

The introduction of methane pricing in the US Inflation Reduction Act

On August 16, 2022, **President Biden signed H.R. 5376, a budget reconciliation measure** also referred to as the **Inflation Reduction Act (IRA)**. With IRA, the United States aims to reduce GHG emissions between **31% to 44% by 2030 compared to 2005 levels through tax incentives and funding mechanisms**. A first-ever federal charge is imposed on the excess methane emissions on designated natural gas and petroleum facilities beginning on January 1, 2024.

IRA allocated **\$369 billion to energy and climate change initiatives**; a \$1.55 billion budget is going to the **Environmental Protection Agency (EPA)** to provide incentives, grants, loans, and rebates for facilities, well operators, and communities to enable methane reduction. The funding is available until September 30, 2028.

For Oil and Gas drilling, leasing, and permitting, IRA raises the rent and royalties. The onshore royalty rate is being increased from 12.5% to 16.67% and will be sustained for 10 years after the enactment of the bill. The lease for onshore oil and gas is also being increased from \$2 to \$10 per acre for the next 10 years.

IRA - Methane

What is the fee for methane waste emissions?

The charge starts at \$900 per metric ton (tonne) of methane in calendar year 2024, increases to \$1,200/tonne in 2025, and then \$1,500/tonne in 2026. The charge remains at \$1,500/tonne in the subsequent years. This charge is equivalent to \$36 per metric ton of CO₂e up to \$60 per metric ton of CO₂e.

For which facilities does this methane fee apply?

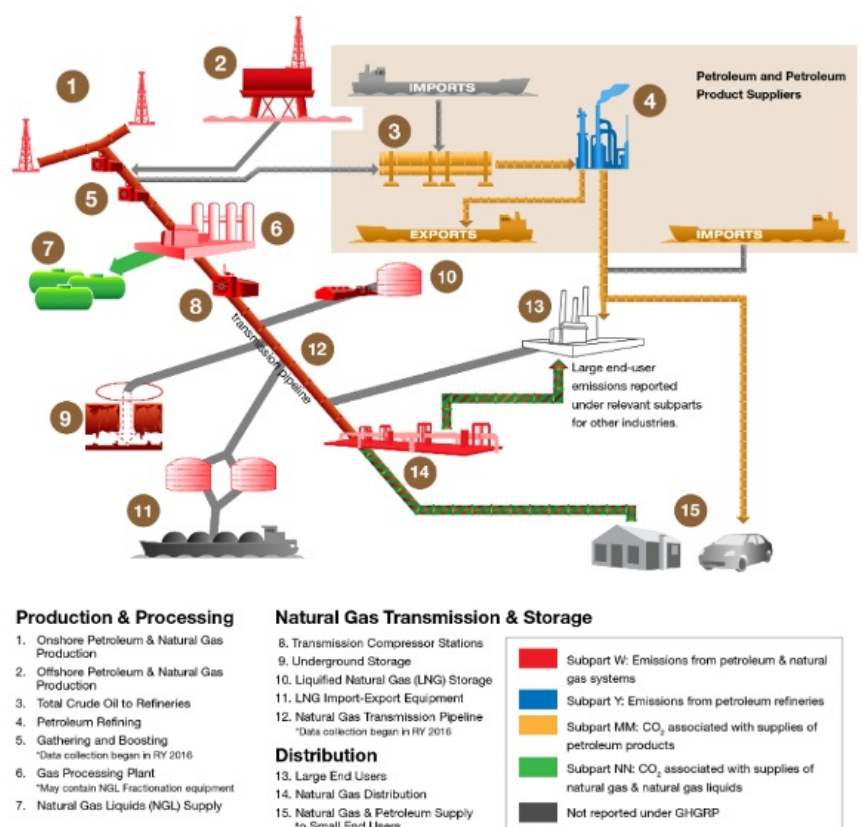
The methane emissions charge applies only to certain facility types that are subjected to reporting their greenhouse gas (GHG) emissions to the Environmental Protection Agency's Greenhouse Gas Emissions Reporting Program (GHGRP). This includes onshore and offshore oil and gas facilities reporting under the EPA regulations (40 C.F.R. Part 98, Subpart W).

The IRA's methane fee is applicable only to facilities that emit 25,000 mtCO₂e or more per year regardless of any subsequent changes to the scope of EPA's reporting requirements.

The facilities subject to charge from the IRA are:

1. Offshore petroleum and natural gas production
2. Onshore petroleum and natural gas production
3. Onshore natural gas processing
4. Onshore natural gas transmission compression
5. Underground natural gas storage
6. Liquid natural gas storage
7. Liquefied natural gas import and export equipment
8. Onshore petroleum and natural gas gathering and boosting
9. Onshore natural gas transmission pipelines

Figure 1. Facility categories subject to report to EPA's GHG program ¹



The following table shows the number of GHG reporting facilities in 2019 and the methane emissions (for 2019) from the facility categories subject to the IRA methane fee.

Table 1. Number of Reporting Facilities and Methane Emissions from Petroleum and Natural Gas System Categories Subject to the IRA Methane Charge

Data for 2019; emissions in million metric tons of CO₂ equivalent (MMTCO₂e)

Facility Type	Number of Reporting Facilities	Reported Methane Emissions (MMTCO ₂ e)
Onshore petroleum and natural gas production	485	44.2
Onshore petroleum and natural gas gathering and boosting	361	21.9
Onshore natural gas transmission compression	624	4.2
Onshore natural gas transmission pipeline	39	2.9
Natural gas processing	457	2.9
Offshore petroleum and natural gas production	141	1.5
Underground natural gas storage	50	0.6
Liquefied natural gas import and export equipment	10	0.1
Liquefied natural gas storage	5	0.001
Total	2,172	78.3

Which facility categories are excluded from the methane charge?

Two facility categories that report emissions under Subpart W (EPA) are not subject to methane charge: (1) natural gas distribution facilities and (2) facilities in EPA as “other oil and gas combustion facilities”. These “Other” facilities have stationary fuel combustion emissions that are associated with the petroleum and natural gas industry, but do not report process emissions from any of the above source categories.

How does the fee apply based on the threshold per activity?

Once the 25,000 mtCO₂e threshold is met by the facility, the amount of methane that is subject to the fee is based on the activity of the facility and the portion of methane that is emitted above the threshold, as follows:

- **Petroleum and natural gas production facilities:** the charge applies only to the number of reported tons of methane that exceed 0.2% of the natural gas sent to sale from such a facility.
- **Nonproduction facilities, such as gathering and boosting facilities:** the charge applies to methane emissions that exceed 0.05% of natural gas sent for sale from the facility.
- **Natural gas transmission facilities:** the charge applies to methane emissions that exceed 0.11% of the natural gas sent for sale from that facility.

Table 3. Estimate of Methane Emissions Subject to Charge After Applying Emissions Thresholds (Based on 2019 Data)

Million Metric Tons CO₂e

Facility Type	Reported Methane Emissions	Reported Methane Emissions Subject to Charge After Applying Emissions Threshold
Onshore petroleum and natural gas production	44.2	27.2
Onshore petroleum and natural gas gathering and boosting	21.9	15.6
Total	66.1	42.8

Are there any exceptions for the charge?

IRA allows an exemption from emissions charges under certain circumstances. The first exemption is for permanently shut-in wells. The methane fee will not apply to any emissions from any well that has been shut in permanently and plugged the previous year.

The second exemption from the IRA methane charge is for the excess of emissions that are caused by unreasonable delays in environmental permitting of pipelines required to transport the surplus gas volume.

The final exemption will be applicable if, in the future, a facility is in compliance with the EPA regulations

addressing methane emissions -that are in effect in all states- and, the emissions reductions of that facility will result in equivalent or greater reductions compared to those that can be achieved by the November 2021 standards proposed by EPA.

Summary

Through the IRA, the US is imposing a fee for the first time on the excess of methane emissions on certain oil and gas facilities effective January 1, 2024. The methane charge is intended to incentivize companies to reduce these emissions to meet the GHG targets. EPA regulations need to be aligned with the IRA either by introducing equivalent or higher emission reductions.

Whereas EPA reviews and finalizes the 2021 methane emissions standards and provides additional guidance on the regulations, companies with US facilities subject to GHG reporting should start laying out a strategy to identify those facilities with potential methane charges. In addition, companies need to evaluate methane reduction opportunities to set up an appropriate financial strategy.

¹ Source: Figure taken from EPA's GHGRP website. <https://www.epa.gov/ghgreporting/ghgrp-and-oil-and-gas-industry>

Sources:

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