CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS
a UNEP convened initiative

Brief

Methane Abatement Finance: Current Landscape and Pathways to Scale

CLIMATE POLICY INITIATIVE

November 2026

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When referencing this report, please use the following attribution: Climate and Clean Air Coalition and Climate Policy Initiative (2026). Methane Abatement Finance: Current Landscape and Pathways to Scale.

Production: Paris, France

URL: https://www.ccacoalition.org/resources/methane-abatement-finance-current-landscape-and-pathways-scale

Co-produced with:

CLIMATE POLICY INITIATIVE

This publication was financially supported by the Climate and Clean Air Coalition Trust Fund.

Acknowledgments

This brief was commissioned by the Climate and Clean Air Coalition (CCAC), a United Nations Environment Programme (UNEP)-convened initiative, with financial support from the CCAC Trust Fund. The analysis was developed by Climate Policy Initiative (CPI), with guidance, review and project coordination from the CCAC Secretariat. The CCAC Secretariat and Trust Fund are hosted by UNEP.

The authors would like to thank the brief's Steering Committee and external experts consulted for their contributions to the development of this brief. These people contributed in their individual capacities, and their affiliations are mentioned for identification purposes only.

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The authors would like to thank and acknowledge CPI members (in alphabetical order): Caroline Alberti, Chavi Meattle, Gaoyi Miao, Baysa Naran, Ira Yulianti Purnomo, Alfred Sloley, Costanza Strinati, Angela Woodall-Pavuk, Lucie Xia, and Gabriela Zangiski for advice and internal review. We also appreciate the support of Asha Raghu, Kirsty Taylor, and Jana Stupperich for copy-editing; David Campanelle, Isabella Frazier, Flora Hamilton, Ben Hufton, Arun Jain, Juliet Onyango, and Ryan Schear for project support; and Pauline Baudry, Elana Fortin, and Denny Kosasih for data visualization and layout.

We also acknowledge the guidance, review, and project coordination by the CCAC Secretariat members (in alphabetical order by last name): Nicolas Abel, Ava Bahrami, Dana Crawhall Duk, Martina Otto, Scarlett Quinn-Savory, and Jingyi Ye.

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Descriptors

Sectors

Agriculture, Livestock, Crops, Energy, Fossil Fuels, Solid Waste and Wastewater

Region

Global

Keywords

Methane, CH_4, Short-lived Climate Pollutants (SLCPs), Super Pollutants, Agriculture, Waste, Fossil Fuels

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Executive summary

This brief assesses the gap between methane abatement financing tracked during 2021–2023 and the investment required to meet the Global Methane Pledge (GMP) target of reducing emissions by at least 30 percent from 2020 levels by 2030.

With a 1.5 °C temperature overshoot now widely assessed as locked in, the central challenge is to limit peak warming, reduce the duration of exceedance, and return temperatures below that level (United Nations 2026). Slowing warming in the near term will require urgent action to reduce emissions of methane (CH_4)—a powerful greenhouse gas responsible for roughly one-third of today's warming —alongside rapid mitigation of other non-carbon dioxide greenhouse gases and deep and sustained decarbonization.

Methane mitigation offers one of the fastest and most cost-effective opportunities to deliver near-term benefits for climate, air quality, public health, food security, and economic development. The GMP, launched in 2021 at COP26, has catalyzed ambitious action and now includes 159 countries and the European Union. Participants have committed to taking voluntary action toward a collective goal of reducing global methane emissions by at least 30 percent from 2020 levels by 2030. Achieving the target can generate substantial climate, health, and agriculture benefits valued at more than US$ 330 billion annually by 2030 (UNEP 2025).

The necessary emission reductions are technically feasible, and the financing challenge associated with achieving the GMP target can now be quantified. The *Global Methane Status Report* estimated US$ 122 billion in annual capital expenditure (CAPEX) and US$ 101 billion in annual operation and maintenance costs (OPEX). Methane abatement can also generate significant financial returns, including approximately US$ 96 billion annually from valorization of recovered natural gas and biogas, bringing the estimated net annual costs to US$ 127 billion (UNEP 2025).

Against this benchmark, this brief tracks methane abatement finance across three major methane-emitting sectors – fossil fuels, waste, and agriculture – from 2021 to 2023.[1] The analysis compares tracked flows with estimated annual costs through 2030 under the Maximum Technically Feasible Reduction (MTFR) scenario assessed in the Global Methane Status Report (UNEP 2025). It presents sectoral and regional findings and concludes with recommendations for scaling methane abatement finance, highlighting how different stakeholders can improve the enabling environment and deliver sector-specific solutions to increase finance.

This brief forms part of the joint body of work by Climate Policy Initiative (CPI) and the Climate and Clean Air Coalition (CCAC) under the Super Pollutant Investment Analysis and complements the *State of Super Pollutants Abatement Finance* report (CPI 2026c).

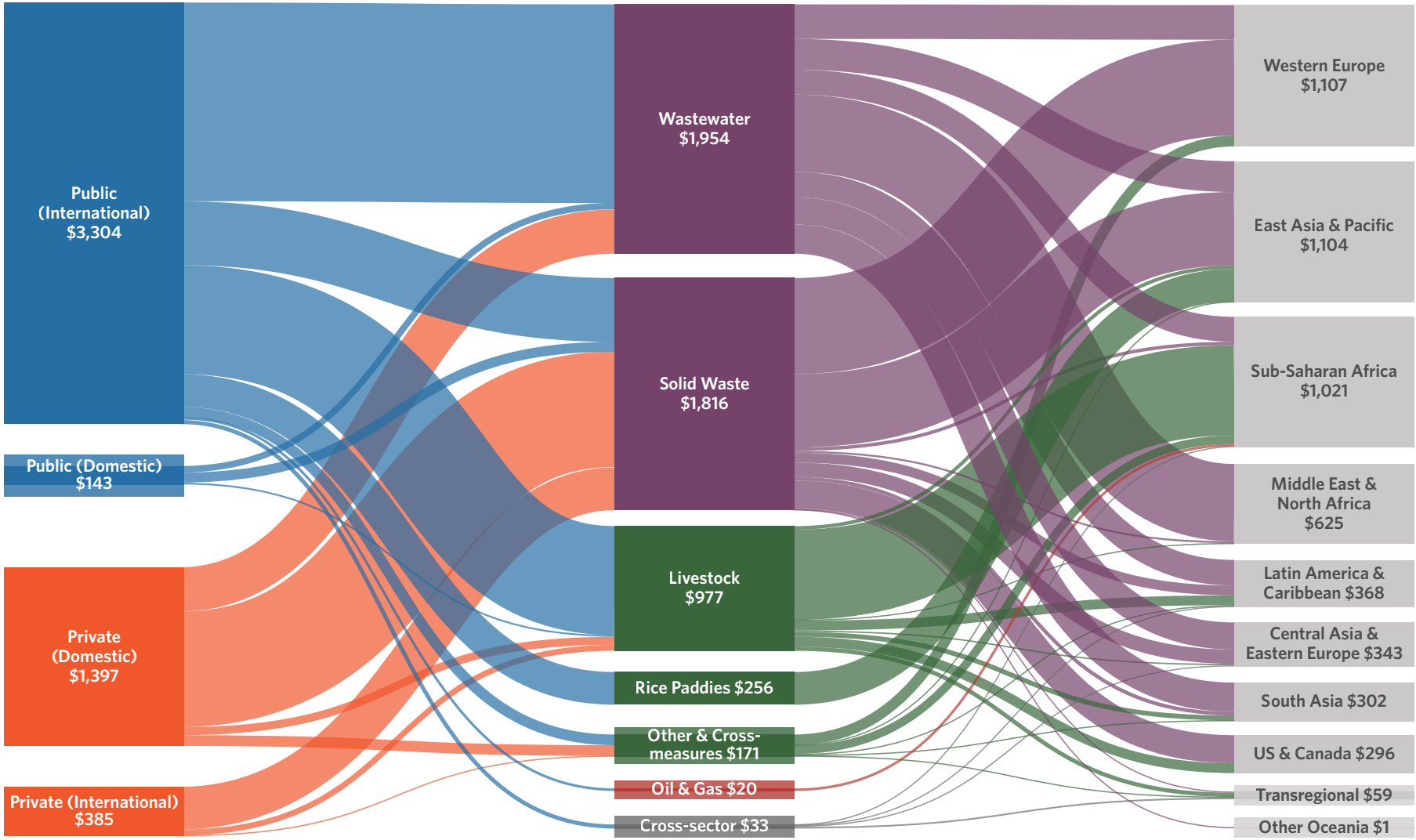
[1] The methodology builds upon CPI's Landscape of Methane Abatement Finance report series (CPI 2023b, 2022), by incorporating methodological improvements for tracking methane abatement finance. Finance is tracked as project-level commitments, with 2023 being the latest year for which sufficiently comprehensive and consistent data were available at the time of analysis across the main data sources. It is underpinned by a taxonomy of methane abatement measures, developed through literature review and expert consultation with key stakeholders. See the Annex for more details.

LANDSCAPE OF METHANE ABATEMENT FINANCE IN 2023

Values in US$ million

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5.2 BILLION US$ IN 2023



Source: Climate Policy Initiative

Key findings

Tracked global methane abatement finance totaled US$ 5.2 billion in 2023, declining from US$ 7.7 billion in 2021. This represents only 4 percent of the estimated US$ 122 billion annual CAPEX to achieve the GMP target by 2030.[2] At the aggregate level, US$ 3.4 billion (66 percent) came from public sources and US$ 1.8 billion (34 percent) from private sources. Finance was also predominantly international, with US$ 3.7 billion (71 percent) from international sources, compared with US$ 1.5 billion (29 percent) from domestic sources.[3] However, these aggregate figures mask substantial differences across sectors and subsectors, reflecting distinct project economics, financing structures, and data availability.

FOSSIL FUELS

Limited data and an absence of standardized reporting frameworks constrain the tracking of methane abatement finance in the fossil fuel sector. Obtaining these figures is also hindered by the difficulty of isolating methane-specific investments from broader OPEX. Against this backdrop, tracked finance for fossil fuel methane abatement remains very limited, reaching just US$ 20 million in 2023 and US$ 360 million in 2021, with no 2022 flows identified.

Methane abatement in the fossil fuel sector requires an estimated annual US$ 96 billion in CAPEX and US$ 42 billion in OPEX by 2030, with recovered natural gas generating around US$ 40 billion in annual savings. Readily available technologies could cut methane emissions by 94 million tonnes (Mt) annually, providing the largest cost-effective mitigation potential across sectors, with many interventions yielding high financial returns. Mobilizing finance will require stronger regulatory frameworks and targeted financing instruments, while ensuring responsible asset management and avoiding long-term fossil fuel lock-in.

AGRICULTURE

Agriculture accounted for US$ 1.4 billion (27 percent) of tracked methane abatement finance in 2023, up from US$ 1.1 billion in 2021 after dipping to US$ 845 million in 2022. In 2023, over 85 percent was directed to measures related to smallholder and pastoralist systems and rice paddy management. Sub-Saharan Africa received the largest share of finance (55 percent), followed by East Asia and the Pacific (20 percent). Public sources drove financing in 2023 (86 percent), with grants and low-cost debt making up most financial instruments. Although cost-effective solutions exist, high upfront costs and limited access to finance constrain adoption.

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2 Tracked finance primarily captures CAPEX investments, together with spending on policy frameworks and capacity building, whereas the MTFR estimated annual investment needs include both capital and operating expenditures, as well as cost savings from valorization of recovered natural gas and biogas. Nevertheless, the comparison between tracked flows and MTFR CAPEX needs provides a useful indication of the scale of the investment gap and underscores the need for both improved investment reporting and increased financing across key methane-emitting sectors. OPEX is not tracked in this report due to limited data availability, with the analysis instead focusing on CAPEX, for which more robust data exists.

3 The data also indicates a tracking bias toward internationally financed projects in developing regions, since development finance datasets provide relatively comprehensive visibility of public flows, while domestic and private investment—particularly in higher-income countries—is harder to identify when embedded in corporate or domestic expenditure.

Meeting the sector's estimated annual needs of US$ 13 billion in CAPEX and US$ 54 billion in OPEX by 2030 will require stronger financing frameworks and greater private sector engagement. Blended finance can help address upfront financing barriers, while developing carbon-market opportunities and clearer standards, such as science-based sector-specific eligibility criteria for methane-relevant measures, could unlock additional private capital.

WASTE

Methane abatement finance in the waste sector fell for the second consecutive year to US$ 3.8 billion in 2023, down from US$ 6.2 billion in 2021. The decline was largely due to reduced investment in solid waste-to-energy (WtE) incineration, although investment in non-incineration and upstream solutions increased from a low base. Finance was divided broadly between activities in solid waste (US$ 1.8 billion) and wastewater (US$ 2 billion). Private finance dominated solid waste, while public finance – particularly from multilateral and bilateral development finance institutions (DFIs) – supported wastewater. Finance also remained geographically concentrated, with South Asia and sub-Saharan Africa accounting for limited investment despite growing needs.

The waste sector requires an estimated US$ 13 billion in annual CAPEX through 2030. However, its cost profile and fragmented network of municipalities and local implementers create challenges for both scaling investment and tracking it. Scaling finance will require broader investment across the waste hierarchy, stronger municipal project pipelines and revenue models, and improved access to larger-scale finance.

Recommendations

Methane abatement offers one of the fastest and most cost-effective opportunities for slowing near-term global warming. Reducing methane emissions has been described as the climate 'emergency brake' while also delivering major benefits for air quality, public health, food security and economic development. Recognizing the urgency, the United Nations Secretary-General's Call to Action on Methane (United Nations 2026) sets out priorities for governments, industry and financial institutions to accelerate implementation across fossil fuels, agriculture and waste, which have been referenced and built upon to inform the recommendations in this report.

Increasing financial flows alone will not be sufficient to deliver the reductions needed. Public and private institutions should strengthen the enabling environment for methane abatement by improving policy and regulatory frameworks, developing credible project pipelines and standards, and expanding access to appropriate forms of capital. These cross-cutting actions should be complemented by sector-specific measures to address the distinct barriers to investment in fossil fuels, agriculture, and waste.

The brief identifies six priority areas for scaling methane abatement finance:

1. **Embed methane abatement** in national policies, strategies, and regulations.
2. **Strengthen monitoring, reporting and verification (MRV) systems** to improve transparency, accountability, and investor confidence.

3. **Build bankable project pipelines** through project preparation, aggregation mechanisms, and targeted de-risking instruments.
4. **Fossil fuels:** embed methane abatement in credible transition plans and leverage buyer and importer demand, regulation, and supply-chain partnerships to create stronger market signals and support suppliers in investing in methane reductions.
5. **Agriculture:** support targeted research and development (R&D) and innovation to scale practical, cost-effective abatement solutions and approaches suited to fragmented production systems.
6. **Waste:** improve the bankability of municipal waste methane projects through improved revenue collection, project aggregation and municipal pipelines.

The tables below present six recommendations for different actors across both cross-cutting and sector-specific priorities.

Recommendation 1. Incorporating methane abatement into policy, regulations and strategy

Key stakeholders and implementation steps	Examples
Governments and government agencies	
• Include methane-specific indicators and milestones in nationally determined contribution (NDC) implementation frameworks. • Incorporate methane abatement into longer-term transition plans/frameworks (e.g., sustainable finance taxonomies) to improve clarity for investors and lenders. • Develop safeguards and technical screening criteria that enable near-term abatement measures for existing assets without creating long-term lock-in (CPI and Climate Bonds 2025). • Strengthen governance for delivery by designating a lead institution / inter-ministerial mechanism to coordinate methane abatement projects. • Develop effective regulation, monitoring, and enforcement systems to identify and prioritize mitigation opportunities, reduce inefficiencies, and create the conditions needed to attract private investment.	• **As of January 2025, 161 countries included methane-related policies/measures in NDCs (CCAC 2025a).** However, NDCs and national Methane Action Plans (MAPs) submitted by mid-2025 could translate to only an 8 percent cut below 2020 levels by 2030, below the 30 percent Global Methane Pledge goal (UNEP 2025). • **CCAC's Guidance on Including Methane in NDCs (CCAC 2024)** provides best practices to ensure that methane-related goals and measures are ambitious and actionable. • The updated **Climate Bonds Taxonomy** explicitly includes oil and gas infrastructure via methane abatement measures and expanded agriculture coverage (Climate Bonds 2026b). • **The EU Methane Regulation contains rules for MRV, Leak Detection and Repair (LDAR),** and limits on routine venting and flaring across oil, gas, and coal. The EU is also the first jurisdiction to set requirements for fossil fuel imports (EIA 2024b). • **The Methane Regulator-to-Regulator (MR2R) Network,** launched in 2026, will support sustained collaboration among participating regulators by facilitating peer exchange and the development and dissemination of best practices (CCAC 2026). • **New Mexico oil & gas regulation:** Since 2021, rules requiring reduced venting and flaring, leak detection, and gas capture have led to declining methane intensity despite production increasing by over 100 percent. Captured methane has generated US$ 125 million in additional gas production and US$ 27 million in tax and royalty revenue, delivering economic benefits to the state (Environmental Defense Fund 2025).

MDBs, DFIs, international organizations and development partners	
• Align country programming with countries' methane priorities by translating targets and implementation plans into pipeline-oriented country and sector strategies and eligibility criteria (catalytic, fit-for-purpose finance). • Assess internal policies/procedures and portfolios to identify practical entry points for scaling methane-relevant finance. • Embed methane targets and emissions considerations across DFI operations to help direct capital toward high-impact projects, particularly where commercial finance is limited.	• **The European Investment Bank assesses policies and procedures for short-lived climate pollutants (SLCPs),** including methane, to identify practical entry points for scaling methane-relevant finance (EIB 2016). • **The World Bank Global Flaring and Methane Reduction (GFMR)** Trust Fund provides catalytic grants, technical assistance, policy and regulatory reform advisory services, and institutional strengthening to support flaring and methane reduction in oil and gas (World Bank 2026a).
Private actors	
• Include methane-specific targets in corporate transition plans and sector strategies. • Embed methane considerations across investment planning, supply-chain engagement, operational decision-making, and standards.	• **Danone, in 2023, announced a target to reduce absolute methane emissions from fresh milk used in its dairy products by 30 percent** by 2030 against a 2020 baseline. Danone became the first corporate funder of the Global Methane Hub's Enteric Fermentation R&D Accelerator, showing how private actors set internal targets in corporate plans and support innovation and solution development (Danone 2023).

Recommendation 2. Improving monitoring, reporting and verification (MRV) and emission standards as a critical accelerator

Key stakeholders and implementation steps	Examples
Governments and government agencies	
• Where feasible, consider the use of satellites and other methane detection systems to convert detection into enforceable action, addressing detection-to-action credibility and accountability gaps. • Establish sector-specific national and local policies and regulations for establishing emission standards to incentivize private finance.	• **UNEP Methane Alert and Response System (MARS)** alerts governments and companies to very large emission events and tracks follow-up, helping close the detection-to-action gap and supporting financier prioritization (UNEP 2025). • **The EU Methane Regulation introduces monitoring, reporting and verification equivalence.** For new contracts, importers will need to prove to authorities that the oil, gas, or coal they import to the EU meets the same monitoring and reporting standards set by the EU Methane Regulation (EIA 2024b).
MDBs, DFIs, international organizations and development partners	
• Support the adoption of robust MRV standards and leverage them to crowd in finance (clear basis for lender and investor requirements). • Provide finance data systems, verification capacity and technical assistance to reduce greenwashing risk and improve market confidence, particularly where capability and data-access barriers persist.	• **The World Bank's GFMR is supporting the Uzbekistan Gas Leak Repair Facility,** which combines leak repair finance with capacity building for the operator to monitor and report methane emissions and work toward the OGMP 2.0 Gold Standard Pathway status (World Bank 2026b).
Private actors	
• Adopt recognized measurement-based methane accounting and verification approaches across operations and relevant joint ventures. • Integrate methane MRV into operations.	• **The OGMP 2.0** is a member-based initiative that supports the transition to comprehensive measurement-based reporting to improve transparency and help prioritize mitigation actions at the asset level. In 2025, it covered over 150 companies representing 45 percent of global oil and gas production (OGMP 2.0 2026).

Recommendation 3. Developing bankable projects and deploying de-risking where needed

Key stakeholders and implementation steps	Examples
Governments and government agencies	
• Expand project preparation (dedicated methane project cycles, technical assistance, aggregation models). • Develop investable project pipelines and scale use-of-proceeds and KPI-linked debt instruments for methane abatement (building on thematic bond approaches).	• **The Africa Methane Abatement Bond framework** proposes blended finance instruments, including Special Drawing Rights (SDRs) and carbon markets, along with participation from AfDB, AIIB, NGOs, and governments to mobilize funding for methane mitigation (AfriCatalyst 2025). • **Brazil's National Zero Methane Program** aims to stimulate economic sectors in the production and use of biomethane and biogas. Financial support comes from public banks, through specific financing and a line of credit (Brazil 2022).
MDBs, DFIs, international organizations and development partners	
• Provide predictable grant-based enabling support for developing economies (implementation capacity and investment readiness), using a more structured and coordinated approach (such as creating a dedicated fund stream or similar mechanism). • Provide leadership/convening to catalyze collaboration around innovative financial solutions. • Stabilize credit revenue risk using price-risk mechanisms to improve bankability and attract private finance. • Combine blended finance and results-based approaches with public/private/civil society partners to unlock pipelines.	• **The Environmental Investigation Agency (EIA) has proposed a dedicated methane mitigation fund** hosted by the UN Multi-Partner Trust Fund to provide predictable grant-based support for emerging economies (EIA 2024a). • **The World Bank Pilot Auction Facility (PAF)** provided price-floor options for future verified emission reductions (World Bank 2014). • **The World Bank Triple Win Blueprint** uses de-risking and blended finance approaches to strengthen project pipelines, improve bankability, and mobilize private capital for scalable methane mitigation (World Bank 2023a).
Private actors	
• Create revenue certainty through procurement commitments, supply-chain methane requirements, regulatory compliance markets, and other payment mechanisms that reward verified abatement. • Support project aggregation and standardization so smaller methane projects can transact at investor-relevant scale.	• **Centrica Energy–Seneca Resources MiQ certificate deal:** a 10-year private agreement for methane emissions certificates, showing how verified methane performance can create a market-based revenue stream for abatement (Centrica 2026). • **MiQ / certified gas procurement models:** buyers use methane certification to differentiate supply and reward lower-emissions gas, creating commercial incentives for methane reduction across supply chains (MiQ 2026).

Recommendation 4. Fossil fuel sector – Leveraging buyer and importer demand to mobilize finance

Key stakeholders and implementation steps	Examples
Governments and government agencies	
▪ Require operators to implement end-of-life fiscal risk management, including clear plans and funding for decommissioning and improved transparency (CTI 2025). ▪ Use regulatory cooperation platforms such as MR2R to explore more consistent disclosure of methane abatement investment alongside emissions reporting. ▪ Establish robust and enforceable decommissioning provisions, including dedicated or escrowed funds, to ensure abandoned sites are properly managed, and liabilities are not transferred to the public sector, preventing ongoing methane emissions. ▪ Incorporate methane intensity into licensing processes. ▪ Adopt shared-responsibility approaches to leverage demand-side trade policies. While trade measures can be a powerful lever, concerns remain, particularly among developing countries, that they may act as protectionist tools and impose disproportionate burdens (UNCTAD 2026). To ensure effectiveness and equity, these approaches should be complemented by concessional finance, technology transfer, and technical assistance to support compliance in Emerging Markets and Developing Economies (EMDEs).	▪ **The Alberta Orphan Well Levy (Canada)** is an industry-wide annual spending requirement transferred to the Orphan Well Association to offset closure costs (IEA 2025). ▪ **Western Australia Mining Rehabilitation Fund** is financed in part through annual levies from active mine operators to support rehabilitation liabilities (IEA 2025). ▪ **Under the EU Methane Regulation,** EU producers and importers, for contracts made or renewed after the six-year period, must prove to authorities that the methane intensity of their product is below the maximum levels set by the European Commission (EIA 2024b). ▪ **China's Emission Standard for Coalbed Methane** is a new plan to lower the emission concentration limit of coal mine gas (primarily methane) from the current 30 percent to 8 percent (IGSD 2024). This is supported by China's Certified Emission Reduction voluntary market via new methodologies, allowing low-concentration gas projects to sell carbon credits (Climate Cooperation China 2025).
Private actors	
▪ Develop transition finance products grounded on credible transition plans, with safeguards to support methane abatement in existing assets without creating long-term lock-in, distinguishing between prohibiting new fossil fuel expansion and enabling abatement-positive actions within existing infrastructure. ▪ Develop methane abatement financing products, including labeled debt instruments linked to methane-related commitments or verified reductions.	▪ **The Japan Oil, Gas and Metals National Corporation (JOGMEC) collaborations with suppliers** (including PETRONAS and Pertamina) on methane measurement and reduction, showing how buyer and importer partnerships can strengthen methane performance across gas supply chains (IEA 2025). ▪ **Guidance for Including Methane Abatement in Oil and Gas Debt Structuring** shows how labeled debt instruments can be adapted for oil and gas methane abatement through use-of-proceeds and KPI-linked structures (Methane Finance Working Group 2025).

Recommendation 5. Agriculture sector – research and development (R&D) for scaling up solutions and finance are crucial

Key stakeholders and implementation steps	Examples
Governments and government agencies	
• Align public subsidies and financial flows with methane-reducing production and consumption systems. • Provide concessional or low-cost lending and scale-up investment models by de-risking R&D and deploying innovative abatement technologies. • Support methane abatement in fragmented agricultural systems through cross-farm collaboration, food value-chain intermediaries and procurement incentives.	• **The World Bank's Global Methane Reduction Platform for Development (CH4D)** launched at COP28 to accelerate methane reduction in high-emitter sectors like agriculture and waste. It aids developing countries in mitigating methane via technical support, finance, and policy, focusing on livestock, rice, and waste management to meet 2030 targets (World Bank 2023b, 2023a). • **The California Department of Food and Agriculture (CDFA)** funds methane reduction projects, specifically dairy digesters and alternative manure management, to mitigate greenhouse gas emissions from livestock. These initiatives, supported by millions in state funding, capture methane from manure to produce biofuel, aiming to cut emissions while providing revenue for farmers (CDFA 2026). • **Uruguay received a performance-linked loan with a KPI to reduce methane per unit** of beef by 33 percent (2025–2029) and 36 percent (2030–2034) (World Bank 2024).
MDBs, DFIs, international organizations and development partners	
• Enable farmers, particularly in developing countries, to adopt methane-reducing practices by improving access to affordable finance, technical assistance, and transition support while safeguarding livelihoods and food security. • Scale up blended finance and risk-sharing mechanisms to mobilize private capital, reduce investment barriers, and accelerate the deployment of innovative methane abatement solutions. • Together with large and medium agrifood companies, set up risk-sharing pilot facilities that can generate replicable templates for scaling both measurement and finance (including corporate co-investment and supply-chain programs). • With support from cooperatives, account for sector fragmentation and the predominance of smallholder farmers by prioritizing cooperative-centered financing models, paired with multi-stakeholder coordination and concessional finance where needed.	• **Climate KIC trialed a EUR 700,000 program** with Carbery and support from Bankers Without Borders for methane-reducing measures on dairy farms (Climate KIC 2025). • **In Brazil, cooperative-based financing achieved a 23.3 percent methane reduction over five years,** while also increasing productivity (World Bank 2025).

Recommendation 6. Waste sector – City-led approaches to developing bankable projects

Key stakeholders and implementation steps	Examples
Governments and government agencies	
• Introduce required policies and regulations, from upstream policy mandates for source separation and organics diversion (to prevent methane generation) to the closure of open dumps and enforcement. • Invest in modern, integrated waste management systems that prioritize waste prevention, reuse, recycling, and composting, with energy recovery where appropriate, to reduce methane emissions across the waste value chain. • Municipalities and cities should develop and aggregate municipal waste methane pipelines across the waste hierarchy (landfill gas-to-energy and markets for products from revalorized organic waste). • Municipalities and cities should use project-preparation support, feasibility assessment and transaction-structuring assistance to improve bankability and mobilize follow-on investment.	• **IDB Too Good to Waste:** feasibility and structuring support to build bankable municipal waste pipelines; supported by partners such as the Global Methane Hub (IDB 2026). • **CATF's Waste Methane Toolbox** outlines how countries can leverage a range of policy approaches within the solid waste management (SWM) chain to mitigate methane emissions effectively (Clean Air Taskforce 2025). • **Thailand's National SWM Plan** (2022–2027) sets a target for 80 percent of community waste to be properly managed by 2027, supported by a 35 percent increase in source separation and recycling of household waste and a reduction in food waste to 28 percent of total waste (Thailand Pollution Control Department 2022). • **Chile's National Organic Waste Strategy** aims to increase the share of organic waste diverted from disposal from 1 percent to 66 percent by 2040 (Ministerio del Medio Ambiente 2021).
MDBs, DFIs, international organizations and development partners	
• Support policy and regulatory reforms. • Use blended finance to unlock waste methane portfolios (such as concessional tranches and guarantees to extend tenor, lower costs, and crowd in private lenders). • Provide guarantees and bankability tools for municipal and private operators. • Prioritize waste management transformation in urban development portfolios of multilateral development banks (MDBs) and other finance providers, recognizing methane mitigation as both a climate and public health imperative, and expanding access to concessional finance in rapidly urbanizing regions.	• **IFC Circularity Plus** offers access to blended finance and guarantees to help cities and private operators reach bankability for waste management infrastructure (IFC 2026).
Private actors	
• Private operators and developers should use blended finance and guarantees to improve the bankability of waste methane infrastructure; participate in aggregated municipal programs to improve projects' scale and credit profile. • Catalytic partners should provide catalytic pre-investment support (feasibility, structuring) to multiply capital by converting early-stage municipal opportunities into investable pipelines.	• **Participation via platforms such as IFC Circularity Plus** (blended finance + guarantees) (IFC 2026). • **IDB Too Good to Waste as an example of catalytic pre-investment** support enabling larger follow-on investment (IDB 2026). • **The Solid Waste Emissions Estimation Tool (SWEET) model** can support emissions estimation and comparison of waste interventions at the project, source, and city levels (GMI 2025). SWEET's measurements are helping cities access climate finance, equipping them with solid data that offers proof of what they can achieve with funding (CCAC 2020).

Introduction

Methane (CH_4) is a powerful greenhouse gas and short-lived climate pollutant (SLCP), responsible for roughly one-third of today's warming. It is primarily emitted by human activities in three sectors: fossil fuels, agriculture, and waste. While it has a shorter lifetime in the atmosphere, methane has strong warming potential and is the second-largest contributor to climate change after carbon dioxide (CO_2). It is also a key precursor of ground-level ozone (O_3), which causes significant harm to human health, agricultural productivity, and ecosystems. As a result, methane mitigation is one of the fastest and most cost-effective ways of delivering near-term climate benefits while improving air quality, public health, food security and economic development.

With a 1.5 °C temperature overshoot now widely assessed as locked in, the central challenge is to limit peak warming, reduce the duration of exceedance, and return temperatures below 1.5 °C (United Nations 2026). Slowing warming in the near term will require urgent action to reduce methane emissions, alongside rapid mitigation of other non-CO_2 greenhouse gases and deep and sustained decarbonization.

Global attention to methane has intensified over the past decade. The 2021 Global Methane Assessment demonstrated that available measures could reduce human-caused methane emissions by up to 45 percent this decade (UNEP and CCAC 2021). Building on this evidence, the Global Methane Pledge (GMP) was launched at COP26 in 2021, uniting participating countries around the collective goal of reducing global anthropogenic methane emissions by at least 30 percent below 2020 levels by 2030. As of April 2025, 159 countries plus the European Union had joined, collectively accounting for around 57 percent of global anthropogenic methane emissions (UNEP 2025), making the GMP one of the most internationally supported climate initiatives to date.

Recent projections show progress in slowing the growth of methane emissions, but current efforts remain far from sufficient to meet the GMP target. While global anthropogenic methane emissions have continued to rise since 2020, this growth is 40 percent slower than previously estimated (UNEP and CCAC 2021; UNEP 2025). These updated projections reflect the combination of growing attention on methane mitigation since the launch of the GMP,[4] such as lower-than-expected growth in natural gas production and consumption and strengthened waste management regulations in Europe and North America.

Despite this progress, emissions are rising overall, with agriculture the largest source (42 percent), followed by fossil fuels (38 percent) and waste (20 percent) (UNEP 2025). Implementing all current commitments, including Nationally Determined Contributions (NDCs) and Methane Action Plans (MAPs) as of May 2025, is projected to reduce global methane emissions by around 8 percent this decade (UNEP 2025). However, this remains insufficient to achieve the GMP target. Meeting the 2030 GMP target requires greater ambition and wider deployment of available methane control technologies globally.

[4] Countries have significantly strengthened their commitments to reduce methane, both in scale and detail. Updated Nationally Determined Contributions (NDCs) and Methane Action Plans (MAPs) increasingly include targeted measures across key emitting sectors. As of January 2026, 91 percent of countries Party to the Paris Agreement had included methane in their NDCs, a 20 percent increase since the pre-2020 period (CCAC Forthcoming).

The social and economic value of achieving the GMP target would be substantial. Achieving it could avoid 180,000 premature deaths and almost 19 million tonnes of annual crop losses, equivalent to more than US$ 330 billion per year (UNEP 2025). These findings underscore the urgent need to accelerate and scale up methane abatement finance and translate political commitments into measurable emissions reductions within this decade.

METHANE ABATEMENT FINANCE

Despite growing policy attention and clear global reduction targets, no comprehensive data sources systematically disclose or track methane abatement financial flows across sectors and sources. Existing public and private finance reporting standards lack methane mitigation markers, and identifying related finance in the data is complex. Methane abatement finance is often: (1) embedded in broader oil and gas, agriculture, or waste infrastructure through either capital expenditure (CAPEX) or operation and maintenance costs (OPEX) and funded via corporate balance sheets; (2) implemented for compliance, safety, or routine operations and maintenance activities rather than standalone "climate" projects; and (3) inconsistently tagged or disclosed as methane-specific in public reporting.

In 2022, CPI established the first baseline for methane abatement finance (CPI 2022, 2023b). This analysis used data science and keyword-search techniques to identify relevant primary project-level investments and overcome limitations in the availability and granularity of investment data. The ***State of Super Pollutants Abatement Finance*** (CPI 2026c) builds on this work by expanding the tracking framework and data coverage, providing an updated baseline of methane abatement finance.

The *Global Methane Status Report* (UNEP 2025a) provides two estimated annual net costs of implementing methane mitigation through 2030 under two different levels of ambition. Implementing the measures mentioned in NDCs and MAPs submitted by May 2025 would require approximately US$ 29 billion in annual net costs and reduce anthropogenic methane emissions by around 8 percent.[5] In comparison, implementing the Maximum Technically Feasible Reduction (MTFR) scenario, which is consistent with the GMP target, would entail US$ 127 billion in annual net costs through 2030.[6] While significant, the MTFR annual costs are relatively small compared with the US$ 1.9 trillion in global climate mitigation finance reported in 2024 (CPI 2026b),[7] indicating that leveraging just a fraction of global climate flows for methane abatement could have outsized mitigation impacts.

[5] This scenario assesses a high-ambition implementation of technical measures stated in NDCs and MAPs as of May 2025. The annual net cost estimates comprise around US$ 29 billion in annual CAPEX and US$ 45 billion in annual OPEX, offset by approximately US$ 46 billion in annual savings from valorization of recovered natural gas and biogas.

[6] The MTFR scenario assesses the impact of maximum technically feasible reduction through the implementation of more than 40 existing methane control technologies. It excludes high-cost measures above an average abatement cost of US$ 15,000 per tonne of methane (i.e., above US$ 500 per tonne of CO2 eq.). The scenario assumes a full technical potential implemented from 2030 onward, though some measures, e.g., targeted breeding of livestock and landfill upgrades, may take time to fully impact emissions. The annual net cost estimates comprise about US$ 122 billion in annual CAPEX and US$ 101 billion in annual OPEX, offset by approximately US$ 96 billion in savings from valorization of recovered natural gas and biogas.

[7] These figures are not directly comparable: MTFR costs represent the capital and OPEX of implementing methane abatement measures, whereas climate finance figures primarily capture CAPEX together with spending on policy frameworks and capacity building.

RESEARCH SCOPE AND OBJECTIVE

This brief provides an in-depth analysis of trends in methane abatement finance from 2021 to 2023, building on the *State of Super Pollutants Abatement Finance* (CPI 2026c). It examines finance across the three main anthropogenic emission sectors (UNEP and CCAC 2021): fossil fuels (oil, gas, and coal mining), agriculture (crops and livestock), and waste (solid waste and wastewater). The analysis includes:

1. **Quantification of methane abatement finance** between calendar years 2021-2023, applying the methodology developed for the State of Super Pollutants Abatement Finance (CPI 2026c) (see Annex).[8]
2. **Assessment of the finance gap**, comparing tracked finance with estimated annual CAPEX needs under the MTFR scenario through 2030, drawing on the Global Methane Status Report (UNEP 2025). As tracked finance primarily captures capital investments, CAPEX provides a more comparable benchmark than total costs, which also include OPEX.
3. **Identification of pathways** to close the finance gap, including recommendations for strengthening the enabling environment and developing sector-specific solutions to scale up methane abatement finance.

[8] The findings are subject to several data limitations common across climate finance tracking methodologies and specific methane finance data limitations. Financial flows reflect committed amounts rather than disbursements, owing to the limited availability of consistent disbursement-level data. This may affect the sequencing of flows over time.

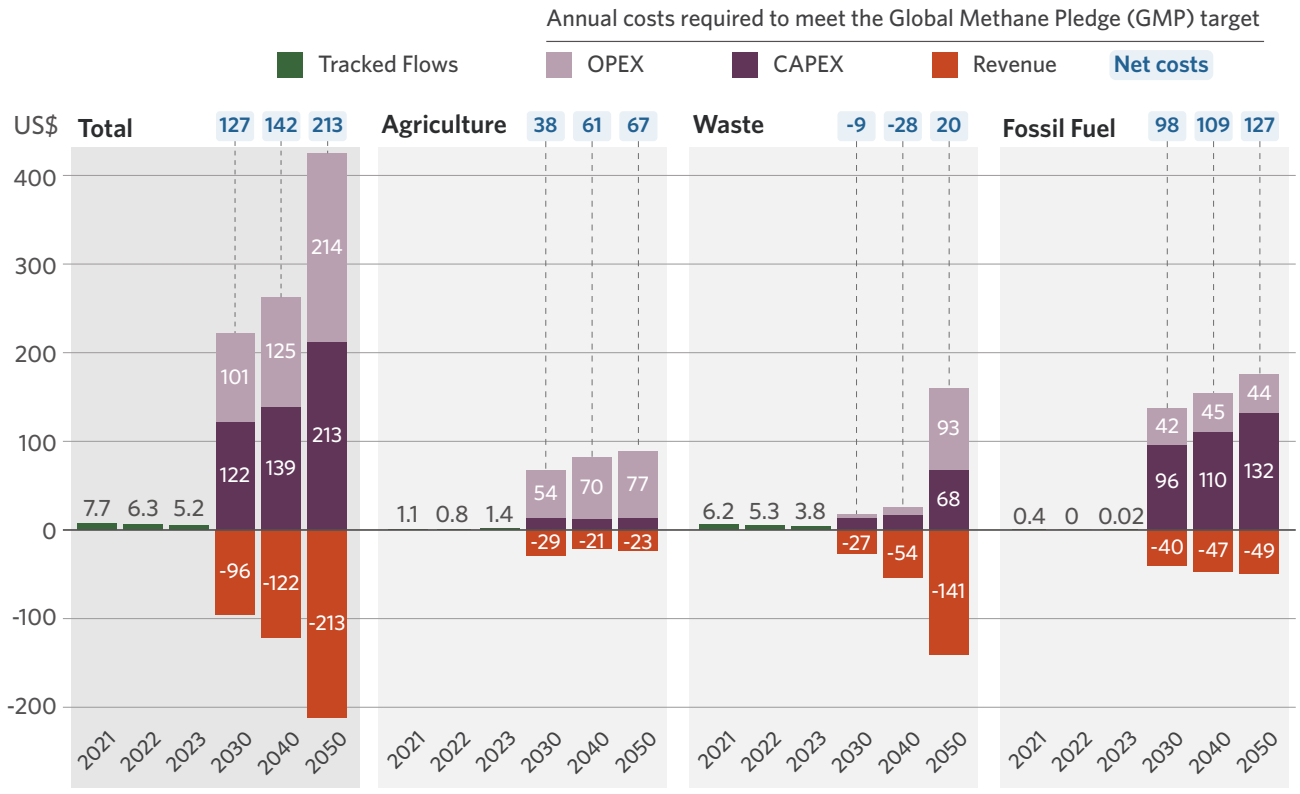
Finance trends and needs

Methane abatement finance totaled US$ 5.2 billion in 2023, declining from US$ 7.7 billion in 2021. Total tracked finance in 2023 therefore represented around 4 percent of estimated US$ 122 billion in annual CAPEX required to achieve the GMP target by 2030 (UNEP 2025), although these figures are not directly comparable in scope.[9]

The annual net cost of achieving the GMP target through 2030 is estimated to be approximately US$ 127 billion (UNEP 2025). Figure 1 breaks down tracked flows and MTFR investment cost totals by sector, representing the most up-to-date and comprehensive analysis of methane abatement finance.

In 2023, waste received US$ 3.8 billion (72 percent) and agriculture US$ 1.4 billion (27 percent) of tracked methane abatement finance. Waste finance declined from 2021, driven primarily by lower investment in solid waste abatement, while agriculture finance increased by 33 percent from 2021 after a significant decline in 2022.

Figure 1: Global finance to methane abatement in 2021–2023 vs annual costs required to meet the Global Methane Pledge target



Note: Annual costs through 2030, 2040, and 2050 under the Maximum Technically Feasible Reduction (MTFR) scenario assessed under the Global Methane Status Report (UNEP 2025).

[9] Tracked finance primarily captures CAPEX investments, together with spending on policy frameworks and capacity building, whereas the estimated MTFR annual investment costs include both capital and operating expenditures, as well as cost savings from valorization of recovered natural gas and biogas. Nevertheless, the comparison between tracked flows and CAPEX annual costs provides a useful indication of the scale of the investment gap and underscores the need for both improved investment reporting and increased financing across key methane-emitting sectors.

The fossil fuel sector faces data and reporting limitations, especially in the private sector. Although policy and corporate commitments have expanded, particularly for oil and gas (UNEP 2025), these commitments have not been accompanied by transparent, consistent data on financial flows to demonstrate policy outcomes and corporate action. Consequently, very little finance was identified for fossil fuel methane abatement, with only US$ 20 million tracked in 2023 covering two projects. Though this funding imbalance reflects data limitations (see Box 1), the lack of reliable data prevents an assessment of whether financial flows are adequate to meet the sector's abatement needs, particularly given that fossil fuels account for 38 percent of global anthropogenic methane emissions (UNEP 2025).

The investment gap for meeting the 2030 GMP target remains substantial. Looking ahead, annual investment requirements vary depending on the timeframe considered. Early investment is critical to accelerating methane reductions, with the financing profile differing by sector:

- **In the fossil fuel sector,** around US$ 96 billion in annual CAPEX and US$ 42 billion in OPEX are required through 2030, highlighting the importance of deploying abatement measures early to deliver rapid emissions reductions.
- **In the agriculture sector,** there are comparatively low annual CAPEX requirements of around US$ 13 billion across both timeframes, alongside substantial and sustained OPEX, increasing from US$ 54 billion through 2030 to US$ 77 billion through 2050. This underscores the importance of continued financing for implementation, operation and maintenance alongside upfront investment (UNEP 2025).
- **In the waste sector,** requirements increase substantially over the longer term, with annual CAPEX and OPEX rising from around US$ 13 billion and US$ 5 billion through 2030 to US$ 68 billion and US$ 93 billion, respectively, by 2050. This suggests that early investment in waste management infrastructure can generate benefits that extend over the longer term.

Even considering that data gaps may lead to under-tracking of flows, current investment in methane abatement solutions falls well short of that required to meet GMP goals.[10]

The oil and gas subsector alone has net annual requirements of approximately US$ 87 billion by 2030, offering the largest mitigation potential. The subsector has many abatement opportunities delivering attractive returns and is therefore well-suited for self-financing by companies. International public finance should prioritize phasing out fossil fuel-prolonging projects (Clean Air Fund 2025) and should be redirected to monitoring, reporting, and verification (MRV) systems and regulation. Where national oil companies and other operators face upfront financing constraints, concessional or blended finance can help de-risk and fund methane abatement measures, including ending routine venting and flaring, replacing high-emitting equipment, and deploying leak detection and repair (LDAR) programs. Under the MTFR scenario, the subsector could reduce methane emissions by 67 million tonnes (Mt) per year by 2030, more than the mitigation potential of the agriculture and waste sectors combined (UNEP 2025).

[10] Data gaps limit the comprehensiveness of tracked methane abatement finance; hence it is not directly comparable to needs estimates.

Box 1: Data challenges, with a focus on fossil fuels

Limited data and a lack of standardized reporting frameworks severely constrain finance tracking, as observed in previous studies (CPI 2022, 2023b, 2026c). CPI's review and processing of relevant datasets found that many projects do not provide up-to-date or fully transparent financial reporting, particularly for project-level budgets and line-item expenditures. As a result, incremental finance specifically targeting methane abatement cannot always be isolated, and the use of full project values is required. By the same token, projects may also be excluded if the abatement component potentially represents only a small aspect of overall project goals and a minor share of total project expenditures. Such issues can be partly mitigated by adopting a robust methodology.

To improve coverage, CPI has expanded its project-level coverage of methane abatement finance by extracting more information from core datasets and incorporating additional data (see Annex). A more extensive and granular taxonomy of eligible activities, allowing for more comprehensive keyword searches of existing data, has also been developed.

Fossil fuel sector data challenges

Financial data coverage is particularly scarce across the fossil fuel sector. Tracking difficulties stem from variations in reporting practices, confidentiality and transparency across sources and entities, challenges in distinguishing methane finance from business-as-usual expenditure, and the inability to quantify financial expenditures from reported methane emission reductions alone. Further, despite the Oil & Gas Methane Partnership (OGMP) 2.0 now covering 45 percent of global oil and gas production, methane abatement investment is still not consistently disclosed, and financial reporting is extremely limited. Reporting under the OGMP 2.0 comprehensively covers emission levels and targets, but not the associated abatement measures and investments.[11]

Additionally, some scoped datasets had to be excluded due to insufficient disaggregation and comparability. In many cases, methane abatement finance could not be reliably separated from total project values, reflecting the persistent structural limitation in the fossil fuel sector, where reporting rarely distinguishes methane-specific investments from overall CAPEX and OPEX. Other datasets were scoped but insufficient, as no finance values were disclosed—such as Oil and Gas Methane Partnership 2.0 resources, which present a comprehensive methodology on emissions reporting but do not include financial reporting.

The subsections below provide further insights into methane abatement finance for each sector. They examine the overall trends, financing gap, funding measures, and splits

[11] Limited investment coverage can be found in company factsheets. In the OGMP 2.0 company factsheet 2024 (OGMP 2.0 2024) TotalEnergies detailed a US$ 25 million contribution to the Global Flaring and Methane Reduction Trust. In the 2025 edition, Equinor detailed that in 2024 they invested US$ 30 million in a Volatile Organic Compound (VOC) recovery unit at Peregrino, Brazil (OGMP 2.0 2025).

between public and private finance. The analysis also identifies which actors provide the most investment, the financial instruments used, and the regions receiving flows.

Fossil fuels

Despite improvements in tracking, identifiable fossil fuel methane abatement finance reached just US$ 20 million in 2023. However, ongoing reporting limitations mean that this figure is unlikely to represent total investment in the sector.

The majority of tracked finance in 2023 supported a publicly funded project targeting methane emissions released through gas flaring and venting in oil and gas operations. The initiative, led by Mauritania's Ministry of Petroleum, Mines and Energy, is supported by the World Bank's *Zero Routine Flaring by 2030 Initiative* (ZRF) through technical assistance to strengthen regulatory and enforcement frameworks (IMF 2026).

By contrast, in 2021, one US$ 360 million loan from the International Finance Corporation (IFC) was tracked to expand Basrah Gas Company's gas processing capacity, enabling the capture and conversion of previously flared gas into energy. No comparable flows of this magnitude were identified in 2022 or 2023.

Under the MTFR scenario, fossil fuel methane abatement requires US$ 96 billion in annual CAPEX and US$ 42 billion in annual OPEX by 2030.[12] Beyond the socio-environmental benefits of emission reductions, methane abatement measures can save US$ 40 billion per year from the valorization of natural gas,[13] recovered through reduced leaks and venting in the oil and gas subsector and coal mine degasification (UNEP 2025).

Access to infrastructure can also determine whether recovered methane can be used commercially. McKinsey (2024) highlights a separate estimate of US$ 20 billion in annual expenditure by 2030 for infrastructure connecting recovered methane to existing pipelines or nearby gas demand centers, including pipelines, LNG terminals, and tankers.[14] The scale of these infrastructure needs will, in many cases, exceed the capacity of individual oil and gas operators, requiring coordinated investment across operators and potentially public-sector support.[15]

While fossil fuels have the greatest cost-effective methane abatement potential, implementation barriers persist. Available technologies and practices could reduce methane emissions by 94 Mt annually by 2030, with many measures achievable at relatively low cost (UNEP 2025). Many methane abatement options for oil and gas can deliver rates

[12] Under the NDCs & MAPs scenario, annual fossil fuel methane abatement requires US$ 9 billion in annual CAPEX and US$ 18 billion in annual operational costs by 2030. Estimates from other sources translate into annual spending for methane abatement around US$ 28 billion up to 2035 and US$ 33 billion by 2030 (McKinsey & Company 2024; IEA 2026).

[13] This estimate is based on country-specific natural gas prices for 2020, using producer prices for net-exporting countries and import prices for net-importing countries. These prices vary across countries and are projected forward in proportion to global gas price trends under the SSP2 Baseline scenario from the IIASA MESSAGE model.

[14] This estimate is based on a separate assessment of infrastructure requirements and should therefore not be added to the CAPEX and OPEX figures above.

[15] Beyond these broader infrastructure requirements, the economics of methane abatement also vary considerably across countries. A CATF-commissioned analysis by Carbon Limits finds that substantial methane reductions can be achieved across nine major oil and gas producing countries in Africa and Latin America using existing technologies, but that the cost of deploying these measures is strongly shaped by infrastructure availability, gas utilization opportunities, regulatory frameworks, and access to finance. In several countries, measures such as quarterly leak detection and repair can even generate net cost savings when the value of recovered gas is taken into account, suggesting that targeted investment in both enabling infrastructure and abatement measures can unlock significant emissions reductions (Carbon Limits 2026).

of return above typical thresholds for capital investment (IEA 2025), creating potential for private financing from oil and gas operators. However, deployment depends on effective policy and regulatory frameworks, enforcement, technical capacity and access to suitable infrastructure. Other barriers include limited awareness of the scale of the problem and available solutions, competition from higher-profile investments for capital, and split incentives between equipment owners and gas owners (IEA 2025).[16]

The gap between fossil fuel methane pledges and legislation highlights the need for further policy development. Modelling projects a 19 percent reduction in fossil fuel methane emissions by 2030 relative to 2020 under NDCs and MAPs commitments (as of June 2025), but the delay in translating these commitments into legislation means that methane emissions are set to marginally rise over this period (UNEP 2025).

Recent regulatory developments illustrate how policy can encourage investment. New Mexico's 2021 regulations aim to curb methane emissions from oil and gas operations by requiring leak detection and banning routine flaring. Since their implementation, production has doubled while methane intensity has lowered significantly (Environmental Defense Fund 2025).

In coal mining, despite no finance being tracked, recent regulatory developments are likely to prompt future investments across the globe. These include the EU Methane Regulation (Ember 2024) and China's Emission Standard for Coalbed Methane (IGSD 2024) supported by new methodologies for the China Certified Emission Reduction voluntary market, which allows low-concentration gas projects to sell carbon credits.

Redirecting fossil fuel expenditure toward clean air and low-carbon solutions is particularly urgent, removing fossil fuels as the default engine of economic development. Given the emission reductions, any scaling up of finance must be accompanied by safeguards to prevent long-term lock-in of fossil fuel production. International development funding data shows an alarming 80 percent year-on-year increase in fossil fuel-prolonging finance from US$ 5.3 billion in 2022 to US$ 9.5 billion in 2023, more than two-and-a-half times the amount directed toward tackling outdoor air pollution (Clean Air Fund 2025). Development funders should phase out such support as quickly as possible, given its impacts on climate and public health. This includes publishing clear roadmaps to reduce fossil fuel financing, embedding just transition principles to protect vulnerable communities, ensuring full transparency and justification for any continued investments, and prioritizing climate-positive development pathways that demonstrate viable alternatives.

Greater participation by corporate investors and external private financiers should be encouraged. International oil and gas companies can strengthen voluntary methane commitments by improving the measurement and disclosure of emissions across Scopes 1, 2, and 3, as well as reporting on related investments. Financial institutions can complement these efforts by using transition plans to identify how their products and services can support greater investment in methane abatement activities (CPI 2026a, 2023c, 2023a).

[16] Split incentives can arise where the party responsible for investing in methane abatement does not capture the full financial benefits of reducing methane losses. For example, an equipment owner may bear the costs of upgrading infrastructure or implementing leak detection and repair, while the gas owner receives the value of the recovered gas but may have limited control over the relevant infrastructure or maintenance decisions.

Integrating methane abatement into oil and gas debt structuring offers one pathway to mobilize external finance. The Guidance for Including Methane Abatement in Oil and Gas Debt Structuring consolidates the Methane Finance Working Group's findings and recommendations to suggest a pathway for financial firms and oil and gas companies to create credible, practical, and mutually beneficial arrangements that prioritize methane and flaring reduction projects, which can help turn commitments into investable action (Methane Finance Working Group 2025).[17] See Table 4 for pathways to meet methane abatement financing needs in the fossil fuel sector.

Agriculture

Tracked agriculture methane abatement finance reached US$ 1.4 billion in 2023, up from US$ 1.1 billion following a dip to US$ 845 million in 2022. Growth was driven primarily by investment in rice paddy management projects and anaerobic digestion facilities. The 2022 decline largely reflects lower financial commitments to smallholder and pastoralist systems,[18] with a 25 percent decrease in finance from US$ 989 million to US$ 743 million. Although there was fluctuation in finance volumes, the number of tracked projects increased by a consistent average of 25 percent each year.

Of the total tracked finance to the agriculture sector in 2023,[19] livestock accounted for US$ 977 million in abatement finance (over 70 percent), while crops accounted for a further US$ 257 million (18 percent).[20] Regarding measures, US$ 939 million supported measures for smallholder and pastoralist systems, followed by rice paddy management measures at US$ 256 million (see Figure 2).[21]

Regional flows were concentrated and strongly influenced by individual large project commitments. Sub-Saharan Africa accounted for the largest volume of agriculture methane abatement finance at US$ 774 million (55 percent) in 2023, of which over US$ 752 million supported smallholder and pastoralist system projects. This represents a recovery from US$ 520 million in 2022, although finance remained below the US$ 819 million recorded in 2021 (Figure 3). Limited equipment and measurement capacity in many countries nevertheless result in difficulties in quantifying and verifying the methane reductions associated with these investments.

[17] While the guidance is relevant to many types of oil and gas producers, it may be especially useful for National Oil Companies (NOCs). Most NOCs play a key role in their national economies, and reducing product loss through methane abatement can strengthen global competitiveness, improve operational safety, and enhance the stewardship of national resources.

[18] Smallholder and pastoralist climate resilience measures include vaccination against zoonotic diseases and emergency feed storage. Such measures improve the survival rate and reduce the unproductive replacement of animals, thereby suppressing methane emissions across the entire herd.

[19] Investments were tracked across six measure groups: Smallholder and pastoralist systems; rice paddy management; manure management; food systems and diets; enteric fermentation; and cross-measure-group investments.

[20] While cross-subsector projects saw 12 percent.

[21] Finance for projects that target enteric fermentation was also tracked, but these are typically larger ticket and exhibit multiple project components. As a result, finance for enteric fermentation projects was largely tracked under our cross-measure category. Notably, over 80 percent of cross-subsector projects contained a component which targeted reductions in enteric fermentation.

Figure 2: Tracked methane abatement finance – Agriculture targeted measures, 2021–2023

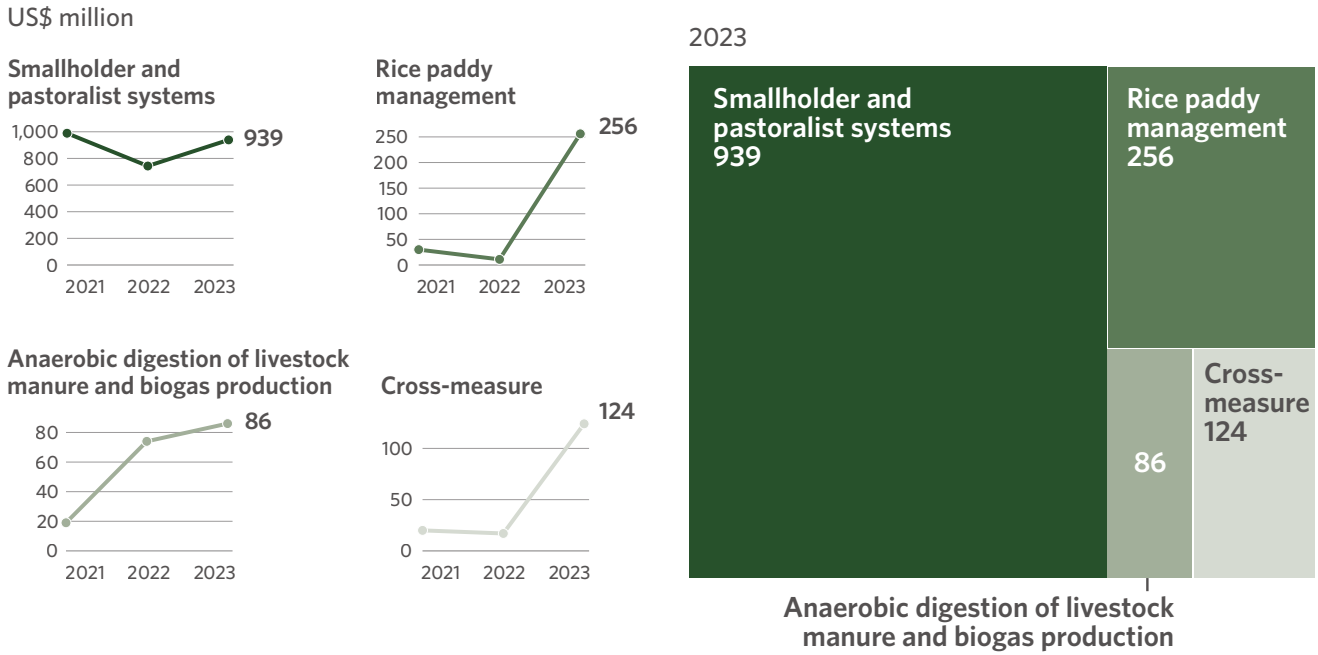
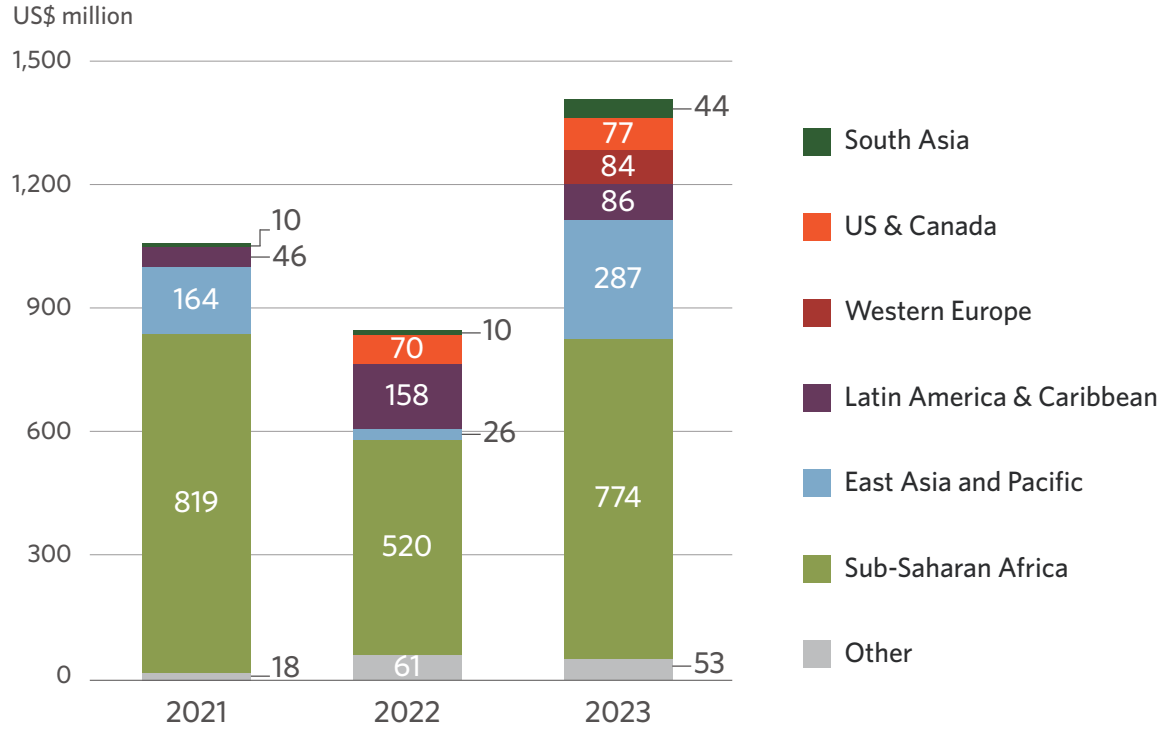


Figure 3: Tracked methane abatement finance – Agriculture regions of destination, 2021–2023



East Asia and the Pacific accounted for US$ 287 million (20 percent), while Latin America and the Caribbean accounted for US$ 86 million (6 percent) of the sector's finance in 2023. Across the years analyzed, both regions saw mixed trends. Finance to East Asia and the Pacific declined to US$ 26 million in 2022 (from US$ 164 million in 2021) before recovering in 2023 (largely driven by a single rice paddy project initiated by the World Bank in China's Hunan region, which accounted for 89 percent of regional finance in 2023). Finance to Latin America and the Caribbean increased between 2021 (US$ 38 million), and 2022 (US$ 158 million) followed by an almost equally large contraction in 2023. This decline largely reflects the concentration of 2022 flows in a single large project supporting smallholder and pastoralist systems, which accounted for 94 percent of regional finance that year (Figure 3). These examples illustrate the substantial inter-year variation in regional methane finance, which can arise from large project commitments being recorded in different years, rather than reflecting changes in the pace of actual disbursements or investment activity.

The United States of America and Canada accounted for a consistently small share of the sector's finance, with just US$ 77 million (5 percent) tracked in 2023, all directed to anaerobic digestion facilities (Figure 3).[22] The small tracked share contrasts with the United States of America as the fourth-largest emitter of agricultural methane, after India, China, and Brazil (European Commission Joint Research Centre and IEA 2024).[23] Recent policy action (Luke and Tonsor 2025; U.S. Department of State 2022) has not yet translated into greater volumes of targeted investments, although data gaps also play a part in the low reported numbers.[24]

In terms of investment origin, the agriculture sector saw a significant disparity between its public and private finance flows in 2023. Public sources provided US$ 1.2 billion (86 percent) compared to private sources, which provided just US$ 197 million (14 percent). Tracked private finance substantially increased from US$ 25 million in 2021, suggesting that the market is continuing to mature with a focus on measures to reduce enteric fermentation and anaerobic digestion for biogas production. However, domestic private finance remains highly geographically concentrated: Western Europe (57 percent of tracked domestic private finance) and the United States of America and Canada (43 percent).

Governments were the largest provider, contributing US$ 569 million (40 percent) to the sector, of which US$ 526 million was for smallholder and pastoralist measures. Multilateral DFIs were another significant contributor at US$ 499 million (36 percent), while no other actor type provided more than US$ 100 million in 2023. At the instrument level, grants accounted for US$ 673 million (48 percent), followed by low-cost debt at US$ 431 million (31 percent).

[22] This finding likely reflects the greater availability of public finance data (e.g., from official development assistance), which is more comprehensive and detailed for developing regions. By contrast, there are known gaps in tracking private and domestically financed activities in higher-income countries. Tracked data for the US and Canada primarily covers the US, due to government initiatives, particularly through grant funding for biodigester projects such as the California Department of Food and Agriculture's Dairy Digester Research & Development Program.

[23] Accessed 23 August 2026: link

[24] Mitigation opportunities and data availability vary across livestock production systems and regions. Production systems in Europe and North America are generally more efficient, while greater opportunities to reduce livestock emissions intensity may exist in Africa. In developed regions, major mitigation opportunities may also lie in manure and fertilizer management. However, livestock-related investments in Africa are often captured through international development finance datasets, which can provide greater visibility of investment flows, whereas domestic investments in developed countries are more difficult to identify when embedded in private or domestic expenditure. As a result, regional differences in tracked finance may partly reflect differences in data availability and reporting, rather than underlying investment levels alone.

Tracked finance remains well below the estimated US$ 13 billion annual CAPEX required by 2030 under the MTFR scenario (UNEP 2025). While not comparable with tracked finance flows,[25] this comes in addition to US$ 54 billion in annual OPEX which will also be required for livestock and rice cultivation measures by 2030 (Figure 1). High upfront costs, fragmented production systems and limited access to affordable finance continue to constrain adoption of mitigation measures.

Practical abatement measures can increase production while delivering methane reductions across crop and livestock systems. For example, adopting enhanced low-emission manure management techniques has the potential to improve yields and food security (Hegde et al. 2025). For such high-impact projects, financial institutions may look to blended finance mechanisms to lower borrowing costs and reduce investment risk, particularly for small-scale farmers who have limited access to capital.

Under the MTFR scenario, methane abatement activities could generate approximately US$ 29 billion in annual savings by 2030 (UNEP 2025), while carbon markets may provide additional revenue opportunities. Agricultural methane abatement projects remain less mature than landfill gas recovery in voluntary carbon markets (Patch 2026) but methodological development and greater market confidence could unlock additional private finance. Alternate wetting and drying for rice and enteric methane feed additives for livestock have significant scaling potential, as they aim to reduce emissions from large-scale food production (Carbon Direct 2026a).

Science-based eligibility criteria can also help investors identify suitable projects. Climate Bonds Standard criteria for Agriculture Production, Bioenergy, Food Value Chains, and Alternative Proteins (Climate Bonds 2025, 2024a, 2024b, 2026a) provide a basis for screening relevant investments. See Table 5 for pathways to meet methane abatement financing needs in the agriculture sector.

Waste

Methane abatement finance to the waste sector declined for two consecutive years, from US$ 6.2 billion in 2021 to US$ 3.8 billion in 2023. These flows remained below the identified needs in every year between 2021 and 2023. In 2023, roughly US$ 1.8 billion was directed to solid waste and roughly US$ 2 billion to wastewater.

The decline was largely driven by lower investment in solid WtE incineration projects. Between 2021 and 2022, solid WtE incineration investment accounted for 94 percent (US$ 8.2 billion) of tracked solid waste financing. Annual investment fell from US$ 4.2 billion in 2021 to US$ 1.1 billion in 2023, when incineration's share declined to 59 percent. Over this period, the number of solid WtE incineration projects fell from around 35 to 10, causing the sharp decline.

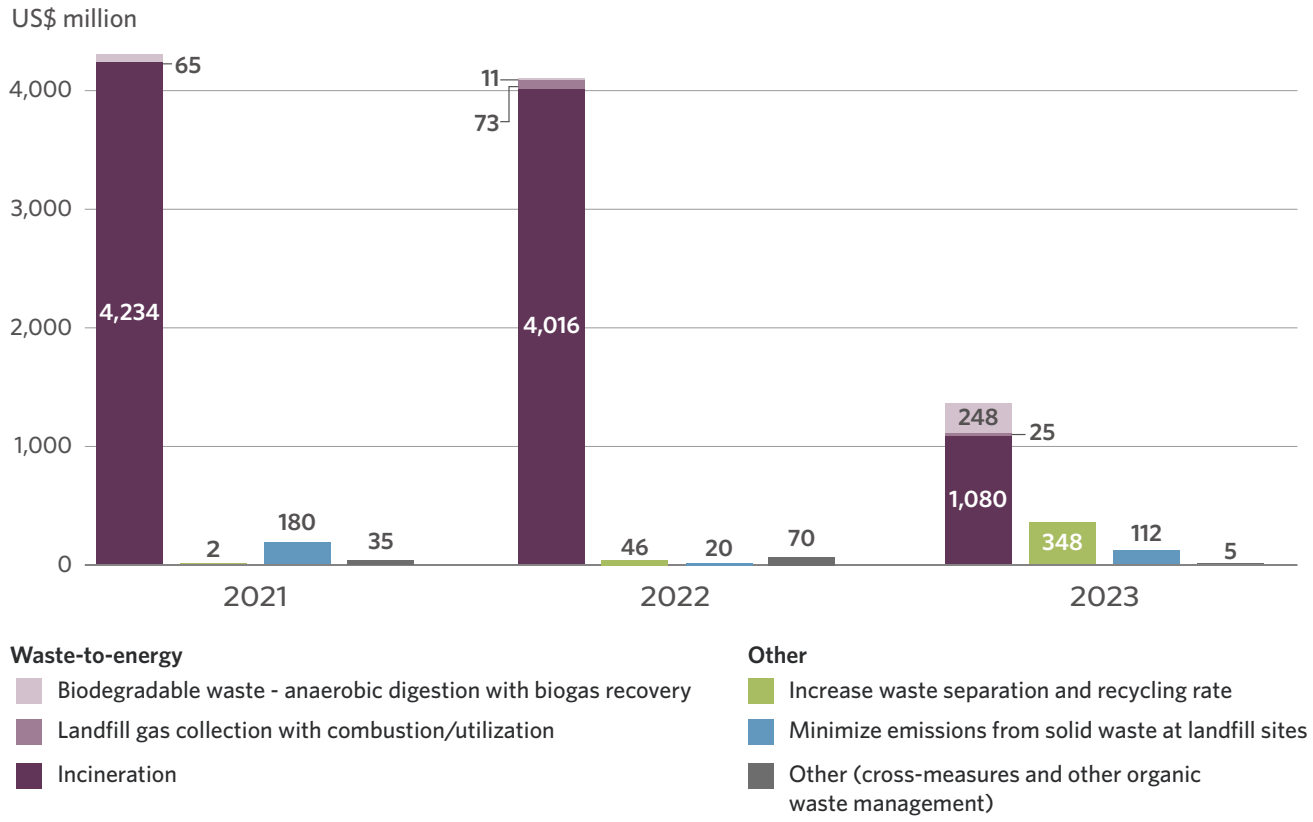
Although rising from very low levels, finance for non-incineration WtE activities and upstream measures increased in 2023. However, these activities still require substantial additional investment. Anaerobic digestion with biogas recovery received US$ 248 million, and US$ 25 million went to landfill gas collection with combustion and utilization. Waste

[25] Tracked finance primarily captures CAPEX investments, together with spending on policy frameworks and capacity building.

separation and recycling measures attracted US$ 348 million, and US$ 112 million targeted emissions reductions from solid waste at landfill sites (Figure 4).

Despite this diversification, finance remained concentrated in downstream, combustion-based technologies. Incineration can create technology lock-in by requiring a steady supply of waste throughout a plant's lifetime, potentially constraining waste reduction and reuse (UNEP 2019). Scaling investment toward a broader set of interventions aligned with the waste hierarchy is therefore important for methane abatement (CCAC 2025b).

Figure 4: Tracked methane abatement finance – Solid waste targeted measures, 2021–2023



Wastewater finance primarily supported projects expanding and improving wastewater collection and treatment, with limited investment in methane recovery. US$ 4.3 billion (92 percent) of tracked flows went to improved wastewater management measures between 2021 and 2023. Advanced wastewater treatment measures for methane recovery received only US$ 269 million (6 percent) over the same period, with most investment in 2021.[26] High upfront capital costs may help explain this limited investment, despite wastewater's estimated abatement potential of approximately 25 Mt annually by 2050 (UNEP 2021).[27] Science-based sector-specific criteria, including Climate Bonds Initiative's

[26] Including: Methane capture at wastewater treatment plants; Two-stage wastewater treatment with biogas recovery (industrial); Upgrading primary wastewater treatment to secondary/tertiary treatment with gas recovery and overflow control (residential)

[27] Converted from 671 Mt CO_2eq using a GWP100 of 27.0 for non-fossil methane, as reported in Table 7.15 of the IPCC Sixth Assessment Report (Forster et al. 2021; CCAC 2025d).

Waste Management and Water Infrastructure criteria, can help ensure such investments deliver credible methane abatement outcomes (Climate Bonds 2026c, 2026d).

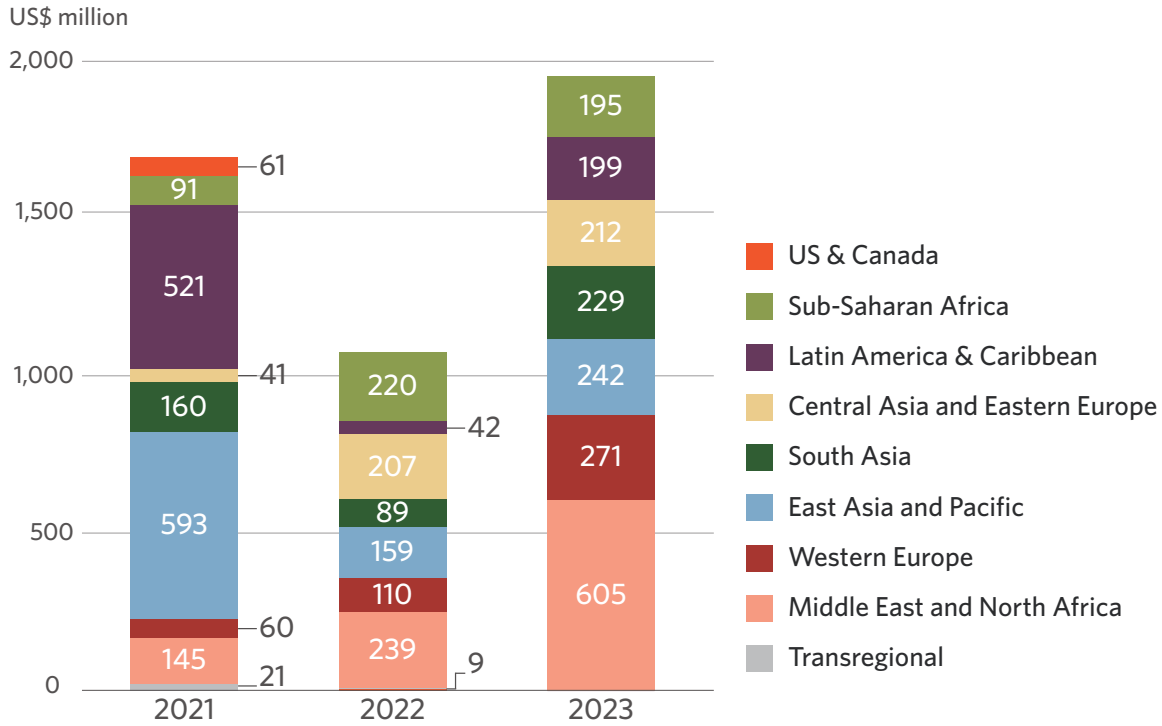
Regarding investment origin, solid waste finance was predominantly private. Private actors contributed US$ 7.6 billion (72 percent) of solid waste flows between 2021 and 2023. Commercial financial institutions and corporations provided US$ 3.9 billion and US$ 2.3 billion (37 and 21 percent) of solid waste abatement finance, respectively.

In contrast, wastewater relied mainly on public DFI-led finance. Public actors dominated wastewater flows with US$ 3.5 billion (73 percent), including US$ 2.8 billion (59 percent) from multilateral and bilateral DFIs. Private actors such as commercial financial institutions and corporations provided US$ 1.3 billion (26 percent) between 2021 and 2023. Dependency on tariff revenue can constrain private investment in wastewater projects (Jha et al. 2023).

Market-rate debt was the main instrument across both subsectors, accounting for US$ 6.2 billion (58 percent) of solid waste and US$ 2.7 billion (57 percent) of wastewater finance. Equity accounted for a further 37 percent of solid waste flows, while wastewater had a higher share of grants (11 percent) and low-cost debt (24 percent), reflecting its DFI-led financing profile.

Regional flows were concentrated and strongly influenced by a small number of large WtE projects. Western Europe received US$ 4 billion (26 percent) of total waste-sector methane finance across 2021-2023, followed by East Asia and the Pacific with US$ 3.8 billion (25 percent). Western Europe led solid waste investment, accounting for US$ 3.6 billion of the US$ 10.5 billion mobilized. East Asia and the Pacific received US$ 2.8 billion for solid waste and US$ 994 million for wastewater treatment. The Middle East and North Africa (MENA) also received significant flows for both solid waste and wastewater, at US$ 2.2 billion and US$ 989 million, respectively (Figure 5).

Figure 5: Tracked methane abatement finance – Wastewater regions of destination, 2021–2023



Nearly all of Western Europe's solid WtE financing (US$ 3.6 billion) went to fewer than 10 projects across the period, reflecting how large projects can significantly influence regional year-on-year trends. In 2021, MENA also mobilized a large amount of financing for WtE projects (US$ 2.2 billion), allocated across only two projects. Careful interpretation of annual trends is required, as only analyzing high-level investment totals, dominated by large WtE projects, may mask progress. For example, the increase in abatement finance to non-incineration solid waste solutions in 2023, although starting from a low base, could be an indicator of progress, especially if finance can be sustained, despite the large fall in subsector-wide investment.

However, many regions continue to receive little financing. South Asia attracted just US$ 586 million (4 percent), mostly toward wastewater treatment (US$ 479 million). Sub-Saharan Africa accounted for US$ 1.2 billion (8 percent), split more evenly across wastewater (US$ 506 million) and solid waste (US$ 710 million). Despite the large and fast-growing populations in these regions, the lack of private participation and structural barriers has limited the success of existing projects. In both regions, inadequate municipal finance and limited capacity in urban local bodies to undertake large capital investment constrain waste infrastructure planning and implementation (Kapoor and Chakma 2024; Kumar et al. 2022).

Under the MTFR scenario, waste-sector methane abatement requires an estimated US$ 13 billion in annual CAPEX through 2030 – US$ 10 billion for solid waste and the remaining US$ 3 billion for wastewater – with a further US$ 5 billion in OPEX (UNEP 2025). Broader World Bank estimates suggest an annual global investment cost of US$ 96–117 billion to achieve universal, sustainable waste management over 2022–2050. While these estimates extend beyond methane abatement, they provide a useful upper-bound benchmark for the scale of investment required to transform waste management to achieve wider environmental and public health benefits (Cook et al. 2026).

The cost profile of the waste sector and its fragmented base of municipalities and local implementers create challenges for both scaling investment and tracking it. Tracked methane abatement finance covers capital investment; however, operational costs can represent a substantial share of project costs (UNEP 2025). Spending through municipal budgets is also difficult to capture consistently. Small ticket sizes, limited access to international finance, and weak or uncertain revenue streams constrain bankability. Greater use of municipal and local-implementer data could improve tracking, while project aggregation, stronger revenue collection and support for municipal project preparation could help scale investment.

Public-private partnerships, biogas revenue and the voluntary carbon market can complement public funding. As of June 2025, the NDCs of 169 countries reference general waste commitments, signaling widespread policy recognition of the sector's mitigation potential (UNEP 2025). Translating commitments into investment requires viable project and financing arrangements suited to local conditions.

Methane recovery can generate financial returns that support waste-sector investment. Under the MTFR scenario, 2-stage anaerobic wastewater treatment with biogas recovery could generate net annual savings of US$ 3 billion by 2030, while valorizing methane captured from solid waste could create about US$ 6 billion in net annual savings by 2030

(UNEP 2025). Early investments in waste infrastructure and circular-economy practices, supported by biogas revenue, can help unlock emission reductions.

Voluntary carbon markets offer an additional revenue source. Landfill gas activities generated annual credit retirements in the range of 5–9 million tCO_2e since 2021 and dominated issuances in 2025 (Patch 2026; Carbon Direct 2026b). See Section 3, Table 6, for pathways to meet global methane abatement financing needs in the waste sector.

Barriers and recommendations to enable finance

The United Nations Secretary-General's 2026 Call to Action on Methane calls for decisive action across fossil fuels, agriculture and waste, offering a practical roadmap for governments, industry and financial institutions to rapidly cut methane emissions this decade through proven and cost-effective solutions (United Nations 2026). The recommendations outlined below build on this call to action.

A stronger enabling environment, combined with sector-specific solutions, is needed to scale methane abatement finance. Finance is not always the primary constraint: policy gaps, fragmented regulatory frameworks, limited institutional capacity, weak enforcement and inadequate data can also prevent available capital from translating into methane abatement. Addressing these barriers can provide greater policy certainty, clarify investment opportunities, and build credible project pipelines needed to mobilize capital. Developing dedicated methane abatement project pipelines, aggregating smaller projects to reach investor-relevant scale, and deploying innovative financial instruments can help mobilize both public and private capital at scale (CPI 2023a).

Financing approaches need to reflect the different market structures, risk profiles, and delivery models of methane-emitting sectors. They also depend on the technical characteristics of abatement solutions, and country- and region-specific factors such as income levels, fiscal space, regulatory maturity, and investment risk. Projects with a clear revenue or profit driver, such as the sale of captured gas or participation in carbon markets, may attract private finance. Those that generate primarily public or environmental benefits may require public or concessional finance. Regulation can also improve commercial viability by creating incentives and market revenues. Dedicated finance for research and development (R&D) and innovation is also needed to scale emerging abatement solutions. These differences call for tailored policy and financial responses across the fossil fuel, agriculture, and waste sectors.

Three priority areas can help unlock methane abatement finance across sectors:

1. **Embed methane abatement in national policies, strategies, and regulations.** Provide clear guidance and signals to markets and investors, establish measurable targets and responsibilities, and create incentives and requirements that support investment and implementation.
2. **Strengthen monitoring, reporting and verification (MRV) systems.** Improve transparency, accountability, and investor confidence, while generating the data needed to identify abatement opportunities, assess progress against targets, and support the development and financing of projects.
3. **Support the development of bankable projects.** Develop project pipelines through project preparation, aggregation mechanisms, and targeted de-risking instruments to address barriers that prevent potential investments from reaching financial close and to mobilize private capital alongside public finance.

These priorities are translated into concrete actions that governments, DFIs, and other stakeholders can take to mobilize investment at scale in Tables 1, 2, and 3.

Three sector-specific priorities address distinct investment barriers:

1. **Fossil fuels:** embed methane abatement in credible transition plans and leverage buyer and importer demand, regulation, and supply-chain partnerships to create stronger market signals and support suppliers in investing in methane reductions.
2. **Agriculture:** support targeted R&D and innovation to scale practical, cost-effective abatement solutions, while strengthening evidence on performance and developing approaches suited to fragmented production systems and smaller producers.
3. **Waste:** strengthen the bankability of municipal waste methane projects through improved revenue collection, project aggregation and municipal pipelines, while using blended finance, guarantees and other financial mechanisms to support a broader range of waste-sector solutions.

Tables 4, 5, and 6 highlight sector-specific investment barriers and priority interventions for the fossil fuel, agriculture, and waste sectors. These tables identify where policy, institutional and financial interventions can help unlock investment rather than providing an exhaustive assessment of methane abatement barriers. Sectoral finance strategies should also account for broader implementation needs, including technical assistance, agricultural extension services, subsidy reform and behavioral changes.

Table 1: Incorporating methane abatement into policy, regulations and strategy

Recommendation	Key stakeholders and implementation steps	Examples
Countries need to incorporate clear methane abatement targets and actions into policy frameworks to align with commitments and strengthen signals for investors and implementers.	**Governments and government agencies** ▪ Include methane-specific indicators and milestones in NDC implementation frameworks. ▪ Incorporate methane abatement into longer-term transition plans/ frameworks (e.g., sustainable finance taxonomies), to improve clarity for investors and lenders. ▪ Develop safeguards and technical screening criteria that enable near-term abatement measures for existing assets without creating long-term lock-in (CPI and Climate Bonds 2025). ▪ Strengthen governance for delivery by designating a lead institution / inter-ministerial mechanism to coordinate methane abatement projects. ▪ Ensure effective regulation, monitoring, and enforcement systems to identify and prioritize mitigation opportunities, reduce inefficiencies, and create the conditions needed to attract private investment.	▪ **As of January 2025, 161 countries included methane-related policies/measures in NDCs (CCAC 2025a).** However, NDCs and national MAPs submitted by mid-2025 could translate to only an 8 percent cut below 2020 levels by 2030, below the 30 percent Global Methane Pledge goal (UNEP 2025). ▪ **CCAC's Guidance on Including Methane in NDCs** (CCAC 2024) provides best practices to ensure that methane-related goals and measures are ambitious and actionable. ▪ The updated **Climate Bonds Taxonomy** explicitly includes oil and gas infrastructure via methane abatement measures and expanded agriculture coverage (Climate Bonds 2026b). ▪ **The EU Methane Regulation contains rules for MRV, Leak Detection and Repair (LDAR),** and limits on routine venting and flaring across oil, gas, and coal. The EU is also the first jurisdiction to set requirements for fossil fuel imports (EIA 2024b). ▪ **The Methane Regulator-to-Regulator (MR2R) Network,** launched in 2026, will support sustained collaboration among participating regulators by facilitating peer exchange and the development and dissemination of best practices (CCAC 2026c). ▪ **New Mexico oil & gas regulation:** Since 2021, rules requiring reduced venting and flaring, leak detection, and gas capture have led to declining methane intensity despite production increasing by over 100 percent. Captured methane has generated US$ 125 million in additional gas production and US$ 27 million in tax and royalty revenue, delivering economic benefits to the state (Environmental Defense Fund 2025).
	MDBs, DFIs, international organizations and development partners ▪ Align country programming with countries' methane priorities by translating targets and implementation plans into pipeline-oriented country and sector strategies and eligibility criteria (catalytic, fit-for-purpose finance). ▪ Assess internal policy/procedures and portfolios to identify practical entry points for scaling methane-relevant finance. ▪ Embed methane targets and emissions considerations across DFI operations to help direct capital toward high-impact projects, particularly where commercial finance is limited.	▪ **The European Investment Bank assesses policies and procedures for short-lived climate pollutants (SLCPs),** including methane, to identify practical entry points for scaling methane-relevant finance (EIB 2016). ▪ **The World Bank Global Flaring and Methane Reduction (GFMR)** Trust Fund provides catalytic grants, technical assistance, policy and regulatory reform advisory services, and institutional strengthening to support flaring and methane reduction in oil and gas (World Bank 2026a).
	Private actors ▪ Include methane-specific targets in corporate transition plans and sector strategies. ▪ Embed methane considerations across investment planning, supply-chain engagement, and operational decision-making, and standards.	▪ **Danone, in 2023, announced a target to reduce absolute methane emissions from fresh milk used in its dairy products by 30 percent** by 2030 against a 2020 baseline. Danone became the first corporate funder of the Global Methane Hub's Enteric Fermentation R&D Accelerator, showing how private actors set internal targets in corporate plans and support innovation and solution development (Danone 2023).

Table 2: Improving MRV and emission standards as a critical accelerator

Recommendation	Key stakeholders and implementation steps	Examples
MRV requirements vary substantially across interventions. Point-source activities such as LNG facilities can often rely on direct emissions monitoring, while diffuse sources such as rangeland cattle require more complex combinations of activity data, sampling, emissions factors, and modeling. MRV frameworks therefore need to be credible yet proportionate to the characteristics and costs of each intervention. **Robust MRV is central to enabling methane abatement finance,** since methane claims and revenues (including results-based payments and crediting) depend on credible quantification.	**Governments and government agencies** ▪ Where feasible, consider the use of satellites and other methane detection systems to convert detection into enforceable action, addressing detection-to-action credibility and accountability gaps.[28] ▪ Establish sector-specific national and local policies and regulations for establishing emission standards to incentivize private finance.	▪ **UNEP Methane Alert and Response System (MARS) alerts governments and companies to very large emission events** and tracks follow-up, helping close the detection-to-action gap and supporting financier prioritization (UNEP 2025). ▪ **The EU Methane Regulation introduces monitoring, reporting and verification equivalence.** For new contracts, importers will need to prove to authorities that the oil, gas, or coal they import to the EU meets the same monitoring and reporting standards set by the EU Methane Regulation (EIA 2024b).
	MDBs, DFIs, international organizations and development partners ▪ Support the adoption of robust MRV standards and leverage them to crowd in finance (clear basis for lender and investor requirements). ▪ Provide finance data systems, verification capacity and technical assistance to reduce greenwashing risk and improve market confidence, particularly where capability and data-access barriers persist.	▪ **The World Bank's GFMR is supporting the Uzbekistan Gas Leak Repair Facility,** which combines leak repair finance with capacity building for the operator to monitor and report methane emissions and work toward the OGMP 2.0 Gold Standard Pathway status (World Bank 2026b).
	Private actors ▪ Adopt recognized measurement-based methane accounting and verification approaches across operations and relevant joint ventures. ▪ Integrate methane MRV into operations.	▪ **The OGMP 2.0** is a member-based initiative that supports the transition to comprehensive measurement-based reporting to improve transparency and help prioritize mitigation actions at the asset level. In 2025, it covered over 150 companies representing 45 percent of global oil and gas production (OGMP 2.0 2026).

[28] While satellite systems can require investments in the hundreds of millions to billions of dollars, they provide near real-time, wide-area coverage that is uniquely effective in detecting large methane leaks and super-emitters. This capability reduces information asymmetries, enables rapid and targeted mitigation, and strengthens accountability across jurisdictions. Given that methane abatement is often low-cost and highly impactful in the near term, satellite-enabled MRV can deliver substantial climate benefits relative to its cost, while also supporting regulatory enforcement, international transparency, and access to results-based finance and carbon markets.

Table 3: Developing bankable projects and deploying de-risking where needed

Recommendation	Key stakeholders and implementation steps	Examples
Structure methane mitigation efforts into scalable, bankable programs with predictable returns, credible counterparties, and secure revenue, offtake or payment mechanisms to attract investment. **Strengthen project-preparation capacity,** consolidate fragmented assets, improve risk allocation, and create both public de-risking support and private revenue/compliance drivers to help unlock finance at scale. **Ensure greater prioritization of methane alongside decarbonization** to accelerate deployment.	**Governments and government agencies** ▪ Expand project preparation (dedicated methane project cycles, technical assistance, aggregation models). ▪ Develop investable project pipelines and scale use-of-proceeds and KPI-linked debt instruments for methane abatement (building on thematic bond approaches).	▪ **The Africa Methane Abatement Bond framework** proposes blended finance instruments, including Special Drawing Rights (SDRs) and carbon markets, along with participation from AfDB, AIIB, NGOs, and governments to mobilize funding for methane mitigation (AfriCatalyst 2025). ▪ **Brazil's National Zero Methane Program** aims to stimulate economic sectors in the production and use of biomethane and biogas. Financial support comes from public banks, through specific financing and a line of credit (Brazil 2022).
	MDBs, DFIs, international organizations and development partners ▪ Provide predictable grant-based enabling support for developing economies (implementation capacity and investment readiness), using a more structured and coordinated approach (such as creating a dedicated fund stream or similar mechanism). ▪ Provide leadership/convening to catalyze collaboration around innovative financial solutions. ▪ Stabilize credit revenue risk using price-risk mechanisms to improve bankability and attract private finance. ▪ Combine blended finance and results-based approaches with public/private/civil society partners to unlock pipelines.	▪ **The Environmental Investigation Agency (EIA) has proposed a dedicated methane mitigation fund** hosted by the UN Multi-Partner Trust Fund to provide predictable grant-based support for emerging economies (EIA 2024a). ▪ **The World Bank Pilot Auction Facility (PAF)** provided price-floor options for future verified emission reductions (World Bank 2014). ▪ **The World Bank Triple Win Blueprint** uses de-risking and blended finance approaches to strengthen project pipelines, improve bankability, and mobilize private capital for scalable methane mitigation (World Bank 2023a).
	Private actors ▪ Create revenue certainty through procurement commitments, supply-chain methane requirements, regulatory compliance markets, and other payment mechanisms that reward verified abatement. ▪ Support project aggregation and standardization so smaller methane projects can transact at investor-relevant scale.	▪ **Centrica Energy–Seneca Resources MiQ certificate deal:** a 10-year private agreement for methane emissions certificates, showing how verified methane performance can create a market-based revenue stream for abatement (Centrica 2026). ▪ **MiQ / certified gas procurement models:** buyers use methane certification to differentiate supply and reward lower-emissions gas, creating commercial incentives for methane reduction across supply chains (MiQ 2026).

Table 4: Fossil fuel sector – Leveraging buyer and importer demand to mobilize finance

Recommendation	Key stakeholders and implementation steps	Examples
Embed methane abatement within clear, credible transition plans to ensure that efforts to reduce emissions from existing fossil fuel infrastructure are aligned with long-term climate goals. **Leverage buyer and importer demand,** such as through regulations and supplier partnerships, to help create stable demand signals and financing mechanisms that support suppliers in meeting methane abatement requirements.	**Governments and government agencies** ▪ Require operators to implement end-of-life fiscal risk management, including clear plans and funding for decommissioning and improved transparency (CTI 2025). ▪ Use a regulatory cooperation platform such as MR2R to explore more consistent disclosure of methane abatement investment alongside emissions reporting. ▪ Establish robust and enforceable decommissioning provisions, including dedicated or escrowed funds, to ensure abandoned sites are properly managed, and liabilities are not transferred to the public sector, preventing ongoing methane emissions. ▪ Incorporate methane intensity into licensing processes. ▪ Adopt shared-responsibility approaches to leverage demand-side trade policies. While trade measures can be a powerful lever, concerns remain, particularly among developing countries, that they may act as protectionist tools and impose disproportionate burdens (UNCTAD 2026). To ensure effectiveness and equity, these approaches should be complemented by concessional finance, technology transfer, and technical assistance to support compliance in EMDEs.	▪ **The Alberta Orphan Well Levy (Canada)** is an industry-wide annual spending requirement transferred to the Orphan Well Association to offset closure costs (IEA 2025). ▪ **Western Australia Mining Rehabilitation Fund** is financed in part through annual levies from active mine operators to support rehabilitation liabilities (IEA 2025). ▪ **Under the EU Methane Regulation,** EU producers and importers, for contracts made or renewed after the six-year period, must prove to authorities that the methane intensity of their product is below the maximum levels set by the European Commission (EIA 2024b). ▪ **China's Emission Standard for Coalbed Methane** is a new plan to lower the emission concentration limit of coal mine gas (primarily methane) from the current 30 percent to 8 percent (IGSD 2024). This is supported by China's Certified Emission Reduction voluntary market via new methodologies, allowing low-concentration gas projects to sell carbon credits (Climate Cooperation China 2025).
	Private actors ▪ Develop transition finance products grounded on credible transition plans, with safeguards to support methane abatement in existing assets without creating long-term lock-in, distinguishing between prohibiting new fossil fuel expansion and enabling abatement-positive actions within existing infrastructure. ▪ Develop methane abatement financing products, including labeled debt instruments linked to methane-related commitments or verified reductions.	▪ **The Japan Oil, Gas and Metals National Corporation (JOGMEC) collaborations with suppliers** (including PETRONAS and Pertamina) on methane measurement and reduction, showing how buyer and importer partnerships can strengthen methane performance across gas supply chains (IEA 2025). ▪ **Guidance for Including Methane Abatement in Oil and Gas Debt Structuring** shows how labeled debt instruments can be adapted for oil and gas methane abatement through use-of-proceeds and KPI-linked structures (Methane Finance Working Group 2025).

Table 5: Agriculture sector – R&D for scaling up solutions and finance is crucial

Recommendation	Key stakeholders and implementation steps	Examples
Support targeted R&D investment and innovation to scale methane abatement solutions, particularly for smallholder and mixed farming systems. **Advance cost-effective, context-appropriate technologies** and strengthen evidence on performance and impacts will be key to enabling wider adoption.	**Governments and government agencies** ▪ Align public subsidies and financial flows with methane-reducing production and consumption systems. ▪ Provide concessional or low-cost lending and scale up of investment models by de-risking in R&D and deployment of innovative abatement technologies. ▪ Support methane abatement in fragmented agricultural systems through cross-farm collaboration, food value-chain intermediaries and procurement incentives.	▪ **The World Bank's Global Methane Reduction Platform for Development (CH4D)** launched at COP28 to accelerate methane reduction in high-emitter sectors like agriculture and waste. It aids developing countries in mitigating methane via technical support, finance, and policy, focusing on livestock, rice, and waste management to meet 2030 targets (World Bank 2023b, 2023a). ▪ **The California Department of Food and Agriculture (CDFA)** funds methane reduction projects, specifically dairy digesters and alternative manure management, to mitigate greenhouse gas emissions from livestock. These initiatives, supported by millions in state funding, capture methane from manure to produce biofuel, aiming to cut emissions while providing revenue for farmers (CDFA 2026). ▪ **Uruguay received a performance-linked loan with a KPI to reduce methane** per unit of beef by 33 percent (2025–2029) and 36 percent (2030–2034) (World Bank 2024).
	MDBs, DFIs, international organizations and development partners ▪ Adopt methane-reducing practices by improving access to affordable finance, technical assistance, and transition support while safeguarding livelihoods and food security. ▪ Scale up blended finance and risk-sharing mechanisms to mobilize private capital, reduce investment barriers, and accelerate the deployment of innovative methane abatement solutions. ▪ Together with large and medium agrifood companies, set up risk-sharing pilot facilities that can generate replicable templates for scaling both measurement and finance (including corporate co-investment and supply-chain programs). ▪ With support from cooperatives, account for sector fragmentation and the predominance of smallholder farmers by prioritizing cooperative-centered financing models, paired with multi-stakeholder coordination and concessional finance where needed.	▪ **Climate KIC trialed a EUR 700,000 program** with Carbery and support from Bankers Without Borders for methane-reducing measures on dairy farms (Climate KIC 2025). ▪ **In Brazil, cooperative-based financing achieved a 23.3 percent methane reduction over five years,** while also increasing productivity (World Bank 2025).

Table 6: Waste sector – City-led approaches to developing bankable projects

Recommendation	Key stakeholders and implementation steps	Examples
Improve revenue collection systems and expand municipal borrowing capacity to strengthen bankability, ensuring that proven technologies can be effectively deployed at scale. **Design financial frameworks to incentivize a broader range of solutions,** preventing an over-concentration of investment in easier-to-finance interventions and enabling more balanced support across diverse, high-impact options, and shift investment toward a broader set of waste-hierarchy-aligned upstream interventions.	**Governments and government agencies** ▪ Introduce required policies and regulations from upstream policy mandates for source separation and organics diversion (to prevent methane generation) to the closure of open dumps and enforcement. ▪ Invest in modern, integrated waste management systems that prioritize waste prevention, reuse, recycling, and composting, with energy recovery where appropriate, to reduce methane emissions across the waste value chain. ▪ Municipalities and cities should develop and aggregate municipal waste methane pipelines across the waste hierarchy (landfill gas-to-energy and markets for products from revalorized organic waste). ▪ Municipalities and cities should use project-preparation support, feasibility assessment and transaction-structuring assistance to improve bankability and mobilize follow-on investment.	▪ **IDB Too Good to Waste:** feasibility and structuring support to build bankable municipal waste pipelines; supported by partners such as the Global Methane Hub (IDB 2026). ▪ **CATF's Waste Methane Toolbox** outlines how countries can leverage a range of policy approaches within the solid waste management (SWM) chain to mitigate methane emissions effectively (Clean Air Taskforce 2025). ▪ **Thailand's National SWM Plan** (2022–2027) sets a target for 80 percent of community waste to be properly managed by 2027, supported by a 35 percent increase in source separation and recycling of household waste and a reduction in food waste to 28 percent of total waste (Thailand Pollution Control Department 2022). ▪ **Chile's National Organic Waste Strategy** aims to increase the share of organic waste diverted from disposal from 1 percent to 66 percent by 2040 (Ministerio del Medio Ambiente 2021).
	MDBs, DFIs, international organizations and development partners ▪ Support policy and regulatory reforms. ▪ Use blended finance to unlock waste methane portfolios (such as concessional tranches and guarantees to extend tenor, lower costs, and crowd in private lenders). ▪ Provide guarantees and bankability tools for municipal and private operators. ▪ Prioritize waste management transformation in urban development portfolios, recognizing methane mitigation as both a climate and public health imperative, and expanding access to concessional finance in rapidly urbanizing regions.	▪ **IFC Circularity Plus** offers access to blended finance and guarantees to help cities and private operators reach bankability for waste management infrastructure (IFC 2026).
	Private actors ▪ Private operators and developers should use blended finance and guarantees to improve the bankability of waste methane infrastructure; participate in aggregated municipal programs to improve projects' scale and credit profiles. ▪ Catalytic partners should provide catalytic pre-investment support (feasibility, structuring) to multiply capital by converting early-stage municipal opportunities into investable pipelines.	▪ **Participation via platforms such as IFC Circularity Plus** (blended finance + guarantees) (IFC 2026). ▪ **IDB Too Good to Waste as an example of catalytic pre-investment** support enabling larger follow-on investment (IDB 2026). ▪ **The Solid Waste Emissions Estimation Tool (SWEET) model** can support emissions estimation and comparison of waste interventions at the project, source, and city levels (GMI 2025). SWEET's measurements are helping cities access climate finance, equipping them with solid data that offers proof of what they can achieve with funding (CCAC 2020).

Annex: Methodology

The methodology used in this brief follows the approach established in the State of Super Pollutants Abatement Finance (CPI 2026c) to assess historical methane abatement finance and compare tracked flows against 2030 investment cost needs.

IMPLEMENTATION COSTS

This brief quantitatively assesses progress on methane mitigation and the remaining gap to the 2030 GMP target, following the figures highlighted in the Global Methane Status Report (UNEP 2025), which draws on estimates of the International Institute for Applied Systems Analysis' (IIASA) Greenhouse Gas and Air Pollution Interactions and Synergies (GAINS) model (IIASA 2025; Höglund-Isaksson et al. 2023).

TAXONOMY

The taxonomy of methane abatement measures forms part of the broader *Super Pollutants Measures Taxonomy*, which was published alongside the *State of Super Pollutants Abatement Finance* report. The list of measures was developed through the compilation and harmonization of multiple CCAC sources (UNEP and CCAC 2021; UNEP 2025; CCAC 2025c, 2025b). These sources were further supplemented with measures drawn from The Landscape of Methane Abatement Finance (CPI 2022) and additional internal CPI taxonomies, alongside targeted desk research.

METHANE ABATEMENT FINANCE TRACKING

CPI has expanded the methodology established in The Landscape of Methane Abatement Finance reports (CPI 2023b, 2022) by incorporating additional datasets to improve coverage of projects not captured in previous iterations.[29] The updated approach also strengthens the sensitivity and specificity of the keyword screening and exclusion criteria. A more granular taxonomy of methane abatement measures, together with an expanded set of associated keywords, enables a broader screening of project-level data while applying stricter criteria to ensure that only projects with an explicit link to methane abatement are retained. These methodological improvements strengthen data coverage while reducing the inclusion of false positives and activities with less direct links to methane mitigation. As a result, applying the previous methodology to the same underlying dataset produces an estimate that is 13 percent higher than the updated methodology, reflecting the latter's stricter screening and more selective sector inclusion.

[29] Existing core dataset coverage (CPI 2023b) was expanded to include IJ Global and World Bank Private Participation in Infrastructure (PPI) datasets. Several additional datasets were assessed but not included in the final analysis, such as the GEM Global Coal Project Finance Tracker and Global Oil Gas Plant Tracker. However, since methane abatement finance could not be reliably separated from total project values, the datasets were deemed unusable, leading to the exclusion of these projects.

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About Climate and Clean Air Coalition

The Climate and Clean Air Coalition (CCAC) is a partnership of over 200 governments, intergovernmental organizations, and non-governmental organizations committed to protecting the climate and improving air quality. The focus is on actions to reduce the super pollutants which are short-lived in the atmosphere: methane, black carbon, tropospheric ozone, and hydrofluorocarbons (HFCs). The Coalition's work is grounded in robust science and analysis and supported by a dedicated Trust Fund, which together have fostered high-level political commitment, in-country implementation, and tools that strengthen the case for action and accelerate action and results. The CCAC Secretariat and Trust Fund are hosted by the United Nations Environment Programme (UNEP).

About Climate Policy Initiative

CPI is an analysis and advisory organization with deep expertise in finance and policy. Our mission is to help governments, businesses, and financial institutions drive economic growth while addressing climate change. CPI has offices in Austria, Brazil, India, Indonesia, South Africa, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.

CLIMATE & CLEAN AIR COALITION
TO REDUCE SHORT-LIVED CLIMATE POLLUTANTS
a UNEP convened initiative

CLIMATE POLICY INITIATIVE