

How We Monitor Methane Emissions

Methane emissions are responsible for 25% of man-made global warming. For the oil and gas industry, reducing methane emissions is the lowest hanging fruit to limit global warming and reach the Paris Agreement goals.

We support the oil and gas industry with reducing methane emissions through measurement, reporting, and verification. We do this for all source types and from well to market.

With certified technicians, advisory services, innovative bottom-up and top-down measurement techniques and a cloud-based software application, we help you reduce methane emissions year after year in a sustainable and cost-effective way.

This Makes Us Different

Dedicated and experienced team

With over 30 years of experience, our well trained and qualified specialists apply best available techniques.

Innovative player

Innovation and continuous improvement is key. We test emerging technologies and use state-of-the-art software platforms SFEMP and PRIMS.

Strategic partner

We go beyond performing measurements onsite. Our advisory services and cooperation with international regulators and policymakers testify to this.

Managing emissions is what we do

Delivering Environmental Services & Pipeline Management is our core business.

Reliable and accredited processes and methodologies

Aellia is a certified and laboratory accredited organization with ISO 9001, 14001 and SCC and ISO 17025 612-TEST Belac.

Active globally

As a global solution provider, we are active in over 35 countries.



Aellia is a partner in environmental emission intelligence for asset intensive industries. We combine precise, real-world emissions measurement with deep regulatory and operational expertise to turn field data into decision ready insight. By supporting organisations across diverse regulatory and operational contexts, we enable confident action and continuous improvement in an increasingly complex environmental landscape.



ENVIRONMENTAL SERVICES

Methane Emission Measurements and Quantification

- Expert in bottom-up and top-down measurement, reporting, and verification of methane emissions
- Measurement of all source types for the full oil and gas value chain
- Cloud-based software to shape your emission management process and deliver compliant reports

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Above Ground

FID / PID

FID/PID devices give you accurate measurement data in Mass Emission Calculations. This method complies with the EPA Method 21 Protocol. With our ISO 17025 Laboratory Accreditation, we ensure that your LDAR measurement data is accurate and reliable.

High Flow Sampling

Reach the OGMP Gold Standard and comply with the EU Methane Regulation by quantifying leaks through High Flow Sampling. This direct measurement technique gives you the most accurate results in mass leak rates in kg/year.

Quantified Optical Gas Imaging

Non-accessible leaks can be quantified by using the QOGI technique. Please note that an OGI camera must be fixed on a tripod and multiple external factors (wind, outside temperature) must be taken into account to perform a proper measurement.

Optical Gas Imaging – Smart LDAR

OGI cameras are ideal for detecting large leaks and will give you visual evidence resulting in Leak / No Leak factors. However, it is inadequate for smaller leaks. To guarantee qualitative screenings, we received the NTA 8399 certification from a governmental body.

Passing Valves Leak Detection

We use ultrasonic equipment such as the VPAC II to detect vent and flare losses from leaking passing valves.

Monitoring On Vents

Technologies to identify venting emissions include calibrated vent bags and anenometers. With the High Flow Sampler, we quantify methane emissions on valves, regulators, and vents.



Flaring & Incomplete Combustion

Flare Efficiency Monitoring

Flaring is performed with a multispectral Optical Gas Imaging camera that measures CH4 and CO2 in the fumes.

Incomplete Combustion Assessment

Our technicians assess all combustion devices that use gas as fuel with a Best Available Technique to measure the mass flow and emission rates.

Underground

Gas Leak Detection and Quantification

We detect methane leaks on buried pipelines on foot, by car, with our own sniffing dogs and with other innovative solutions. After detection follows leak quantification to meet new regulatory requirements. Our experts can help.

Technologies for Fugitive Emissions



Site-Level Measurements

Continuous Monitoring

We analyze and test a wide range of technologies for continuous monitoring.

UAV Drone Surveys

Together with our partner, we detect methane emissions using UAV drones to detect super emitters and hotspots. Increase people's safety and perform efficient measurements to comply with the Level 5 reporting target.

Reconciliation & Reporting

Once the measurements are done, we reconcile the data from the bottom-up and top-down measurements. Our team delivers a compliant report using in-house developed emission management software SFEMP.



Full Support for OGMP Members

Advisory

- Assess current emission situation;
- Perform a gap analysis;
- Create a roadmap towards the Gold Standard;
- Create inventory and database;
- Recommendations on the best methane measurement and abatement technologies;
- Train your professionals to ensure OGMP requirements are clear across all assets.

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Execute level 4/5 measurements

- Conducting methane emission measurements for all source types on source level (Level 4) and site level (Level 5);
- Determine (manufacturer) source-specific Emission Factors.

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Reconciliation and reporting

- Reconciliation of bottom-up and top-down measurements;
- Delivering a compliant OGMP report.

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