Monitoring Technologies at US Landfills: How Landfill Operators and Municipalities Can Leverage New Tools to Reduce Methane Emissions and Deliver Powerful Benefits

(1 FILE)

This playbook is intended to provide an overview of strategies to monitor and mitigate emissions that may be appropriate for US landfill operators to consider based on their evaluation of site-specific, technological, and operational conditions. The playbook also contains some case studies and highlights the community and economic benefits of reducing methane emissions.

U.S. Department of State

Methane Mitigation from Pledges to Plans to Progress



Ilissa Ocko, Ph.D.
Senior Advisor
Office of the Special
Presidential Envoy for Climate
U.S. Department of State

Office of the Special Presidential Envoy for Climate (SPEC) has made methane mitigation a **priority**



30% of current warming
and **fastest** way to curb
the climate crisis



Strategies available to
cut emissions in **half**,
many affordable



Global reach that
leverages work of
domestic agencies

Priority areas

Driving

PLEDGES

US and EU launched Global Methane Pledge in 2021, now has **155+** country participants

Facilitating

PLANS

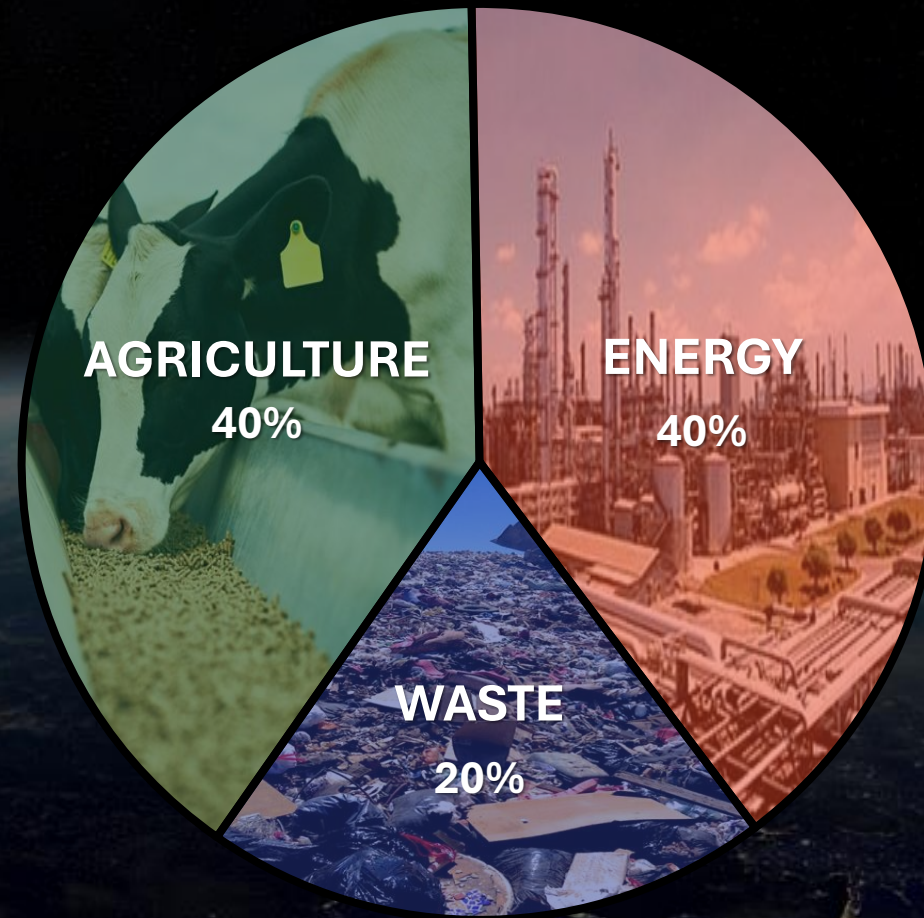
90+ countries have released or are developing methane action plans

Securing

PROGRESS

Working across **all sectors** and with **major emitters** to implement projects and strengthen policies, while facilitating **data tools** and mobilizing **funding**, and with many agency and international **partners**

Securing progress across **all sectors**



Current global methane emissions
UNEP Global Methane Assessment 2021

Securing progress by **major emitters**



The screenshot shows the U.S. Department of State website. At the top left is the Department of State seal and the text 'U.S. DEPARTMENT of STATE'. To the right are navigation links for 'Newsroom', 'Business', 'Employees', 'Job Seekers', 'Students', 'Travelers', and 'Visas', along with social media icons for Facebook, X, Instagram, YouTube, and Email. Below this is a secondary navigation bar with 'POLICY ISSUES', 'COUNTRIES & AREAS', 'BUREAUS & OFFICES', and 'ABOUT', each with a dropdown arrow, and a search icon. The breadcrumb trail reads: 'Home > Office of the Spokesperson > Press Releases > Sunnylands Statement on Enhancing Cooperation to Address the Climate Crisis'. The main heading is 'Sunnylands Statement on Enhancing Cooperation to Address the Climate Crisis' with three stars above it. Below the heading are the labels 'MEDIA NOTE' and 'OFFICE OF THE SPOKESPERSON', and the date 'NOVEMBER 14, 2023'.

Recalling the meeting between President Xi Jinping and President Joseph R. Biden in Bali, Indonesia, the United States and China reaffirm their commitment to work jointly and together with other countries to address the climate crisis. In this regard, U.S. Special Presidential Envoy for Climate John Kerry and China Special Envoy for Climate Change Xie Zhenhua met in Beijing from 16 to 19 July 2023 and at Sunnylands, California, from 4 to 7 November 2023 and released the following:

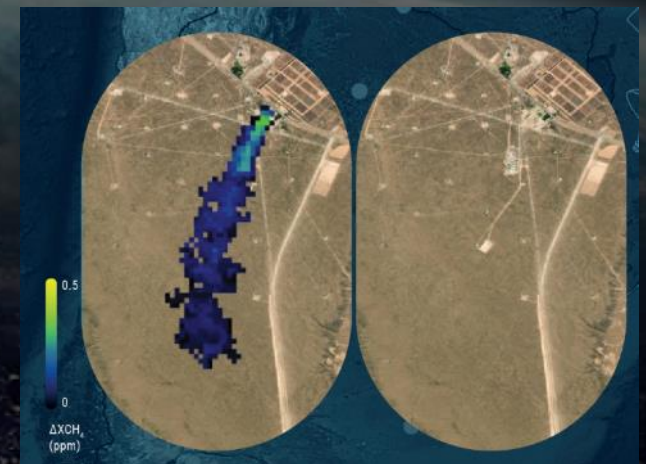
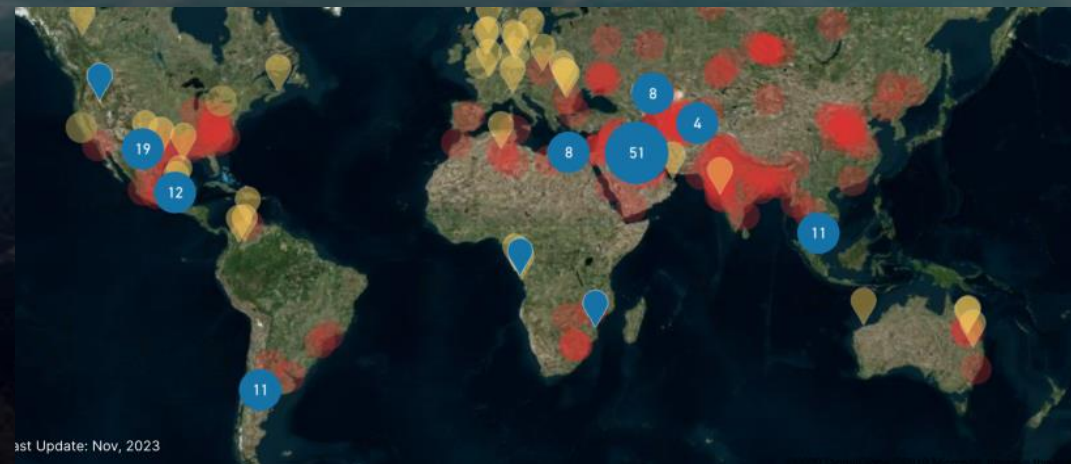
Methane and Other Non-CO2 GHG Emissions

10. The two countries will implement their respective national methane action plans and intend to elaborate further measures, as appropriate.
11. The two countries will immediately initiate technical working group cooperation on policy dialogue, technical solutions exchanges, and capacity building, building on their respective national methane action plans to develop their respective methane reduction actions/targets for inclusion in their 2035 NDCs and support each country's methane reduction/control progress.
12. The two countries intend to cooperate on respective measures to manage nitrous oxide emissions.
13. The two countries intend to work together under the Kigali Amendment to phase down HFCs and commit to ensure application of ambitious minimum efficiency standards for all cooling equipment manufactured.

Securing progress by facilitating **data tools**



International
Methane Emissions
Observatory
**Methane Alert and
Response System
(MARS)**



<https://methanedata.unep.org/>

Securing progress by mobilizing **funding**



Agency and international **partners**

EPA

USTDA

**UNEP Climate and
Clean Air Coalition**

USAID

EXIM

**UNEP International
Methane Emissions
Observatory**

USDA

DFC

World Bank

DOE

COMMERCE

Regional MDBs

DOT

**U.S. Chamber +
Business Councils**

Upcoming milestones: **COP29**



Methane and Non-CO2 Greenhouse Gases Summit

hosted by US, China, and COP29
Presidency of Azerbaijan

Global Methane Pledge Ministerial

hosted by US, EU, CCAC

Upcoming milestones: 2035 NDCs



Support Global Stocktake consensus

39. *Reaffirms* the nationally determined nature of nationally determined contributions and Article 4, paragraph 4, of the Paris Agreement and *encourages* Parties to come forward in their next nationally determined contributions with ambitious, economy-wide emission reduction targets, covering all greenhouse gases, sectors and categories and aligned with limiting global warming to 1.5 °C, as informed by the latest science, in the light of different national circumstances;

Why methane mitigation is a **must**

1 **Possible**

Numerous strategies available to slash methane emissions

2 **Practical**

Many cost-effective opportunities and co-benefits

3 **Powerful**

Large climate and societal benefits from action



EESI
Environmental and
Energy Study Institute

What did you think of the briefing?

Please take 2 minutes to let us know at:

www.eesi.org/survey

Materials will be available at:

www.eesi.org/102424cop

Tweet about the briefing:

[#eesitalk](https://twitter.com/eesitalk) [@eesionline](https://twitter.com/eesionline)



Thursday, October 24, 2024