

# Closing Implementation Gaps: Recommendations for Pemex to Meet Its Emissions Reduction Goals

ROBERT PITMAN AND FERNANDA BALLESTEROS



---

# Table of contents

Introduction ..... 3

    Swelling pressure to reduce methane ..... 3

Pemex’s record on GHGs ..... 5

Failure to reduce GHGs more costly than ever ..... 9

    Changing capital market preferences ..... 9

    Increased scrutiny in consumer markets ..... 10

    The continued rise of carbon pricing ..... 10

    A GHG data revolution ..... 11

Recommendations ..... 13

## Key messages

- The sustainability plan from Mexico's national oil company, Pemex, lays out how the company hopes to bring down emissions of methane and other greenhouse gases (GHGs) associated with the production of oil and gas. While this is an important step forward, there are good reasons to be skeptical over whether the company will meet these goals.
- Pemex has made multiple past commitments to bring down its emissions, and these have been backed by requirements in the Mexican legal framework, yet data show that the company has been failing to manage its GHGs.
- Runaway GHG emissions are more likely than ever to have consequences for Pemex. Changing capital market preferences, increased scrutiny in consumer markets, and the continued rise of carbon pricing mean that excessive emissions will generate financial costs for the company.
- Meanwhile, a revolution in the quantity and quality of third-party data on GHGs means that investors, customers, regulators and accountability actors are able to monitor company activities more closely than ever before.
- The entry into office of the newly elected government in October 2024 presents an opportunity for Pemex to seriously address GHG emissions.

## Summary of recommendations

We make five recommendations that the company and the new administration can implement to help Pemex stick to its plans:

- 1. Targets.** Pemex should establish short-term targets to track and demonstrate progress towards its medium- and long-term goals.
- 2. Transparency.** Pemex should publish transparent monitoring data to show progress towards short-, medium- and long-term targets. This data should be sufficiently granular to be used by local stakeholders, including civil society, communities and government.
- 3. Engagement.** Pemex should nurture a critical mass of informed stakeholders that can build momentum and maintain pressure on the company and the Mexican government to stick to their goals.
- 4. International initiatives.** Pemex should seek support and promote public accountability through membership of key international initiatives on methane and other GHGs.
- 5. Enforcement.** The Government of Mexico should empower enforcement authorities to stand up to Pemex. The regulators, currently *Comision Nacional de Hidrocarburos*, and the environmental regulator, *Agencia de Seguridad, Energía y Ambiente*, should have sufficient autonomy, capacity and budget to do so. They should be able to levy fines that are large enough to serve as a deterrent.

# Introduction

In March 2024, the Mexican national oil company Pemex published a new sustainability plan laying out how it hopes to bring down emissions of methane and other greenhouse gases (GHGs) associated with the production of oil and gas. While this is an important step forward, there are good reasons to be skeptical over whether the company will meet these goals. Pemex has made similar plans in the past, which have not been implemented.

In this brief, we explore Pemex's recent emissions history and reflect on why the costs of not following through on these latest commitments may be higher than ever before for the company and the citizens of Mexico. As a new administration comes to power in October 2024, we suggest five actions that Pemex and the government can take to ensure that the company meets its latest goals to reduce emissions of methane and other GHGs.

## Swelling pressure to reduce methane

Pemex's [sustainability plan](#) comes as a combination of market forces and global climate commitments linked to the energy transition are forcing oil and gas producers to tackle their GHGs. Producers cannot escape the fact that the use of oil and gas as fuels creates around 30 percent of [total GHGs](#) generated every year. For the industry as a whole, this means that there is no way to address the problem of GHGs without simply producing less. In this context, companies that want to survive will need to diversify away from fossil fuels, or position themselves with sufficiently low-cost assets to remain as one of the few competitive "last men standing". However, as we explore in a [sister brief](#), this latter option would be difficult for Pemex, given its high costs, declining reserves and high debt.

On the path to right-sizing, oil and gas companies also face pressure to address the operational emissions that stem from their production and distribution activities. Also known as scope 1 and scope 2 emissions (see box 1), these make up a further 10 percent of total global GHGs. At this scale, their magnitude alone is enough to put them in the spotlight. But operational GHGs in oil and gas are drawing special scrutiny thanks to growing consensus among climate experts that addressing them is one of the most straightforward and cost-effective options the world has to [reduce global GHGs](#) by 2030. Oil and gas operational GHGs largely stem from venting and improper flaring of excess or unwanted gas, and so-called "fugitive" emissions

released from infrastructure leaks in pipelines, refineries and other downstream facilities.

About half of these GHGs are methane, which is the main component of gas.<sup>1</sup> This represents a significant wasted economic opportunity for Pemex and the Mexican people, given its potential for sale or use as an energy source. But it also brings grave climate impacts. Methane is a particularly potent GHG, with a warming potential up to [80 times higher](#) than carbon dioxide over a 20-year period. There is therefore broad consensus among governments, international institutions and investors that rapid and sustained reductions in methane emissions are key to limiting global warming in the short term. This is particularly true for the upstream oil and gas sector, which is responsible for around 25 percent of all man-made methane.

### Box 1: Understanding scope 1, 2 and 3 emissions

In order to reduce emissions, a company must first understand where they are occurring. The [Greenhouse Gas Protocol](#), which is the world's most widely used GHG accounting standard, identifies three types or "scopes" of emission:

- **Scope 1:** Direct emissions from sources that a company owns or controls. In the oil and gas sector, this includes emissions from drilling rigs, oil and gas extraction, and transportation.
- **Scope 2:** Indirect emissions from the energy a company purchases and uses. This includes electricity, steam, heat and cooling purchased by an oil and gas company for its operations.
- **Scope 3:** Indirect emissions that occur in a company's value chain. This includes the emissions associated with goods and services that an oil and gas company purchases, but also the emissions that stem from the use of sold products, including gasoline, diesel, gas and other petrochemicals. These downstream emissions are responsible for the greatest share of emissions in the sector.

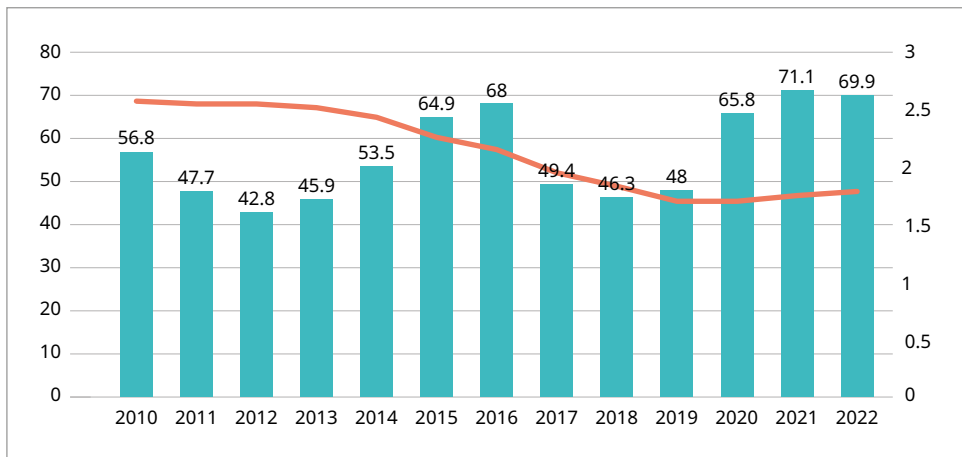
<sup>1</sup> Pemex states that [32 percent of its direct emissions in 2022 were of methane](#). These figures are lower than 50 percent in part because Pemex estimates the carbon dioxide equivalence of methane using a 100-year warming potential of 28. However, given the high short-term warming potential of methane, we think it is more appropriate to use the 20-year warming potential, estimated by the International Energy Agency to be between 84 and 87.

Global warming potential is how many times more powerful a substance is at warming than CO<sub>2</sub>.

# Pemex's GHG record

Pemex data show a company that has not been able to manage its GHG emissions with consistency. Against a backdrop of general declines in production, the company has had two periods of rapid increases in GHGs, from 2012–2016 and from 2018–2022, when reported scope 1 GHGs increased by 58 percent and 51 percent respectively (see Figure 1). It is notable that these spikes were closely correlated with significant rises in direct methane emissions, which rose by 302 percent from 2012–2016 and 177 percent from 2018–2022.

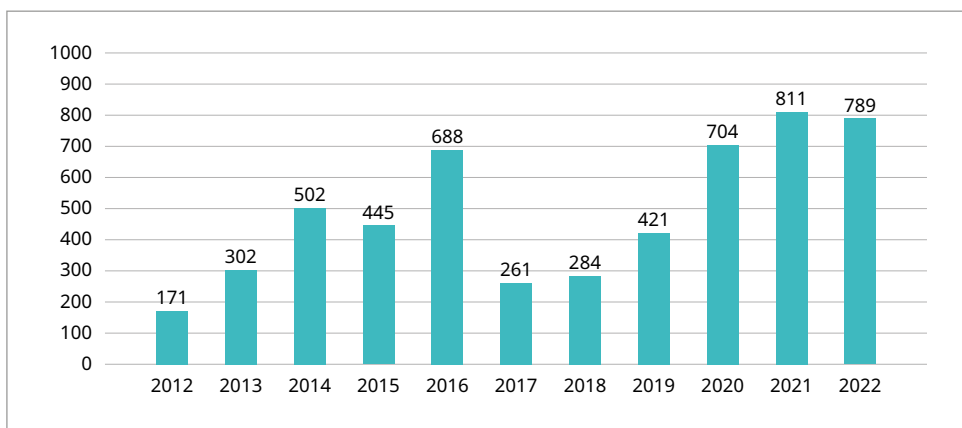
**Figure 1. Pemex, scope 1 GHG emissions (MMtCO<sub>2</sub>e\*) and crude production (million barrels per day)**



Source: Pemex reporting

\* Million metric tons of carbon dioxide equivalent

**Figure 2. Pemex, direct methane emissions (Kt\*)**



Source: Pemex, response to freedom of information request number 330023823002978, received through the National Transparency Platform, 15 June 2023.

\* Thousands of metric tons

In this context, the public commitments set out in Pemex's sustainability plan are welcome (see Box 2 for an overview). For the first time, the company has committed to net-zero scope 1 and 2 emissions by 2050 (although it has no commitments to address its scope 3 emissions by right-sizing its production), and it has provided detailed descriptions of nine decarbonization lines of action. Each of these features important implementation details, including targeted results by 2030 (such as abatement of carbon dioxide equivalent emissions, and the required capital expenditures and operating expenses), the main assets that will be impacted, and the key initiatives Pemex will carry out. These are important details, with potential to allow stakeholders to anticipate and monitor progress, if the company provides suitably granular implementation data on an ongoing basis.

### Box 2. GHG goals and ambitions in Pemex's March 2024 Sustainability Plan

#### Ambition by 2050:

- Net-zero scope 1 and 2 emissions.

#### Goals by 2030:

- From 2024, achieve at least a 98 percent of gas use associated to exploration and production (E&P).
- Reduce GHG emissions intensity (Scope 1): 61 percent in E&P; 40 percent in refineries and 60 percent in gas processing (compared to 2021 baseline).
- Achieve a reduction of 30 percent in methane emissions (compared to 2020 baseline).
- Achieve zero routine gas flaring in E&P.

#### Selected decarbonization lines of action by 2030:

- Reaching near-zero methane emissions requires additional actions in leak detection and repair programs, and reduction in routine venting and flaring.

However, there are good reasons to remain skeptical as to whether the sustainability plan will result in change at Pemex. Spikes in GHGs have occurred despite numerous public gestures and commitments on GHGs by Pemex and the Government of Mexico, which closely controls the company. As far back as 2005, Pemex had an active role as co-president of the [Oil and Gas Subcommittee](#) of the international partnership Methane to Markets (M2M). In 2016 Mexico endorsed the [Zero Routine Flaring by 2030](#) initiative, while also joining the United States and Canada in calling for a [40–45 percent reduction](#) in methane emissions in its oil and gas sector —dominated by Pemex— by 2025. Mexico also signed up to the [Global Methane Pledge](#) in 2021, committing to reducing methane emissions by 30 percent between 2020 and 2030.



Many of these emissions commitments have been enshrined in Mexico's legal and regulatory framework for years. The Pemex sustainability plan's goal of "at least 98 percent in gas utilization in E&P" has been a regulatory requirement for the company since 2019, detailed in the *Technical Guidelines for the Use of Associated Natural Gas* in the Exploration and Production of Hydrocarbons. The same rules also place strong limitations on routine gas flaring and venting. Another set of regulations, the Guidelines for the Prevention and Comprehensive Control of Methane Emissions from the Hydrocarbons Sector (known under the Spanish acronym PPCIEM), require Pemex to produce a plan for controlling methane emissions for all new and existing facilities. Mexico's *Iniciativa Climática* (Climate Initiative) has stated that the country's current regulations are sufficient to reduce emissions from the oil and gas sector by 50 percent by 2030, suggesting that implementation of existing requirements is an important part of the problem.

Pemex's poor record in meeting these commitments is partly a result of the politicization of company strategy. As a result, long-term goals can be axed or ignored as government priorities change. An investigation by Reuters shows that while Pemex had plans to invest USD 3 billion to fix its flaring problem in 2016, these were [dropped](#) half-way through completion under the administration of President Andrés Manuel López Obrador, which sought to [increase](#) crude oil production and refining, regardless of the environmental costs. More recently, a 2024 investigation shows that even while the company was developing the current sustainability plan, it [put off urgent repairs](#) and maintenance at the important Zaap-C platform, despite a massive methane leak.

Regulators have been powerless to rein the company in. The industry regulator, the *Comision Nacional de Hidrocarburos* (CNH), attempted to impose financial penalties on Pemex when the company burnt off huge amounts of natural gas in two important fields, Ixachi in Veracruz and Quesqui in Tabasco. But it ended up resolving the issue based on a technicality that stated that the fields were non-associated gas and therefore beyond CNH's jurisdiction, which is limited to gas associated with crude oil production. In the end, the only fines it could levy were for failure to comply with development plans, which were little deterrent to Pemex. As one company executive noted, the violations were worth it because the fines were "small."

The controversies related to these fields and the role of the regulator also extend to other cases. [Reuters reported](#) that in 2022, CNH officials were pressured to quit by officials from the government and Pemex after they rejected Pemex's plans to develop some of its biggest discoveries in three decades, on the grounds that the proposals were both economically and technically unsound. The plans, including the Quesqui field in the southern state of Tabasco, went ahead in November 2022 after the head of CNH was replaced by a former Pemex official. This raised concerns that

the regulator was no longer able to act independently with regard to the national oil company.

The environmental regulator, *Agencia de Seguridad, Energía y Ambiente* (ASEA), has also faced challenges. As its budget decreased by more than 45 percent during the first three years of the López Obrador administration, the supreme auditor *Auditoría Superior de la Federación* (ASF) stated that [ASEA had limited capacity](#) to carry out its functions, with failures including a lack of policies and manuals to regulate activities, inadequate metrics and indicators to measure impact, and a lack of mechanisms to ensure the accuracy of information collected in the field. Against this backdrop, ASEA has not fined Pemex for leaks and spills [since 2018](#), despite a reported increase in accidents, explosions and leaks.

ASEA was also hobbled in its enforcement of the PPCIEM methane control plans, following a regulatory amendment in 2020 which extended the time-period in which operators were able to present their plans, from three to 19 months. As recently as 2023, investigators from the Mexican Methane Emissions Observatory (OBMEM) found that [only 7 percent](#) of regulated entities had submitted the required documents. Importantly, Pemex appears to be falling short of requirements, having submitted only some of the documents needed for two of its registered entities. The [OBMEM](#) website shows that Pemex Exploration and Production and Pemex Logistics have submitted their methane emissions control plan, but not their annual compliance report.

# Failure to reduce GHGs more costly than ever

This time, however, the costs to Pemex of failing to stick to its emission reduction plans are likely to be higher than ever before. Changing capital market preferences, increased scrutiny in consumer markets, and the continued rise of carbon pricing are increasing the potential financial costs of not delivering on its goals. Meanwhile, a revolution in the quantity and quality of third-party data on GHGs means that investors, customers, regulators and accountability actors are able to monitor company activities more closely than previously.

## Changing capital market preferences

Investors have long been concerned about the financial risks that climate change and the energy transition pose for fossil fuel production and other activities. This has precipitated new reporting requirements in most capital markets, to improve and standardize the GHG emissions data that companies publish on an ongoing basis. With Pemex dependent on U.S. debt markets for its bond issuances, it must consider new [Securities and Exchange Commission](#) rules which require companies to publish operational GHG data annually and to improve the assurance processes surrounding the quality of those data. This puts pressure on Pemex to improve its monitoring, reporting and verification (MRV) systems.

Importantly, increased investor attention to GHGs is likely to have financial consequences for Pemex. Many investment analysts already consider low-carbon oil and gas projects [more likely](#) to receive financing than those with higher emissions. Over the longer term, institutional investors expect high-emission oil and gas projects to be [no longer viable](#). Of the world's 60 largest banks, 38 have some [restriction on the financing](#) of oil and gas, and the rise of investing linked to sustainability and environmental, social and governance factors is putting further restrictions on potential financing available to oil and gas companies. As options for financing narrow, a failure to address emissions has greater potential to increase Pemex's borrowing costs—no small concern, given the company's status as the world's [most highly indebted](#) oil and gas producer.

## Increased scrutiny in consumer markets

Consumers and the companies they buy from are becoming increasingly conscious of supply-chain emissions. With oil and gas being the source of some 70 percent of [Mexican electricity](#), high operational emissions in the Mexican oil and gas sector have the potential to hold back other export industries in their decarbonization efforts. These challenges are acute in the automotive industry —responsible for one third of Mexico’s exports— where emissions scrutiny is increasing with the rise of electric vehicles (EVs). The country attracted significant investment from [Tesla](#) in 2023, and [other companies](#) are already producing EVs in Mexico, or have plans to do so. But to compete with other exporters for investment, Mexico must meet growing clean energy requirements, a challenge that will be difficult to meet without collaboration from Pemex.

Some consumer markets are going further by imposing import regulations on high-emitting products. Notably, the European Union (EU) has already agreed new rules that target methane emissions in [fossil fuel imports](#). These stipulate that exporters to the EU will have to pay a penalty unless they meet the same MRV obligations as EU companies from 2027, with methane intensity targets coming into effect in 2030. While the EU accounts for only [10-15 percent](#) of Mexico’s total crude exports, it would be prudent for Pemex to anticipate that other export destinations, such as the United States —which recently established its own methane rules for [domestic producers](#)— may also impose the same requirements on importers. The [International Energy Agency](#) (IEA) and the [Organization for Economic Cooperation and Development](#) have supported this idea, and the EU is looking to coordinate with [other countries](#).

## The continued rise of carbon pricing

Through carbon pricing, an increasing number of governments, including Mexico’s, are applying financial penalties to fossil fuel users for their GHG emissions. These schemes now cover 25 percent of [annual emissions worldwide](#), up from 10 percent in 2015, and the prices they charge are increasing, rising by [17 percent](#) between 2018 and 2021 in the economies that use four fifths of global energy. As they increase, carbon prices reduce demand for fossil fuels, resulting in lower market prices, which will make many oil and gas projects unprofitable. Pemex is particularly vulnerable, given the [relatively high cost](#) of its operations. The company’s failure to address its emissions will only compound these challenges.

## A GHG data revolution

Advances in satellites and other remote-sensing technology are increasing the quantity and quality of third-party data available for investors, customers, regulators, journalists and civil society to monitor Pemex's activities (see Box 3). As a result, Pemex and the Government of Mexico are no longer able to control the narrative on emissions in the way they once used to. This increases the potential for significant consequences in the form of decisions by investors and customers, and pressure from citizens and civil society.

In addition, third-party data are already contributing to increased public scrutiny of Pemex. Academics reported two giant super-emitter events in 2021 and 2022, following the analysis of third-party [satellite data](#). The International Methane Emissions Observatory run by the United Nations Environment Programme (UNEP) also confirmed [vast leaks](#) in the Gulf of Mexico during 2023. Meanwhile, citizens and local governments are also demanding accountability from Pemex. The State Government of Nuevo Leon [rebuked the company](#) after a dramatic increase in visible emissions from its Cadereyta refinery in 2023, and thousands of Monterrey residents have since rallied to demand that the refinery be [shut down](#). Given the increases in emissions transparency, these events represent a potential harbinger of what is to come if Pemex fails to take control of its GHGs.

**Box 3. A GHG data revolution**

Governments and companies are no longer alone when it comes to producing data on methane and other GHG emissions. Advances in technology mean that data provided by third parties are rapidly increasing in quantity and quality, and some of it is publicly available at no cost.

- **Private-sector data providers and industry data-houses**, such as [Rystad Energy](#) and [Wood Mackenzie](#), have built continuously updated proprietary emissions databases, allowing paid users to analyze and benchmark emissions performance at project, company or portfolio level. **Remote-sensing firms**, such as [Kayrros SAS](#) or [GHGSat](#), have developed satellite technologies that companies can use to obtain an independent measure of their emissions. While these readings can cost thousands of dollars, Kayrros puts some of its data on super-emissions events online, for all stakeholders [to view](#) at no cost.
- **Nonprofits, academics and the public** have been empowered to play a more active role in emissions accountability, as satellite images and handheld sensors have become more accessible and cheaper. Some have developed free-to-use open source emissions tools, revealing which projects are the most polluting. These include RMI's [Oil Climate Index Plus Gas](#), [Climate Trace](#) and Carbon Tracker's [Global Registry of Fossil Fuels](#). Some civil society actors are conducting investigative work on specific projects [or super-emissions events](#), and regulators such as the US Environmental Protection Agency are now exploring how they can incorporate these efforts into their [ongoing monitoring](#) of the oil and gas industry. The [Environmental Defense Fund](#) took the step of launching its own methane detecting satellite in March 2024. [MethaneSat](#) promises to provide high-resolution data that is free to access and covers wider areas than existing satellites. Publication of the first results is expected in mid-2024, with a full flow of data publicly available from 2025.
- **Global initiatives** are employing sophisticated accountability mechanisms which are publicly accessible at no cost. UNEP's [International Methane Emissions Observatory \(IMEO\)](#) reconciles methane data from satellites, scientific measurement studies, national inventories and rigorous industry reporting through the [Oil and Gas Methane Partnership 2.0](#). Through the [Methane Alert and Response System](#), IMEO data are now linked with a [notification process](#) which informs operating companies and host governments about their emissions as they occur. Data are made public with a 45–75-day lag, giving companies and governments a short period to respond before they are subject to public accountability. The IEA hosts its own [Methane Tracker](#), an interactive database of country and regional estimates for methane emissions and abatement options. The World Bank's [Global Gas Flaring Tracker](#) provides open access to the independent estimates of routine gas flaring data that the Bank uses to monitor country progress against its Zero Routine Flaring by 2030 initiative.

# Recommendations

With more public data available on GHGs than ever before, and growing scrutiny from investors, customers, civil society and citizens, Pemex and the Government of Mexico must make sure that the company's future approach to GHG reduction does not repeat the mistakes of the past. A new government presents an opportunity to make real progress over the next six years. We suggest five ways that Pemex and the new administration can ensure that the company meets its goals for reducing emissions of methane and other GHGs.

## 1. **Targets.** Pemex should establish short-term targets to track progress towards medium- and long-term goals.

Pemex has set medium- and long-term quantitative targets to reduce emissions intensity and make absolute reductions in methane (see Box 2). Measurement targets like these are important for the long term, but they present Pemex with significant difficulties right now. This is because a robust baseline, against which the company can track progress, is complex and takes significant time and effort to produce. In addition, on the path to better data, it is common for companies to find that their emissions are much higher than originally thought—a fact which Pemex acknowledges in a footnote to its sustainability plan. Focusing on GHG targets alone therefore runs the risk of disincentivizing action taken to reduce emissions.

Recognizing this, Pemex must emphasize a set of targets that it can use to track and demonstrate progress in the short term. The company's nine lines of action for 2030, detailed in the sustainability plan, are a good place to start. These should be augmented to explicitly include annual targets that are Specific, Measurable, Achievable, Relevant and Time-Bound (SMART) for the six years between now and 2030. These targets should cover critical issues including the detection, management and prevention of super-emitter events; approaches to stopping all non-routine flaring and venting, and leak detection and repair activities to address fugitive emissions.

## 2. Transparency. Pemex should publish transparent monitoring data to show progress towards targets.

Pemex should publish transparent monitoring data on an ongoing basis, designed to meet the needs of various stakeholders, for its short-, medium- and long-term targets. The company should work with investors, consumers, regulators, civil society, local communities and other stakeholders to ensure that the data it produces support the needs of these different groups. The process that petroleum regulator CNH used to develop the transparency platform [Rondas Mexico](#), in which a diverse oversight group met regularly to share user needs and monitor data portal development, stands out as good practice that Pemex could draw on to achieve this.

Pemex should also provide data that are sufficiently granular to be used by local actors. The tendency of many companies to publish aggregate company-level data on GHGs is the product of a focus on investors, who need data primarily to compare companies against each other. But investors are not the only stakeholders who need data on GHGs. Disaggregation by project would allow affected communities, local government and other stakeholders to track progress, challenges and risks at specific facilities that they may be close to or may depend on for jobs or revenues. Through a request for access to information on the National Transparency Platform, NRGi was able to confirm that Pemex already collects emissions data at this level of granularity. The company now just needs to publish such disaggregated data on an ongoing basis.

## 3. Engagement. Pemex should support public engagement and debate on GHGs data.

Pemex should nurture a critical mass of informed stakeholders who can achieve momentum and maintain pressure on the company and the Government of Mexico to stick to their medium- and long-term emissions goals. For these efforts to be robust and credible, Pemex should encourage a wide set of interests to engage with them, by communicating various reasons why it is important to address company methane and GHG emissions. In addition to climate change, these include maintaining the competitiveness of Pemex and the benefits that it brings (such as avoiding public debt and supporting government tax revenues), ensuring the Mexican economy can thrive in the low-carbon era, reducing waste gas, and improving local health and the environment. Where possible, Pemex's efforts to support ongoing public engagement and debate should build on existing networks or national initiatives, including the [Mexican Methane Observatory](#), or by reviving the [Mexican Extractive Industries Transparency Initiative process](#).



## 4. International initiatives. Pemex should seek additional support through international initiatives.

Pemex should seek further support in its efforts by joining relevant international initiatives tackling emissions of methane and other GHGs. These include:

- [Oil and Gas Methane Partnership 2.0](#) (OGMP 2.0), a measurement-based reporting framework under UNEP, which centers around a multi-year process in which companies improve the accuracy and granularity of emissions targets and reporting.
- [Oil and Gas Decarbonization Charter](#) (OGDC), a declaration of intent for oil and gas companies to reach net-zero operational emissions by 2050, and to end routine flaring and hit near-zero upstream methane emissions by 2030.
- [World Bank Zero Routine Flaring by 2030 initiative](#) (ZRF), a framework launched in 2015 that commits governments and oil companies to end routine flaring no later than 2030. Participating governments and oil companies commit to reporting their flaring and progress towards the initiative annually. Given that the Mexican government is already a member of this initiative, Pemex's membership would support the government in meeting its commitments.

Though Pemex's sustainability plan already mirrors many of the commitments of these initiatives, membership would confer three additional benefits to the company. Firstly, it would send an important message to investors, customers and other stakeholders that Pemex is committed to addressing its GHG emissions and keeping pace with other national oil companies (NOCs) that are members (see Figure 3 for NOC participation in these initiatives). Secondly, membership would give Pemex access to a broader community of practice through which it can learn from others and share its successes. Thirdly, membership would subject Pemex to additional international review and scrutiny that could help the company meet its goals. For example, OGMP 2.0 members receive feedback on their targets and emissions measurement systems as they progress through the partnership's framework; OGDC members are monitored by the IEA on their progress towards the charter's commitments, and ZRF members are subject to monitoring via government and company reports and satellite observations.

**Figure 3. Overview of NOC participation in emissions initiatives**

<b>Initiative</b>	<b>Members</b>
<b><u>Oil and Gas Methane Partnership 2.0 (OGMP 2.0)</u></b>	<b>124 oil and gas companies, including 12 NOCs</b> ( <i>ADNOC, EcoPetrol, Petroecuador, Equinor, KazMunayGas, Naftogaz, National Gas Company of Trinidad and Tobago, Petroleum Development Oman, Petrobras, Petronas, PTTEP, QatarEnergy</i> ).
<b><u>Oil and Gas Decarbonization Charter (OGDC)</u></b>	<b>52 oil and gas companies, including 30 NOCs</b> ( <i>ADNOC, Bapco Energies, Ecopetrol, EGAS, Equinor, GOGC, INPEX Corporation, KazMunaiGas, Mari Petroleum, Namcor, National Oil Company of Libya, Nilepet, NNPC, OGDC, OMV, ONGC, Pakistan Petroleum Limited, Pertamina, Petoro, Petrobras, Petroleum Development Oman, Petronas, PTTEP, Saudi Aramco, SNOC, SOCAR, Sonangol, Uzbekneftegaz, ZhenHua Oil, YPF</i> ).
<b><u>World Bank Zero Routine Flaring by 2030 initiative (ZRF)</u></b>	<b>54 oil and gas companies, including 21 NOCs</b> ( <i>EcoPetrol, Entreprise Tunisienne d'Activités Pétrolières, Equinor, Gazprom Neft, KazMunayGas, Kuwait Oil Company, NNPC, Oil India, ONGC, Nile Petroleum Corporation, Petroecuador, Petrobras, Petronas, QatarEnergy, Saudi Aramco, SOCAR, Société Nationale des Hydrocarbures, Société Nationale des Petroles du Congo, Sonangol, Sonatrach, Uzbekneftegaz</i> ).

## **5. Enforcement.** The Government of Mexico should empower enforcement authorities to stand up to Pemex.

Mexico's government should take steps to redress the power imbalance between Pemex and the regulatory agencies that currently oversee its GHG emissions. It should ensure that the regulators, currently CNH and ASEA, have the independence, capacity and budget to perform their duties adequately. The lack of policies and manuals to regulate activities, lack of metrics and indicators to measure impact, and lack of mechanisms to ensure the accuracy of information provided by operators all demonstrate the regulator's inadequate capacity. In addition, the absence of fines imposed on Pemex in recent years, despite the increase in accidents, emissions leakage and waste of non-associated gas, indicates the regulators' lack of autonomy. This hints at a permissiveness that is costly for workers and citizens, and contrary to the requirements of investors and international authorities.

## **ACKNOWLEDGEMENTS**

We would like to express our gratitude to Alejandro Chanona for his valuable contributions to the research for this brief. We also thank Andrea Furnaro, Thomas Scurfield, Amir Shafaie and Juan Luis Dammert for their review of the text. Likewise, we extend our gratitude to Anna Cartagena and Julian Martínez for their help in publishing the text.

---

# About NRGi

The Natural Resource Governance Institute is an independent, non-profit organization that supports informed, inclusive decision-making about natural resources and the energy transition. We partner with reformers in government and civil society to design and implement just policies based on evidence and the priorities of citizens in resource-rich developing countries. For more information visit

[www.resourcegovernance.org](http://www.resourcegovernance.org)



Natural Resource  
Governance Institute