

This abstract will be presented during LNG2023 conference on 10-13 July in Vancouver, Canada among many other innovative projects, ideas and outlooks. LNG2023 will provide a unique platform for the global LNG industry and key stakeholders to discuss, debate, and showcase the latest industry developments and opportunities.



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TOOLKIT FOR EMISSIONS REDUCTION AND INCREASED SAFETY

Liquefied natural gas (LNG) facilities of various scales are becoming an increasingly necessary component to natural gas infrastructure systems. As technology advances in the production and optimization of gas reserves, its transportation safety, and meeting the demand for stable energy sources, all of this leads to the expansion of the LNG market globally.

Along with this increase in liquefaction projects, as part of maintaining stringent environmental and safety standards, producers must conduct a thorough assessment of the potential emissions and their rates from leaking components in gas compression, and liquefaction facilities.

Fixed gas Optical Gas Imaging (OGI) technology improves site safety, reduces emissions, and provides additional cost savings with the continuous monitoring of emissions. Secondly, the quantification of those fugitive emissions can be performed using Flow Sampling technology, that measures the emission rates accurately.

The overall benefits are:

- A significant reduction of total emissions rates due to faster identification and repair of leaks with continuous emission monitoring
- Identification of ongoing emissions from unmonitored equipment
- Identification of potentially hazardous conditions associated with emissions from process equipment, the monitoring of which can be incorporated into the plant safety programs.
- Identification of exact emission source, preventing repair errors
- The ability to monitor multiple components and areas.
- Volumetric quantification of emission rates as part of a facility's Fugitive Emissions Reduction Programs (FEMP)
- Meeting regulatory framework for emission detection, quantification, and product safety

Fixed OGI and Flow Sampling technologies add significant flexibility for detecting fugitive emissions, evaluating its severity through quantification, and performing risk management.

To view the full conference agenda, visit <https://www.lng2023.org/lng-programme-overview>