METHANE
IS ALL THE TALK ACCOMPANIED BY A WALK?

The Global Methane Pledge, announced in 2021, has now been signed by 149 countries.

Many countries have announced methane policies, but they lack depth and specificity, and reporting rigour.

Oil and gas companies have set methane intensity targets but continue to expand production.

Methane, the second-most abundant greenhouse gas after carbon dioxide, has significantly contributed to the planet's warming since 1750. Its emissions have contributed about a quarter of the cumulative warming, translating to 0.5ºC of global temperature increase, compared to carbon dioxide (CO_2)'s contribution of 0.8ºC. According to the UN Environment Programme (UNEP), every million tonne of methane emitted results in the loss of roughly 300 million hours of work and 145 kilotonnes of crop globally. Global emissions of methane in 2019 stood at 11,000 million tonnes of CO_2 equivalent.

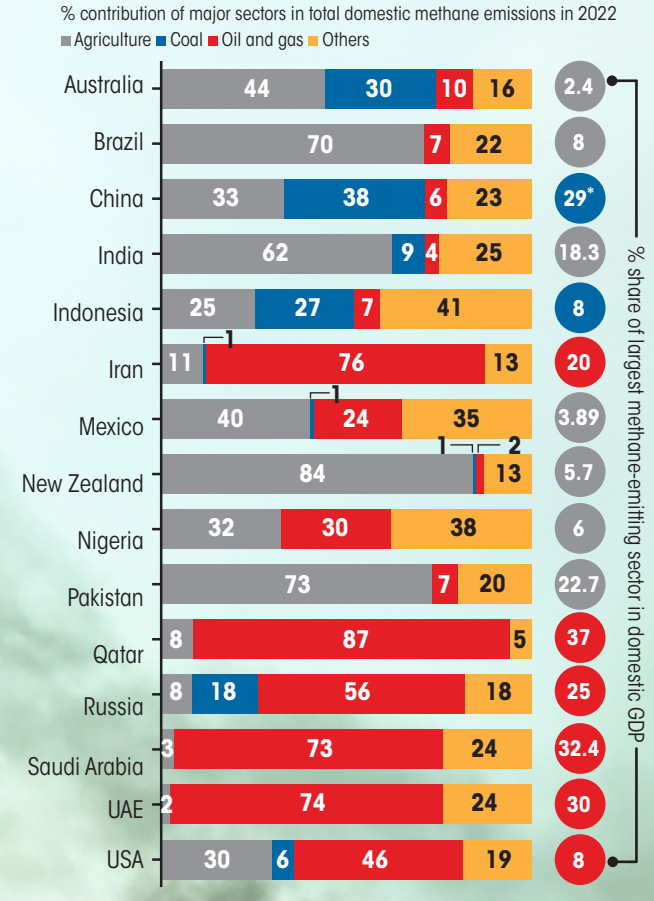
The UN Intergovernmental Panel on Climate Change (IPCC), in its Sixth Assessment Report, called for a 34 per cent methane reduction by 2030 compared to 2019 levels to ensure that the world has a fighting chance of staying within the Paris Agreement's 1.5°C warming limit. This is achievable due to methane's short atmospheric lifetime (12–15 years, compared to 150–200 years of CO_2) and high global warming potential (28 times that of CO_2).

Motivated by scientific warnings, countries united under the Global Methane Pledge (GMP) at the 26th Conference of the Parties (COP) to the UN Framework in Glasgow in 2021. This voluntary agreement aims to collectively reduce global methane emissions by at least 30 per cent from 2020 levels by 2030, a target that could avert over 0.2ºC of warming by 2050. Spearheaded by the US and the EU, so far 149 countries have signed GMP, without which global methane emissions would rise by 13 per cent by 2030, according to US presidential climate envoy John Kerry.

While GMP and scientific warnings have spurred discussions on methane reduction strategies, translating these discussions into concrete domestic policies and actions remains a challenge. To gauge the headway made in curbing methane emissions, we evaluated the pledges and domestic policies of the EU and 15 nations, which in 2022 collectively discharged 68 per cent of the global methane emissions (see "Polluting group"). Of these, 12 have signed GMP and nine have mentioned methane in their nationally determined contributions (NDC) under the Paris Agreement of 2015. The analysis shows that the ongoing

Polluting group

Agriculture is the largest methane source in seven of the 15 high methane-emitting countries. Six other countries' principal methane source is the oil and gas sector. In the remaining two countries, coal is the primary source



* The figure is only for Shanxi, one of the largest coal producing regions in China
Source: Author analysis based on International Energy Agency data

OIL FIRMS DOWNPLAY METHANE EMISSIONS

While major oil and gas companies are reporting reduced methane, they are also actively exploring new oil wells and increasing production

THE OIL and gas industry, while reaping record-high profits in 2022, has fallen short in its efforts to address its significant contribution to global methane emissions. Despite setting ambitious climate pledges, companies continue to prioritize exploration and production expansion over meaningful methane-reduction measures.

The sector accounts for nearly a quarter of the global emissions of methane, a potent greenhouse gas with a warming effect 25 times greater than carbon dioxide over a 100-year period. In 2022, methane emissions from oil and gas operations reached a record high, highlighting the urgency for the industry to adopt effective mitigation strategies.

To understand the sector and its pledges, *CSE* analysed 10 oil and gas companies with the highest production in 2022. The 10 companies are distributed across six countries, with the US hosting the highest number (see "Problematic lot").

Nine of these companies—barring Valero Energy Corporation of the US—have voluntary greenhouse gas emissions reduction targets. Six of them (Saudi Aramco, British Petroleum, Chevron, China National Petroleum Corporation [owns PetroChina], Exxon Mobil and Total Energies) are signatories to the Oil and Gas Climate Initiative (OGCI) to bring methane intensity to near zero by 2030.

The pledges, though, lack specificity and fail to address the full scope of the problem. For instance, several companies focus solely on methane intensity targets, which measure methane emissions as a percentage of natural gas produced. While this metric can be useful, it does not account for absolute emissions levels, which can increase even with declining methane intensity if production

discussions and commitments around methane reduction are encouraging, but the need for comprehensive action remains urgent.

Countries have Outlined Domestic Policies

Since US President Joe Biden declared methane mitigation a “climate game changer” at COP 27, the US has taken significant strides to address the potent greenhouse gas (GHG). The country implemented last year the Inflation Reduction Act, which provides incentives for methane mitigation and imposes a tax on the oil and gas sector for their methane emissions.

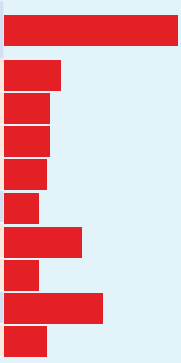
The US has also rolled out the Super-Emitter Response Program, which mandates oil and gas operators to respond to credible third-party reports of high-volume methane leaks. The US has also committed to share methane-abatement technologies with international partners such as Nigeria, Canada and Mexico. This March, the country allocated nearly US $47 million to support 22 research projects that are developing methane emission monitoring methods (see "Major pledges").

Problematic lot

The 10 oil companies with highest methane emission are spread across six countries

Oil production in 2022
(in million barrels of oil equivalent per day)

Saudi Arabia	Saudi Aramco	11.5
USA	Exxon Mobil	3.74
	Chevron	3.0
	Valero Energy Corporation	3.0
	Marathon Petroleum	2.8
UK	British Petroleum	2.3
Russia	Rosneft	5.1
	Lukoil	2.3
China	Petro China	6.54
France	Total Energies	2.8



Source: Based on annual and sustainability reports released by the companies

volumes rise—a real fear given the fact that most companies continue to explore new wells.

A recent UN analysis revealed discrepancies between the reported methane emissions of the 10 major companies and their actual emissions. The reported annual methane emissions of these companies were a mere 1.3 million tonnes, while estimates suggest that the actual figure lies between 80 and 140 million tonnes per year. This underreporting stems from the fact that most companies fail to account for methane leakages from their supply chains and the end-use consumption of their fossil fuel products. Paradoxically, nine out of 10 companies included in the analysis appear to comply with the OGCI target on paper, despite their significantly lower reported emissions compared to actual estimates.

The most viable path to controlling methane is to pledge a complete phase out of fossil fuels and a stop to further explorations. At the 28th Conference of Parties in Dubai, the hope is for a phaseout of all fossil fuels, including coal, oil and gas, to be agreed upon. Till then, the goal to limit global temperature rise to under 1.5°C will remain out of reach.

Seven other major methane-emitting countries—Brazil, Pakistan, Nigeria, Mexico, Australia, New Zealand and Qatar—have also established national plans or policies. Three more—China, Russia, and the UAE—have recently announced comprehensive domestic action plans.

Though not a signatory to GMP, India has several programmes that incorporate methane-emission reduction strategies. The National Mission for Sustainable Agriculture, established to promote climate-resilient practices, is tasked with reducing methane emissions from rice cultivation. Similarly, the National Livestock Mission aims to develop improved bovine breeds that will contribute to methane reductions. The Indian Council of Agricultural Research is developing technologies with methane mitigation potential.

On November 15, 2023, the EU adopted a new law to curtail methane emissions from its oil and gas imports. The law aims to reduce methane leaks by oil and gas companies operating within the region. A May 2023 study by a team headed by Maria Olczak at the Queen Mary University of London, UK says that despite the hype around methane

Major pledges

Announcements made so far by the 15 major methane-emitting countries and the EU. They are cumulatively responsible for 68% of global methane emissions

(% contribution to global methane emissions in 2022)

- Signatories to Global Methane Pledge launched in November 2021 with a target of reducing anthropogenic methane emissions by 30% by 2030
- Countries/groups that mention methane reduction in nationally determined contributions

US *(9%)*

IN FORCE: US Methane Emissions Reduction Action Plan, 2022, outlines targets for methane emission reduction in oil and gas, waste and abandoned coal sectors

IN FORCE: The Inflation Reduction Act, 2022, incentivises methane mitigation and levies a tax on oil and gas methane emissions

MEXICO *(2%)*

IN FORCE: National Strategy to Reduce Short-Lived Climate Pollutants, 2019, to reduce methane from major sources

IN FORCE: Guidelines for the prevention and comprehensive control of methane emissions from the hydrocarbons sector, 2018 to reduce methane emissions by 40-45% from oil and gas sector by 2030

IN FORCE: Amended the General Law of Climate Change in 2020 and 2022 to include provisions in accordance with nationally determined contributions

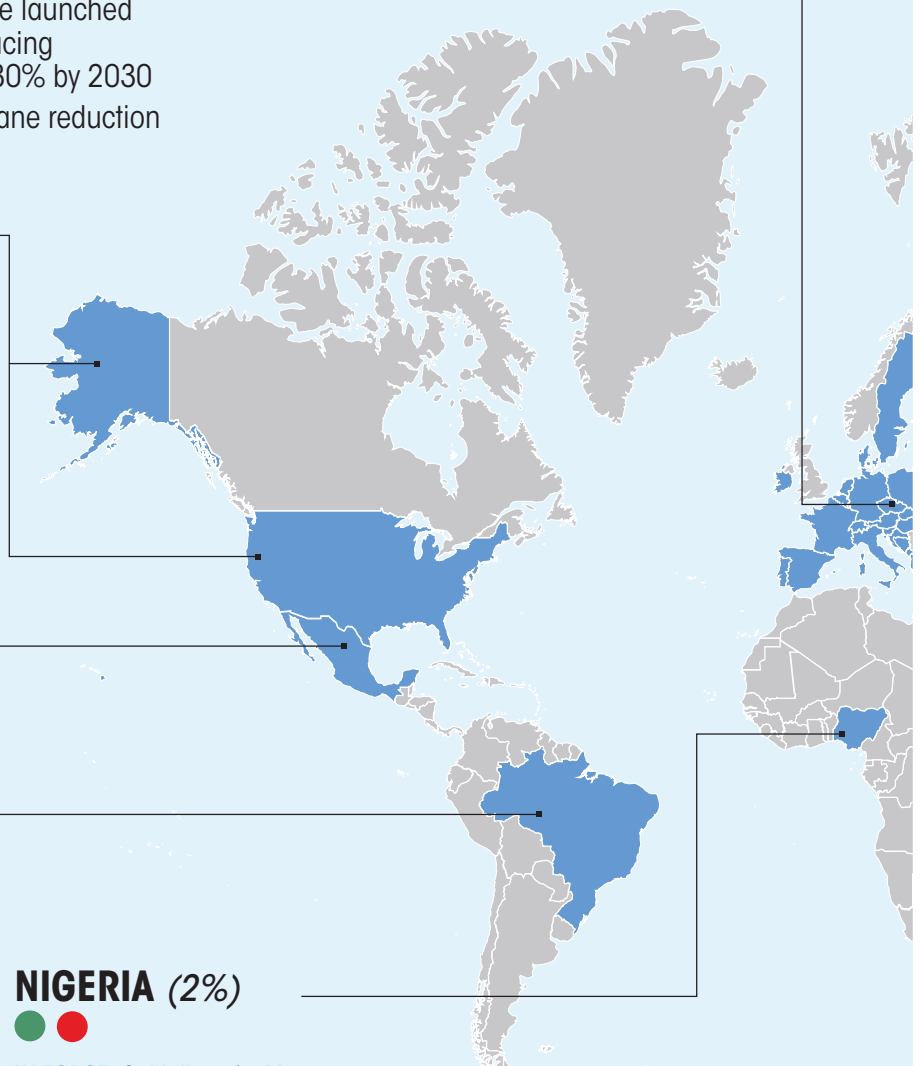
BRAZIL *(6%)*

IN FORCE: National Zero Methane Program enforced in 2022

EU 27 *(5.18%)*

ANNOUNCED: EU Methane Action Plan 2022 that contains industry-wise guidelines to reduce greenhouse gases

ANNOUNCED: A law to place methane emissions limits on Europe's oil and gas imports from 2030



NIGERIA *(2%)*

IN FORCE: Guidelines for Management of Fugitive Methane and Greenhouse Gases Emission in the Upstream Oil and Gas Operations in Nigeria, 2022

IN FORCE: National Action Plan on Short-Lived Climate Pollutants, 2018, to halve fugitive methane emissions from oil and gas sector by 2030

QATAR *(0.3%)*

IN FORCE: Energy Sustainability Strategy, 2021, to reduce methane intensity by 0.2% by 2025

IN FORCE: Phasing out of routine gas flaring by 2030, as necessitated under the World Bank's Global Gas Flaring Reduction Partnership

RUSSIA *(7%)*

ANNOUNCED: Strategy of Socio-economic Development of the Russian Federation with a Low Level of Greenhouse Gas Emissions until 2050

CHINA *(16%)*

ANNOUNCED: National Methane Action Plan to promote measures to cut down methane

ANNOUNCED: China is part of the seven-member Oil and Gas Methane Alliance. Members to reduce methane intensity in natural gas production to below 0.25% by 2025 through technology sharing

ANNOUNCED: Methane Action Plan in November 2023, but it does not contain targets to cut emissions

INDIA *(8%)*

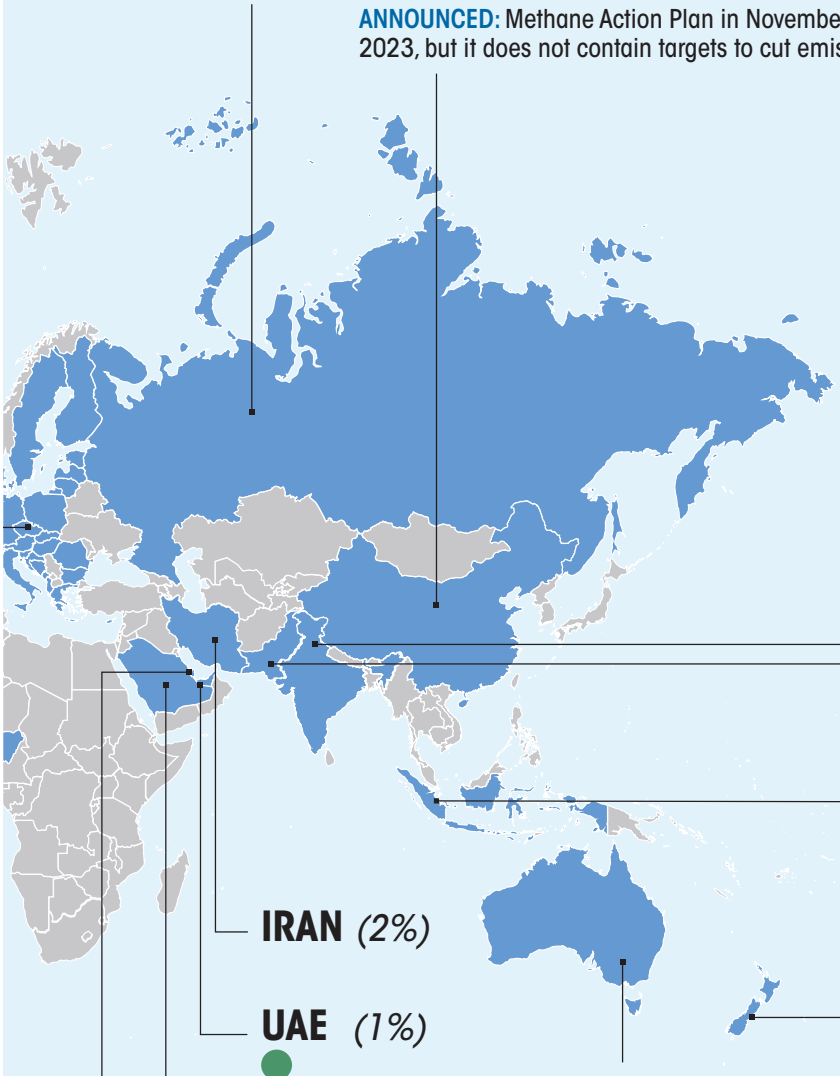
ONGOING MEASURE: National Mission for Sustainable Agriculture to promote climate-resilient practices including methane reduction in rice cultivation

ONGOING MEASURE: Indian Council of Agriculture Research is developing technologies with methane mitigation potential

ONGOING MEASURE: National Livestock Mission is developing improved bovine breeds

ONGOING MEASURE: Promoting production of green fodder

ONGOING MEASURE: Gobar-Dhan scheme and New National Biogas and Organic Manure Programme have methane-reduction components



PAKISTAN *(2%)*

IN FORCE: National Climate Change Policy of Pakistan,2012

DRAFT: National Methane Action Roadmap

INDONESIA *(4%)*

NEW ZEALAND *(0.4%)*

IN FORCE: New Zealand's Methane Emissions Reduction Action Plan, 2022 sets quantifiable reduction targets

ANNOUNCED: Tax on agricultural emissions from 2025

ANNOUNCED: New Zealand Emissions Trading Scheme mandates companies to measure and report greenhouse gas emissions from 2025

IRAN *(2%)*

UAE *(1%)*

ANNOUNCED: In October 2022, Abu Dhabi National Oil Company announced the Upstream Methane Intensity target of 0.15% by 2025

AUSTRALIA *(2%)*

IN FORCE: Methane Emissions Reduction in Livestock Program to promote research, development and deployment of methane-reducing livestock feed technologies

SAUDI ARABIA *(1%)*

Source: International Energy Agency, Global Methane Tracker 2023, Global Methane Pledge, UNFCCC Nationally Determined Contributions Registry

mitigation, only 13 per cent of its emissions are covered by the policies. The researchers add that current policies are also not stringent enough, especially those directed towards emissions from the fossil fuel sector. This is unfortunate as the world already has readily available solutions to cut methane emissions from the sector. It is also relatively easy to locate and fix methane leaks.

"Fossil fuel and agricultural industries have opposed new policies as they could raise the cost of production. Other factors include the relative importance of those industries to national economies, energy and food security or rural poverty considerations," Olczak said.

Many NDCs feature methane

China's Nationally Determined Contribution (NDC) to the Paris Agreement mentions efforts to capture coal-bed methane, with a target of reaching 30 billion cubic metres of coal-bed methane production. As the largest emitter of agricultural methane, China mentions the need to control methane emissions from rice fields in its NDC but does not specify targets.

Indonesia's NDC references capturing and utilizing methane from the waste sector but not from coal, its largest-emitting sector.

USA's NDC mentions updates to standards and investments in plugging leaks from wells and mines and across the natural gas distribution infrastructure. It also mentions programmes and incentives to improve agricultural productivity through practices and technologies that also reduce agricultural methane, but without clear targets. The UAE's NDC mentions an upstream methane intensity target of 0.15 per cent by 2025. Qatar's NDC mentions reducing methane emissions across the natural

METHANE LEAKS FROM OIL, GAS AND COAL ACCOUNTED FOR 5.8 PER CENT OF GLOBAL GHG EMISSIONS IN 2019

gas value chain, and Nigeria's NDC mentions a commitment to reducing methane emissions by 60 per cent. Mexico aims for a 30 per cent reduction in methane emissions, and the capture of methane from livestock and the waste sector.

Among the countries with agriculture as the highest-methane emitting sector, Pakistan mentions controlling methane from rice production and livestock management as a high-priority mitigation option but has no targets included. Mexico aims for a 30 per cent reduction in methane emissions, and the capture of methane from livestock and the waste sector. The European Union in the latest update to its NDC mentions the extension of its Emissions Trading System to methane emissions from shipping, but not agriculture. Australia, New Zealand, India and Brazil do not mention methane explicitly in their NDCs.

Russia, Saudi Arabia, and Iran's NDCs do not mention methane-reduction targets.

Countries must translate their pledges into binding policies and implement effective methane-reduction strategies to achieve the ambitious goals set by GMP and the Paris Agreement.

1. Absence of policies

Of the 15 countries analysed by CSE, three—Indonesia, Saudi Arabia and Iran—do not have methane-reduction policies. These three countries collectively account for 7 per cent of global methane emissions.

Indonesia, the seventh-largest methane emitter in 2022, remains heavily reliant on coal for energy generation. The country recently announced plans to convert diesel-fuelled power plants to gas-fired power plants, a move that could further increase methane emissions.

Saudi Arabia, despite being the world's leading oil and gas producer, lacks a dedicated methane reduction policy. The country has even been criticized for undermining fossil fuel phaseout language in an IPCC report that was excluded from the formal UN climate negotiations in 2019. Iran also lacks a methane-reduction policy and is not a signatory to

GMP. Even Iran's NDC does not mention methane, despite being criticized for climate inaction.

Oil and gas is the highest emitting sector for six of the 15 countries CSE analysed. Climate negotiators, who wish to remain anonymous, say that these countries, which include Russia and Saudi Arabia, are often blockers of climate action, particularly on the issue of fossil fuel phaseout.

2. No numerical target for absolute emissions reduction

Meanwhile, China, the world's largest methane emitter, unveiled a methane plan in November 2023, but it falls short of expectations by omitting quantifiable emission reduction targets and timelines. The plan essentially outlines China's intention to enhance methane-emission monitoring, reporting and verification, along with a phaseout of gas flaring in the oil and gas sector by 2030. It, however, conspicuously avoids setting targets for the coal sector, a major contributor responsible for nearly half of China's total methane emissions. To grasp the scale of this omission, consider that China's coal sector emitted more methane in 2021 (18 million tonnes) than the total methane emissions by the EU.

In 2021, Chinese President Xi Jinping declared that the country would cap its coal consumption by 2023. In contrast, the country's reliance on coal intensified in 2022 due to severe droughts that hampered energy generation from hydropower projects.

3. Targets too low

Some countries have also kept unambitious targets to reduce methane emissions. UAE's NDC sets an upstream methane intensity target—emissions as a percentage of natural gas

NATURAL GAS CONTAINS NEARLY 90 PER CENT METHANE AND IS ALSO A BYPRODUCT OF OIL EXTRACTION

produced—of 0.15 per cent by 2025. This is less ambitious than what is already achieved by neighbouring Qatar (0.06 per cent) and Saudi Arabia (0.14 per cent), according to a 2023 study by Harvard University researcher Zichong Chen and colleagues. The study estimates that methane leaks in the UAE stood at a staggering 3.3 per cent in 2019, indicating leaky infrastructure combined with deliberate venting or incomplete flaring of gas.

Methane leaks from the oil and gas sector, also known as fugitive emissions, constitute a significant environmental concern. IPCC's Sixth Assessment Report estimates that these leaks accounted for 5.8 per cent of GHG emissions in 2019. A 2023 study published in Environmental Research Letters by Brown University's Deborah Gordon reveals that even leakage rates as low as 0.2 per cent can render natural gas as harmful to the climate as coal.

4. Inadequate focus on industrial agriculture

Agriculture, the largest methane contributor in seven of the 15 analysed countries, along with the EU, is also often overlooked in mitigation efforts. The seven countries represent a diverse mix of developing nations with significant agricultural employment, such as India (18 per cent GDP dependence on agriculture), Pakistan (23 per cent) and Brazil (8 per cent), and developed countries such as New Zealand, Australia and Mexico, where agriculture contributes less to GDP but harbours industrialized agricultural sectors.

The EU's latest NDC update proposes expanding its Emissions Trading System to include methane emissions from shipping but excludes agriculture. Livestock emissions are responsible for 71 per cent of New Zealand's total agricultural emissions. However, agricultural emissions are not yet incorporated into the country's Emissions Trading Scheme.

New Zealand and Australia have among the highest per capita methane emissions from agriculture in the data set, with 0.23 and 0.09 tonnes per capita, respectively. Despite

these significant agricultural emissions, they receive less scrutiny compared to the fossil fuel sectors that also emit methane.

5. Reporting not done

The lack of mandatory reporting requirements for agricultural emissions in several major emitting countries further exacerbates the issue. Australia exempts agriculture from its National Greenhouse and Energy Reporting Scheme, the country's framework for measuring and reporting GHG emissions, including methane. Similarly, the US's Greenhouse Gas Reporting Program, despite reporting emissions from various sectors, does not include agricultural emissions, potentially leading to a significant underestimation of methane emissions from the US.

The reporting gap extends beyond agricultural methane emissions. A recent report by *The Guardian* reveals that the COP 28 host, the UAE, has not reported any methane emissions, even though countries have been mandated to submit GHG inventories every two years through the Biennial Update Report process since 2014. These gaps in reporting create a lack of transparency and hinder effective mitigation efforts.

A February 2023 analysis by the Stockholm Environment Institute and the Climate and Clean Air Coalition in Paris, France, found that only a "full implementation" of methane reduction actions outlined in 86 per cent of NDCs would achieve a global emissions reduction of 31 per cent. And nationally announced plans often consist of a mix of guiding principles with limited enforcement and potential loopholes, along with occasional regulations. This heterogeneity makes it difficult to assess the overall impact on emissions.

6. Fossil revenue dependence

Oil and gas is the highest emitting sector for seven—Qatar, Saudi Arabia, UAE, Russia, Iran, United States and Nigeria—of 15 countries in the data set analysed. These countries account for nearly one-fourth of global methane emissions.

The oil and gas sector in the US alone accounts for 4 per

cent of global methane emissions, and close to half of the US's methane emissions. In the US, the oil and gas industry supports nearly 10.3 million jobs and accounts for nearly 8 per cent of GDP. For oil and gas producing countries in the Gulf region, dependence on fossil revenues is even higher—37 per cent of GDP for Qatar in 2021, 32 per cent for Saudi Arabia, and 30 per cent for the UAE. The share of fossil revenues in Russia's GDP is estimated at around 25 per cent, with the same being 20 per cent for Iran and about 6 per cent of the GDP for Nigeria.

Fossil gas and oil producing nations' dependence on revenues explains in part why many of these countries are often blockers of climate action, particularly on the issue of fossil fuel phaseout. Discussions with climate negotiators who wish to remain anonymous reveal that Russia and Saudi Arabia are often countries opposed to including language on fossil fuel phaseout due to their economic dependence on oil and gas. From the perspective of methane emissions, the IEA estimates that 70 per cent of global methane emissions from the fossil fuel sector can be cut with existing technologies. The IEA says that for oil and gas, emissions can be reduced by over 75 per cent by implementing well-known measures such as leak detection and repair programmes and upgrading leaky equipment.

Look ahead to COP 28

In a notable development ahead of COP 28, the US and China announced efforts to collaborate on climate action through the Sunnylands Statement on Enhancing Cooperation to Address the Climate Crisis. This statement includes a commitment to address methane emissions, with both nations pledging to implement their national methane action plans, develop methane-reduction targets for their 2035 NDCs, and co-host a Methane Summit at COP 28.

Furthermore, the US and UAE have spearheaded efforts to raise funds for methane reductions. The UAE COP Presidency has proposed a fund to support methane mitigation in the oil and gas sector, while the US initiated the Methane Finance Sprint in April 2023, aiming to raise

at least $200 million in new public and philanthropic donor support for developing countries to tackle methane emissions. The US has recently expressed confidence that this goal will be exceeded at COP 28.

These developments highlight the growing recognition of methane's significant climate impact and the urgent need for concerted action to address it. The stage is set for COP 28 to provide a platform for advancing methane reduction efforts and strengthening international cooperation on the issue.

Oil and gas companies are reporting reduced methane—is it enough?

The oil and gas industry are responsible for nearly a quarter of global methane emissions caused by human activity. In 2022, the industry reported record high profits, almost doubling amounts, despite a global price dip. Many companies even started turning their backs on ambitious climate pledges, instead committing to more explorations. More companies are, however, reporting on methane emissions with methane-specific targets and plans. To understand the impact of these targets, the Centre for Science and Environment analysed ten oil and gas companies with the highest production in terms of million barrels of oil equivalent (mmboe) in 2022. Saudi Aramco was the highest at 11.5 mmboe while British Petroleum produced 2.3 mmboe, making it the last on the list.

Action being taken

The ten companies are distributed across six countries, with USA hosting the highest number. Despite Saudi Arabia hosting only one company—Saudi Aramco—its production

IN AUSTRALIA, METHANE EMISSIONS FROM LIVESTOCK ITSELF CONSTITUTES 10 PER CENT OF TOTAL GREENHOUSE GAS EMISSIONS

as a country was almost comparable to the six companies in USA. Every company on the list has announced greenhouse gas emissions reduction targets and all of them except USA's Valero Energy Corporation has a defined methane emissions reduction target. The data was retrieved from their respective annual sustainability reports, except for Rosneft and Lukoil whose reports were not accessible. Six of these (Saudi Aramco, British Petroleum, Chevron, China National Petroleum Corporation [owns PetroChina], ExxonMobil and TotalEnergies) are signatories to the Oil and Gas Climate Initiative (OGCI) to bring methane intensity to near zero by 2030.

Natural gas contains nearly 90 per cent methane and is also a byproduct of oil extraction. As a result, methane comprises a majority of the direct Scope 1 emissions of companies. If considered uneconomical to sell, it is vented (intentionally released into the atmosphere) or flared (burned in a controlled manner), resulting in direct emissions.

Fugitive emissions, the third-biggest source comes from undetected leaks. To tackle leaks, companies are investing in Leak Detection and Repair (LDAR) systems, including satellites and drones for monitoring and solutions like sealing and capture. In an effort to address flaring, all companies excluding Valero Energy Corporation, Marathon Petroleum and PetroChina outlined explicit flaring reduction targets. While explicit targets for venting are sparse, the overall emissions intensity targets in alignment with OGCI are expected to cover them.

The sector's OGCI target is to lower the "methane intensity" of their operations to under 0.2 per cent by 2025. This calculates methane emissions as a percentage of natural gas produced. Except for PetroChina, all companies reporting a methane emissions intensity target are already below the OGCI target. The sustainability report of Rosneft was inaccessible, as was that of Lukoil, both housed in Russia. Valero Energy Corporation does not have a methane specific disclosure. The result begs some critical questions of the corporate sector's methane reduction efforts.

Gaps to fill

First, it is important to note that the disclosures are voluntary and largely follow methodologies developed by the companies themselves or with third parties. Second, reporting of Scope 3 methane emissions is not compulsory and there was no explicit reference to the same in the reports. In the oil and gas sector, Scope 3 emissions not only arise from the supply chain providing barrels but also from the end-user consuming the final product. By 2030, Scope 3 methane emissions are projected to exceed their share of the carbon budget by 18 per cent. In choosing not to report them—despite using the expected growth of demand for natural gas as a crutch to expand—the industry is washing its hands off accountability for emissions rise.

Third, the methane intensity target does not guarantee absolute emissions reduction. In fact, if the emissions intensity decreases—an achievement highlighted in nearly every sustainability report; but the production volume increases—very likely with the expansion plans of the companies, the annual emissions may still increase overall. Altogether the picture tells us that current methane emissions numbers are underreported. Unsurprisingly, the United Nations reported that under its flagship Oil and Gas Member Partnership 2.0 member companies accounted 1.3 million tonnes of methane emissions when the actual number is estimated to be about 80—-140 million tonnes per year.

With double the profits, oil and gas companies have continued to announce mergers, new field explorations and enhanced production capacity, with little action reflecting in methane-reduction and reporting efforts. Indeed, the most viable path to truly controlling methane is to pledge for a complete phaseout of fossil fuels and a stop to further explorations. At the 28th Conference of Parties coming up in Dubai this December, the hope is for a phaseout of all fossil fuels, including coal, oil and gas to be agreed upon. Else, the goal to limit global temperature rise to under 1.5°C will remain out of reach.

COP28

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FACTSHEET

ARTICLE 6 OF THE PARIS AGREEMENT

While the negotiation carves out further guidance on Article 6, bilateral deals between countries are making Article 6 operational

Parties need infrastructure and institutional capacities to understand the opportunity cost of trading mitigation outcomes

Non-market approaches under Article 6 are equally important and require more attention than they currently receive

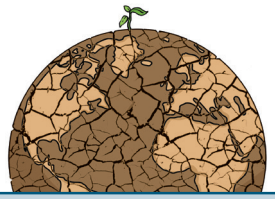
FACTSHEET

ADAPTATION GOAL

Even after eight Glasgow Sharm El-Sheikh (GlaSS) workshops on the Global Goal for Adaptation (GGA), adoption of the GGA framework at COP 28 may be tricky

The GGA framework has to be in line with the principle of common but differentiated responsibilities and respective capacities

Grant-based contributions for adaptation finance, especially to the Adaptation Fund, from developed countries have to increase by many times to reduce the Adaptation Finance Gap



FACTSHEET

CLIMATE FINANCE

In 2009, developed countries committed to providing US $100 billion in climate finance per year to developing countries from 2020. In 2021, the total climate finance provided by them stood at US $89. 6 billion according to OECD

Progress on deciding a New Collective Quantified Goal (NCQG) on climate finance by 2025 is slow. Developing countries hope to see discussions on the quality of finance at COP 28

FACTSHEET

MITIGATION

Climate change mitigation is achieved by limiting or preventing GHG emissions and by enhancing activities that remove these gases from atmosphere

Current Nationally Determined Contributions (NDCs) are insufficient, with estimates suggesting a temperature rise between 2.1 to 4oC by 2030 if these pledges are implemented

Shifting to a low-emission energy mix, tripling renewable energy capacity, and phasing down fossil fuels require addressing regional imbalances, redirecting financial flows to underserved regions, and incentivizing renewable adoption in developing nations.

FACTSHEET

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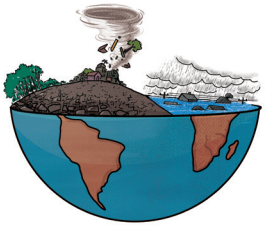
FACTSHEET

LOSS AND DAMAGE

Estimations of economic, non-economic and ecological losses due to ongoing and future impacts of climate change are termed as loss and damage (L&D)

The world needs to provide L&D finance under the broader climate justice and equity framework



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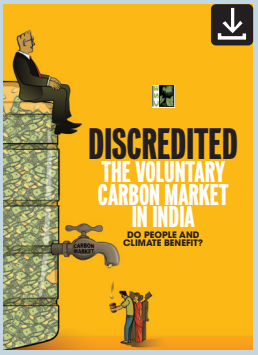

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