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Methane and GHG Emissions Management Issues in LNG **- Policy, markets, and companies - May 2026**

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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 May 2026.

International agencies emphasize the urgent need to bridge the gap between climate goals and regulatory enforcement through improved satellite monitoring and expanded databases for coal and waste sectors.

Despite international climate targets, the IEA (International Energy Agency) warns that fossil fuel methane emissions remain at near-record levels, necessitating stricter regulatory frameworks. UNEP's (United Nations Environmental Programme) MARS (Methane Alert and Response System) is leveraging satellite data to mitigate major leaks across energy, coal, and waste sectors.

Meanwhile, the EU (European Union) is moving forward with methane import rules starting in 2027.

In Japan, key developments include the testing of methane oxidation catalysts for ships and the revitalization of local hot spring gas resources.

[Global Developments]

The Global Methane Tracker 2026, published by IEA (International Energy Agency) on 4 May 2026, highlights that despite international pledges, methane emissions from fossil fuels remained at near-record levels in 2025. The report emphasizes that closing the implementation gap between climate targets and real-world action is essential for both environmental health and global energy security. While satellite monitoring has significantly improved the detection of large leaks, the report urges governments to transition from setting ambitions to enforcing stricter regulatory frameworks.

UNEP (United Nations Environment Programme) published on 21 April 2026 *Methane Alert and Response System Snapshot - April 2026 Update*. MARS integrates data from more than 30 satellites to alert countries of major methane emissions and enable action. The snapshot provides information on mitigation cases enabled and

confirmed via MARS, country response rates to alerts, and the world's 50 largest methane sources across sectors, as detected by satellites. By using satellite surveillance, the initiative has addressed 41 major leak sites. Data indicates that countries with designated focal points achieve significantly higher response rates and more effective mitigation outcomes. The documentation includes a comprehensive list of the top 50 emitters, primarily originating from the energy, coal, and waste sectors in nations like Turkmenistan, China, and Chile.

UNEP / IMEO (United Nations Environment Programme / International Methane Emissions Observatory) announced on 4 May 2026 a major expansion of its global methane detection system, enabling satellites to track emissions from coal mines and waste facilities for the first time. The plan, unveiled at a high-level methane event hosted by France under its G7 Presidency, follows UNEP analysis of the world's top 50 methane sources - many of which stem from the coal and waste sectors. It comes alongside new industry commitments from national oil companies in Angola, Libya and Pakistan, bringing global coverage of UNEP's Oil and Gas Methane Partnership 2.0 (OGMP 2.0) closer to half of oil and gas production. To ensure alerts result in real-world fixes, IMEO and IEA (International Energy Agency) released a new *MARS Response Blueprint*. IMEO also launched its *Coal Methane Database*, delivering unprecedented mine-level transparency. The database provides emissions estimates for nearly 250 coal mines, covering more than half of global metallurgical coal production.

The European Commission proposed on 22 April 2026 the "*AccelerateEU*" package, including short- and long-term measures to reduce reliance on imported fossil fuels and accelerate the shift to clean, domestic energy. The package combines emergency support measures, including coordinated gas storage, targeted consumer subsidies and potential state aid flexibility, with structural actions to scale up electrification, renewable energy and clean fuels.

CTCI Thailand, a CTCI Group company, announced on 29 April 2026 that it had secured EPC contracts for the Olefins 3 Cold Energy Utilization Project (OCP), a joint project by PTT Global Chemical (PTTGC) and PE LNG. A new cold energy utilization facility will be built in Nongfab, Rayong, linking PTTGC's olefins plant and PE LNG's LNG regasification facility. The project features a closed-loop mixed refrigerant system linking the two plants, enabling the transfer of the cold energy released during LNG regasification at the PE LNG terminal to the PTTGC plant for use in olefins cooling. The refrigerant then carries heat energy back to the PE LNG terminal to warm LNG and convert it to natural gas. The project is scheduled for completion in 2028.

Spain's HAM Group announced on 29 April 2026 that, during the month of May, its

entire network of refuelling stations would offer Bio-LNG and/or Bio-CNG, completing the rollout announced at the end of 2025 to extend the use of biomethane across its network.

According to Japan's MLIT (Ministry of Land, Infrastructure, Transport and Tourism) press release on 7 May 2026, the IMO (International Maritime Organisation) is working on revising the Annex to the Convention for the Prevention of Marine Pollution (MARPOL) to introduce new international rules with the aim of achieving zero GHG emissions from international shipping by 2050. However, following strong opposition from some countries at an extraordinary committee meeting in October 2025, the 84th session of IMO Marine Environment Protection. Committee (MEPC 84) decided to suspend the adoption process for one year. At MEPC 84, Japan, Liberia and other countries presented proposed amendments. Working group meetings are scheduled in September and November to consider the proposed amendments, with a view to resuming the adoption deliberation in early December 2026. Japan's proposed amendment includes revisions to the standards for GHG emissions per unit of energy (GHG intensity) to include LNG-fuelled vessels as compliant vessels.

JAXA (Japan Aerospace Exploration Agency) and VNSC (Vietnam National Space Center) signed the *"Revised Agreement on the Exchange of Satellite Data between VNSC and JAXA"* on 28 April 2026. Since September 2017, the two organizations have cooperated in the use of JAXA's *"DAICHI-2" (ALOS-2)* for disaster management, agriculture, and forestry, as the satellite is capable of observing the earth's surface even under adverse weather conditions and at night, while also providing vegetation monitoring capabilities. The revised agreement adds the provision of observation data from the successor satellite *"DAICHI-4" (ALOS-4)*, thereby strengthening monitoring of frequent flood disasters in Vietnam. In addition, as part of the *"Space Applications for Environment (SAFE)"* initiative under the *Asia-Pacific Regional Space Agency Forum*, the two organizations will further enhance research and development cooperation led by VNSC on the use of satellite data to reduce methane emissions from rice paddies."

MB Energy, Daimler Truck AG and Kawasaki Heavy Industries, Ltd. (KHI) announced on 11 May 2026 that they had signed a Joint Development Agreement (JDA) to establish a liquefied hydrogen supply chain to Europe via the Port of Hamburg. The objective is to achieve Commercial Operation Date (COD) for the supply of liquefied hydrogen and hydrogen by the early 2030s.

MorGen Energy, a European developer of large-scale green hydrogen projects and a wholly-owned subsidiary of Trafigura, announced on 7 May 2026 that it had been awarded a conditional grant of up to EUR 422.75 million to support the future operations

of its Njordkraft green hydrogen project in Esbjerg, Denmark, under the European Hydrogen Bank auction financed by the EU Innovation Fund. The first phase of the Njordkraft development comprises 300 MW of electrolyser capacity with the potential to scale to 1 GW over time. The project is expected to produce renewable hydrogen compliant with EU Renewable Fuels of Non-Biological Origin (RFNBO) standards for delivery to industrial customers in Germany and mainland Europe. The project is designed to connect directly into the developing Danish and German hydrogen backbone system - a cross-border hydrogen pipeline connecting Esbjerg to Heidenau, near Hamburg - and will target offtakers in sectors including steel, refining and energy-intensive manufacturing across Europe. Targeting annual production of approximately 45,500 tonnes of renewable hydrogen, the project is expected to be one of Europe's most significant hydrogen developments.

[Developments in Japan]

Mitsubishi Corporation announced on 1 May 2026 that it had formulated its "*Roadmap 2.0 Toward a Carbon-Neutral Society*". Considering changes in the environment surrounding decarbonization and emerging social challenges - including heightened geopolitical risks and the rapid spread of AI since the release of "*Roadmap 1.0*" in October 2021 - the company revised its strategic guidelines to address these issues head-on while advancing its energy transformation initiatives.

Kawasaki Kisen announced on 7 May 2026, that it had been selected as a constituent of the "*Dow Jones Best-in-Class Asia Pacific Index*", part of the globally recognized ESG investment benchmark "*Dow Jones Best-in-Class Indices*".

INPEX CORPORATION announced on 8 May 2026 that it had been selected as a constituent of both the "*Dow Jones Best-in-Class World*" and the "*Dow Jones Best-in-Class Asia Pacific*".

NYK (Nippon Yusen Kabushiki Kaisha) has conducted the first measurement in a demonstration test of a methane oxidation catalyst system for LNG-fuelled marine engines aboard the LNG bunkering vessel *KEYS Azalea*, which is owned by KEYS Bunkering West Japan and managed by Taiheiyo Kaiun, according to NYK's announcement on 14 May 2026. The catalyst system was jointly developed with Mitsubishi Heavy Industries Marine Machinery, Mitsubishi Shipbuilding, and Daihatsu Infinearth. Shipboard measurements confirmed that the exhaust gas treatment unit achieved a methane oxidation rate of more than 90%. The full-scale demonstration unit will remain installed on the vessel for approximately one year to verify performance under actual operating conditions.

Hokkaido Gas announced on 19 May 2026 that it had signed a research cooperation agreement with the Hokkaido Research Organization to promote the utilization of locally available hot spring-associated gas and had launched a demonstration test using gas power generation systems. In the demonstration, the company will use the home gas cogeneration system "COREMO" to evaluate combustion performance when fuelled with hot spring-associated gas, while also examining challenges and potential solutions for its effective utilization. In Hokkaido, hot spring-associated gas containing combustible natural gas such as methane has been identified at around 500 hot spring sources; however, much of it remains unused and is currently being released into the atmosphere.

Kawasaki Heavy Industries, Ltd. (KHI) announced on 22 April 2026 that KHI, Edmonton Region Hydrogen Hub (ERHH), Alberta's Industrial Heartland Association (AIHA), and Edmonton Global had signed an MoU (Memorandum of Understanding) at the international exhibition "Canadian Hydrogen Convention 2026" held in Edmonton, Canada, to explore the potential for building a liquefied hydrogen supply chain.

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