

Methane and GHG Emissions Management Issues in LNG

- Policy, markets, and companies - January 2026

Hiroshi Hashimoto and Satoshi Kihara*

Introduction

The monthly report, in this latest edition, outlines global advancements in methane management and greenhouse gas reduction strategies within the energy sector, notably in the LNG industry, as of the beginning of 2026.

International developments highlight the use of satellite monitoring and regulations to curb leaks from landfills and aging offshore oil infrastructure. Examples from Colorado and India represent targeted policies and climate-smart agricultural practices that can reduce emissions without compromising economic productivity.

In Japan, recent initiatives focus on building low-carbon supply chains through hydrogen and ammonia projects which are also supported by government policy measures. Concrete rules are being introduced to establish carbon trading guidelines and pricing stability. A project financing deal was announced to promote a natural gas and desalination project in Qatar.

[Global Developments]

The California Air Resources Board (CARB) approved amendments to the Landfill Methane Regulation (LMR) in late November 2025. The amendments promote the use of advanced technologies, including satellite monitoring. The revised regulation applies to 188 landfills across the state.

A study published in the Journal of Environmental Management by researchers from Indian Universities shows that Bihar in eastern India has become a persistent methane emission hotspot. The study published in early January 2026 suggests that locally adapted measures - such as improved water management, climate-smart agriculture, livestock waste management, and wetland conservation - can achieve reductions. **According to Australia's Discovery Alert, in offshore Angola, shallow-water legacy infrastructure emits more than ten times as much methane as modern FPSOs.** The findings revealed in early January 2026 point to the need for measurement-based regulatory frameworks that combine satellite and airborne observations.

According to the Durango Herald, in Colorado, methane regulations introduced in 2014 have led to substantial reductions in methane emissions alongside continued growth in natural gas production. This trend is supported by analyses

* The writers belong to the Energy Security Unit.

based on independent, wide-area observations from Japan's GOSAT satellite, conducted on behalf of EDF, according to the article in the middle of January 2026.

[Developments in Japan]

Mitsui & Co and Hokkaido Electric Power announced in the middle of December 2025 that they had obtained certification under Japan's price-gap support scheme established pursuant to the Hydrogen Society Promotion Act for a low-carbon ammonia supply chain by fiscal year 2030. Mitsui will offtake low-carbon ammonia from the Blue Point project in Louisiana and will receive price-gap support.

NYK and Knutsen NYK Carbon Carriers AS (KNCC) announced in late December 2025 that they had signed an MoU (memorandum of understanding) with Petronas CCS Solutions Sdn. Bhd. to assess the feasibility of a CCS (carbon capture and storage) value chain using the ambient-pressure elevated-temperature (EP) method.

A ministerial ordinance under the revised GX Promotion Act was issued in the middle of January 2026, setting out detailed rules for the GX-ETS. The ordinance specifies the covered sectors and processes, as well as detailed methodologies and coefficients for calculating emissions. It also defines a price ceiling and a floor (reference) price to curb excessive volatility.

JBIC (Japan Bank for International Cooperation) signed a project finance loan agreement in the middle of January 2026, committing up to USD 990 million, with RAS Abu Fontas Power Company, a Qatari company invested in by Sumitomo Corporation, Shikoku Electric Power, Korea Southern Power, and others, for Qatar's Facility E natural gas-fired power generation (2.4 GW) and desalination project. The total amount of co-financing is approximately USD 2.97 billion.

Contact: report@tky.ieej.or.jp