FEATURE ARTICLE:

COP30 signals climate policy shifts reinforcing the global role of natural gas

The year 2025 represented a pivotal moment for the global energy industry, marked by a shift away from the traditional climate agenda and a reassessment of previously dominant climate-driven energy policies. In particular, after several years of a negative narrative, natural gas regained credibility as a reliable and sustainable energy source, increasingly recognized as one of the most effective means of meeting rapidly growing global energy demand.

This policy shift culminated in the outcomes of the 30th session of the Conference of the Parties (COP30) to the United Nations Framework Convention on Climate Change (UNFCCC), held from 10 to 21 November 2025 in Belém, Brazil, bringing together representatives from nearly 200 countries. Notably, the event also marked the 10-year anniversary of the Paris Agreement, serving as an important benchmark for assessing global climate mitigation efforts largely focused on accelerating the transition toward lower carbon energy sources.

Major COP30 outcomes with potential implications for the gas industry include agreements on climate adaptation, climate finance, and climate-related trade measures.

COP30 elevated climate adaptation to an equal political footing with climate change mitigation, marking a historic shift in the trajectory of international climate summits. While the appropriate balance between these two pillars has long been a subject of rigorous debate, the conference signalled a strategic pivot toward the adaptation through the formal adoption of 59 voluntary Belém Adaptation Indicators. Established under the mandate of Article 7 of the Paris Agreement, these metrics provide a standardized, system-wide framework to monitor global progress toward the Global Goal on Adaptation (GGA). In this context, the heightened focus on climate adaptation recognizes that immediate energy security is a prerequisite for systemic resilience, reducing the pressure previously placed on natural gas and other hydrocarbon fuels, as reflected in COP28 outcomes. This approach enables natural gas to expand its role in the global energy mix, providing the reliable, sustainable energy needed for communities to withstand climate-driven disruptions.

COP30 largely preserved the status quo on climate finance, merely reaffirming the targets set at the previous COP without securing new binding commitments from developed countries. The final documents emphasized the urgent need to remain on a pathway toward mobilizing at least USD 300 billion in public finance and scaling total financing for developing countries to at least USD 1.3 trillion per year by 2035. However, they provided no clear mandatory roadmap for how developed nations would fulfil these commitments. Moreover, the final documents highlighted that Parties have divergent views on whether the previous goal of developed countries to jointly mobilize USD 100 billion per year in climate finance for developing countries, set at COP15 in 2009, was achieved. A lack of an agreed definition of climate finance and standardized accounting methodologies continues to frustrate developing countries. The reluctance of developed nations to assume significant financial burdens in supporting developing countries' adaptation and mitigation efforts poses a major challenge to advancing renewables-oriented energy transitions. In this context, many developing countries are inclined to prioritize energy transitions that rely more on traditional low-carbon sources, particularly natural gas, which provides a balanced solution to the energy trilemma and serves as a reliable backup for intermittent wind and solar power.

COP30 marked the first time trade policies became a central component of the official negotiated outcome, formally integrating trade into the international climate agenda through a structured dialogue process aimed at ensuring that trade policies and climate objectives are mutually reinforcing. The final documents reaffirmed that climate-related trade measures, including unilateral ones, must not constitute "arbitrary or unjustifiable discrimination or a disguised restriction on international trade." To implement this, the decision mandates a three-year series of dialogues (2026–2028) involving major international organizations, including the WTO, UNCTAD, and ITC, to examine opportunities and barriers for international cooperation at the intersection of climate and trade. These dialogues are intended to specifically address tensions over unilateral trade measures like the EU's Methane Emissions Regulation (MER) and Carbon Border Adjustment Mechanism (CBAM). These new EU regulations are poised to not only affect the EU but also reshape the global gas market by imposing strict requirements on international suppliers, potentially resulting in the fragmentation of global gas trade and altering supply routes, price signals, and competition patterns. The establishment of the dialogues provides a formal venue for exporting nations to contest border restrictions and taxes.

In addition, 2025 represented the third major cycle for Nationally Determined Contributions (NDCs 3.0) mandated by the Paris Agreement, with COP30 formally commending the 122 Parties whose updated 2035 targets account for 80% of global greenhouse gas (GHG) emissions. These updates are critical for the gas industry because they establish clear regulatory benchmarks through explicit methane reduction targets. For instance, China's NDC includes non-CO_2 gases for the first time, Nigeria targets a 60% reduction in fugitive methane alongside zero routine flaring by 2030, and Canada aims to cut oil and gas methane emissions by at least 75%. Furthermore, the gas industry is poised to benefit from a strategic reliance on natural gas by major emitters seeking to fulfil coal reduction commitments without compromising energy security. This trend is evident in China's updated climate strategy, which positions gas as a critical stabilizer for its 2035 absolute emission reduction goals. Similarly, India and Vietnam are accelerating plans to phase down unabated coal in favour of expanded gas capacity and LNG imports, utilizing them as flexible baseload power.

The legacy of COP30 is also defined by the decision to refrain from including a formal hydrocarbon phase-out roadmap in the final documents, despite such requests from a coalition of countries seeking to build on the COP28 decision, which urged "transitioning away from fossil fuels in energy systems." The absence of such a roadmap recognizes the practical complexities of the energy transition and reflects a balanced approach that prioritizes national sovereignty over energy policies, leaving the development of voluntary roadmaps to individual nations.

This decision highlights that global climate cooperation has increasingly fractured, with disagreements among major players widening, as short-term national interests take precedence over long-term international environmental objectives. Following his return to office in January 2025, President Trump rapidly reversed U.S. energy and climate policies, withdrawing from the Paris Agreement and subsequently from the UN Framework Convention on Climate Change and the Intergovernmental Panel on Climate Change, while boycotting COP30 entirely. In contrast, the EU has maintained its commitment to advance the climate agenda, though it recalibrated its energy transition after the new European Commission took office in December 2024, loosening certain regulatory pressures to ensure industrial competitiveness and affordable energy.

More broadly, global pressure on the climate agenda has diminished as many countries prioritize immediate economic and social development. This shift generally aligns with the Paris Agreement's recognition that balancing climate action with sustainable development and the eradication of energy poverty is essential for long-term success. Today, energy poverty remains a staggering challenge, with 750 million people still lacking basic electricity, primarily in Sub-Saharan Africa. Simultaneously, 2.3 billion people still rely on polluting fuels for cooking, leading to millions of premature deaths from indoor air pollution each year. Looking ahead, global energy demand is expected to rise sharply, driven by economic growth, industrial expansion, population increases, climate-related heating and cooling needs, and the rapid growth of AI data centers. This underscores the need for a broad mix of sustainable energy sources, as renewables alone are not able to meet this demand at the required scale and reliability.

Despite some advancements in global climate policy, COP30 acknowledged for the first time the high likelihood of overshooting the 1.5°C temperature rise target relative to pre-industrial levels. The rise in global temperatures is closely linked to the growth in GHG emissions, with the energy sector contributing roughly 75% of the total. Energy-related GHG emissions reached 41.2 GtCO2eq in 2024, up from 38.2 $GtCO_2eq$ in 2015, with CO_2 emissions driving this growth, while methane emissions have remained almost flat (Figure i). This divergence highlights significant progress in the upstream sector, especially within the gas industry, in deploying methane abatement technologies, while underscoring the persistent challenge faced by the downstream sector in reducing CO_2 emissions during fuel combustion. Four major economies are responsible for 60% of global energy-related GHG emissions (Figure ii). Notably, the combined emissions of China and India in 2024 were 3.1 $GtCO_2eq$ higher than in 2015, even exceeding the net global emissions growth of 3.0 $GtCO_2eq$ over the same period. This places these economies at the forefront of global mitigation efforts.

Figure i: Global energy-related GHG emissions

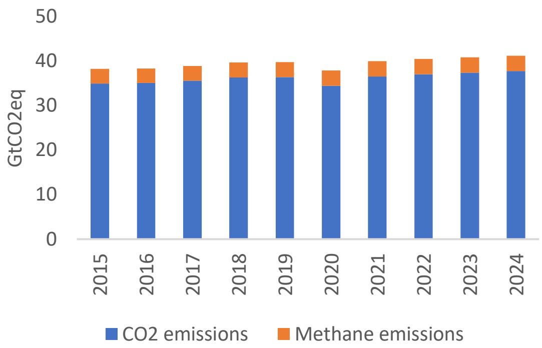
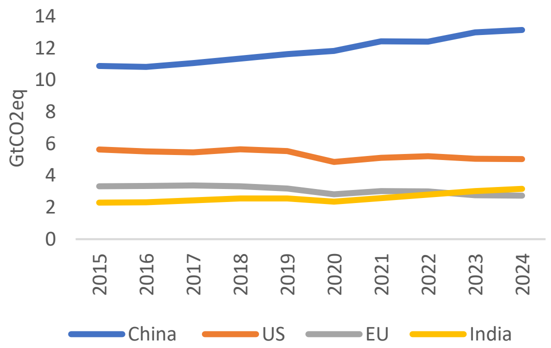


Figure ii: Energy-related GHG emissions by economy



Source: GECF Secretariat based on data from IEA, S&P Global and EDGAR

Global CO_2 emissions growth over the last decade has been mainly driven by coal combustion. Between 2015 and 2024, total emissions rose from 31.4 Gt to 35.0 Gt, with coal contributing 2.1 Gt of that increase, compared to only 1.3 Gt from natural gas (Figure iii). This occurred even though global natural gas consumption grew faster than coal, increasing by 30 EJ compared with coal's 28 EJ over the same period. In contrast, growth in primary consumption of other fuels, such as oil (12 EJ), wind and solar electricity (13 EJ), and biomass (8 EJ), was much lower, making natural gas the largest contributor to primary energy consumption growth over the last decade.

Coal-fired generation, which accounts for 55% of CO_2 emissions from coal combustion, 65% of CO_2 emissions from the power sector, and 27% of global CO_2 emissions, should be at the center of global mitigation efforts. In recent UN climate summits, the international community has shifted from broad environmental aspirations toward more explicit policy mandates aimed at reducing coal use. This shift began with the COP26 Glasgow Climate Pact in 2021, which marked the first UN agreement to call for a phase down of unabated coal power, a commitment subsequently reaffirmed at later COPs. Despite this strengthened rhetoric, coal-fired generation has continued to expand globally, rising from 9,300 TWh in 2015 to 10,500 TWh in 2024, with associated CO_2 emissions increasing from 8.6 Gt to 9.5 Gt over the same period.

Against this background, substantial untapped potential remains to reduce CO_2 emissions through coal-to-gas switching, which is already underway but not at a pace sufficient to deliver large-scale progress. As a significantly cleaner alternative to other hydrocarbon fuels, natural gas has a lower carbon intensity and a cleaner combustion profile, emitting roughly 50% less CO_2 than coal and 30% less than oil per unit of energy (Figure iv). This allows natural gas to meet growing energy demand while generating substantially fewer emissions per unit of energy consumed. In addition, natural gas combustion produces far lower levels of particulate matter, sulphur dioxide, and nitrogen oxides, thereby reducing air pollution and associated health impacts. Furthermore, advances in methane abatement technologies in the upstream gas sector have helped limit fugitive emissions, strengthening the overall climate performance of natural gas and reinforcing its role as a key lower carbon energy source.

Figure iii: Growth in CO_2 emissions from 2015 to 2024

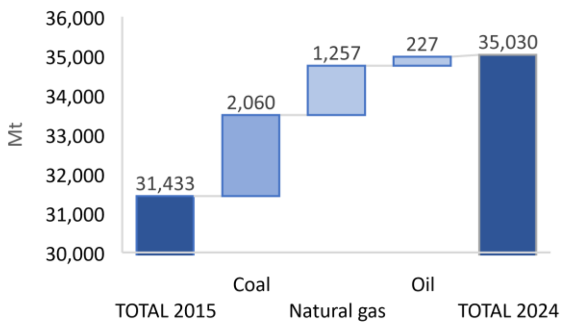
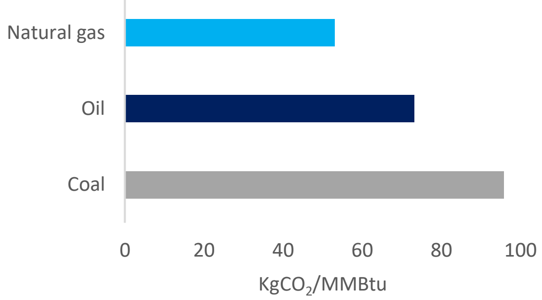


Figure iv: CO_2 emission intensity of hydrocarbon fuels



Source: GECF Secretariat based on data from Enerdata and US EIA

As 2026 begins, the international climate agenda remains marked by a widening gap between ambition and implementation, underscoring the need to shift from potentially unattainable aspirational targets toward pragmatic and achievable pathways grounded in technological readiness, economic feasibility, and social realities. In an increasingly complex energy and climate environment, effective climate action must reconcile emissions mitigation with the imperative to sustain economic development and social progress.

Against this backdrop, global energy demand is projected to continue rising, while hydrocarbon fuels are expected to retain a dominant share in the global energy mix through mid-century, according to all major energy outlooks. In this context, natural gas, owing to its lower carbon intensity compared to other hydrocarbon fuels, occupies a unique position. It is increasingly recognized both as a transition and a destination fuel within realistic decarbonization pathways. As global GHG emissions continue to increase and energy security concerns intensify, natural gas plays a critical role in addressing the energy trilemma by supporting emissions reduction efforts, enhancing energy security, and maintaining affordability.