

PICARRO

Your Path to NetZero

EU Methane Regulation – How Operators and Stakeholders along the Value Chain can implement it

Renato Winkler, PhD 12 March 2024



Picarro is a global leader in the measurement, quantification, and reduction of methane emissions.

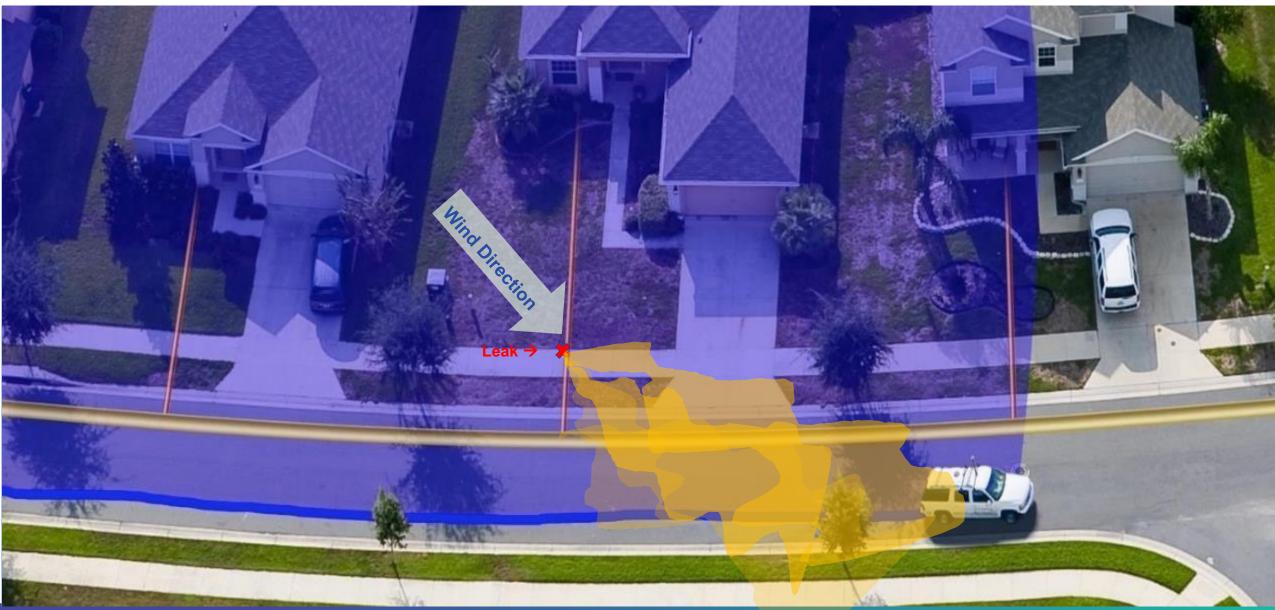
25 Years of Innovation

Serving the gas industry since 2012

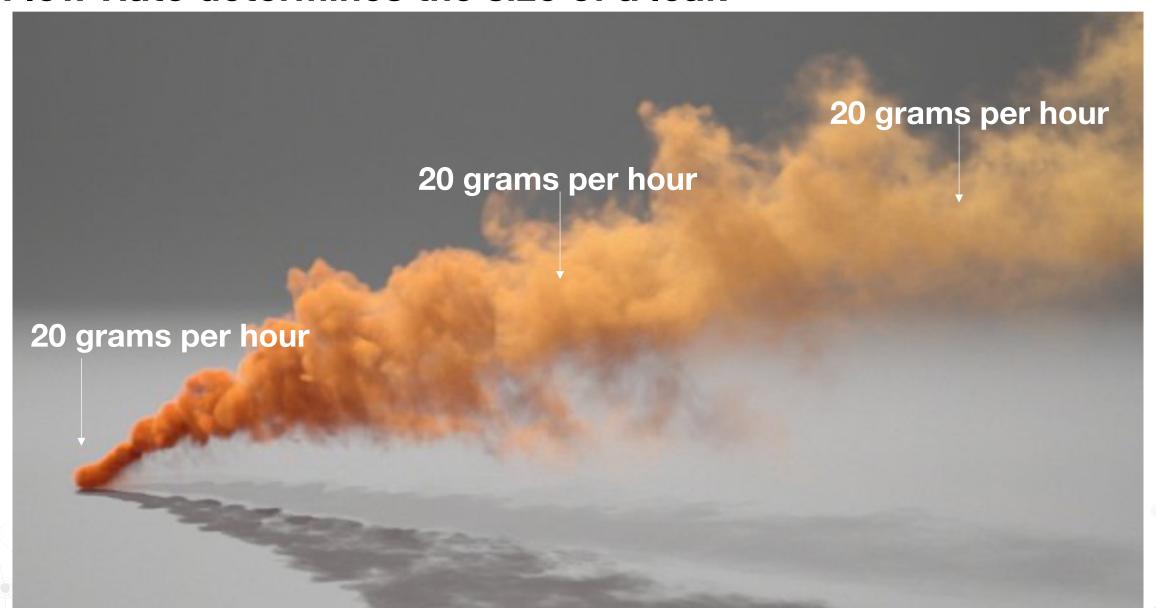
- 1000s of Picarro instruments deployed worldwide
- R&D, engineering, and manufacturing in California
- Offices in US, Europe, LATAM, India and APAC regions
- World's largest emission data set (DSOs)
- Emissions Quantification & Reduction analytics
- System-wide leak risk management
- ISO 9001, ISO 27001, SOC2 Certified

Picarro Mobile Emission Measurements

Measure, don't estimate



Flow Rate determines the size of a leak

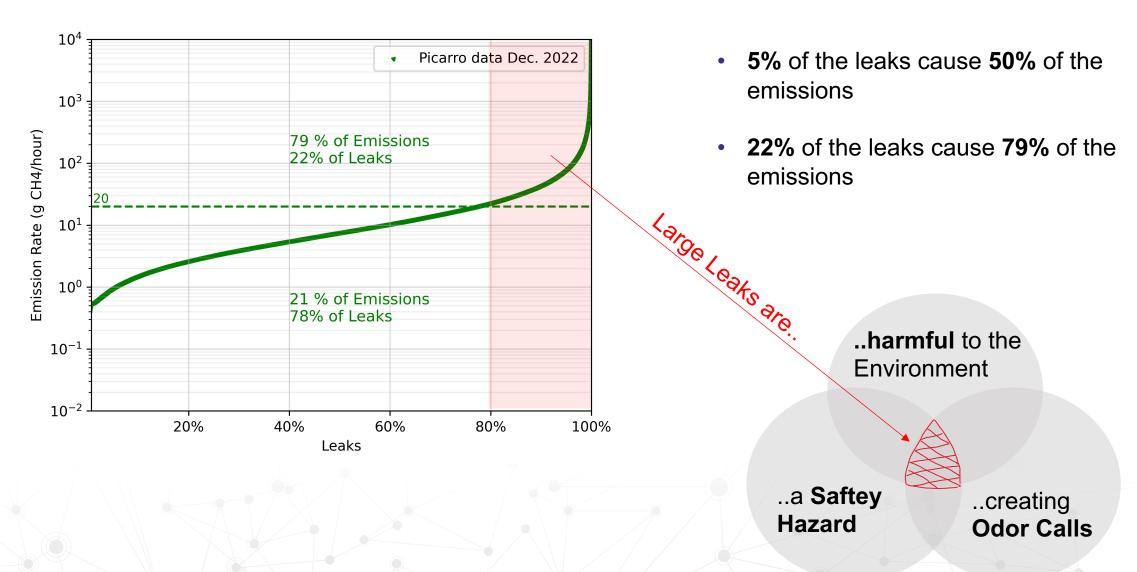


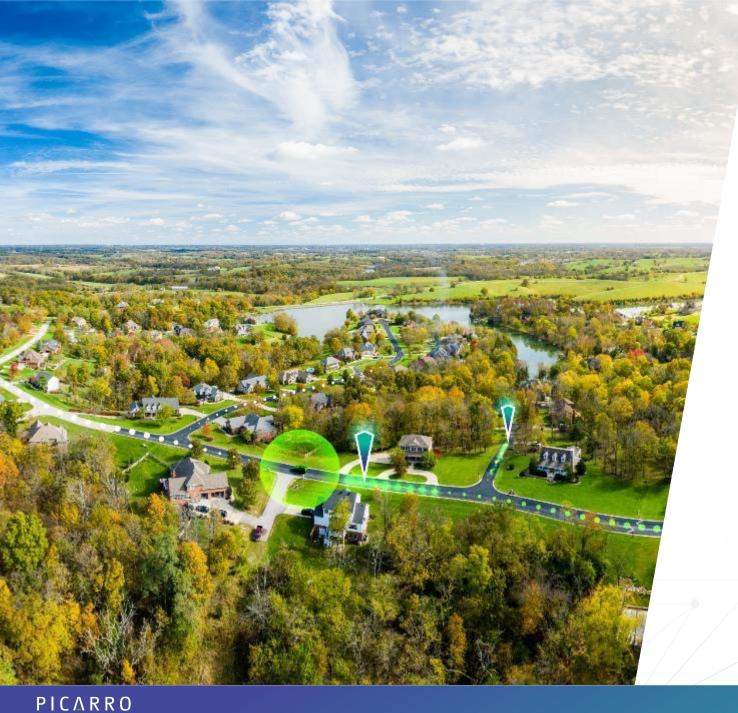
The problem with concentration



The importance of a leak is determined by its flow rate

Focus on Large Leaks





How can Picarro help implementing the Emissions Regulation?

Actionable Data for Emissions-Reduction & Risk-Management

Direct Emission Measurements at the Scale of the Distribution Grid

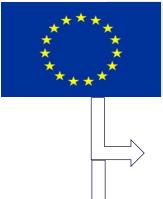
Data Collection

Data Analytics









EU Methane Regulation

- Suitable for 2-Step Approach
- Externally validated method
- Prioritization of large emitters
- Discrimination between Natural Gas and other Methane sources

Art. 12 (Monitoring & Reporting)

- Specific Source-level Emission (according OGMP-Project Veritas protocol)
- · Site-level Emission Measurements directly measured from the vehicle

Art. 14 (LDAR)

- Step 1 to determine from the vehicle if a leak is > 5 gph / >1 gph
- Step 2 to determine if the leak needs to be repaired (hand-held device)
- · Post-Repair Check & Verification of leak indications below the threshold



Emission Quantification & Reduction

- ✓ Source- and / or Site-Level measurements
- ✓ OGMP 2.0 Gold Standard
- ✓ Verifiable Emission Reductions



National Compliance Survey Rules

- Reduction of Odor Calls
- LDAR according to national technical standards
- Network-wide Risk Management

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