MONITOR CH4

PICARRO

Your Path to NetZero

Compliance as an Opportunity

Francesco Ciocca, Regional Director
fciocca@picarro.com

Bologna, July 9, 2026

Who are we?

🧪 25+ years measuring hazardous air pollutants & Greenhouse Gases

👩‍🔧 400+ employees worldwide

🌍 6,000+ systems | 100+ countries

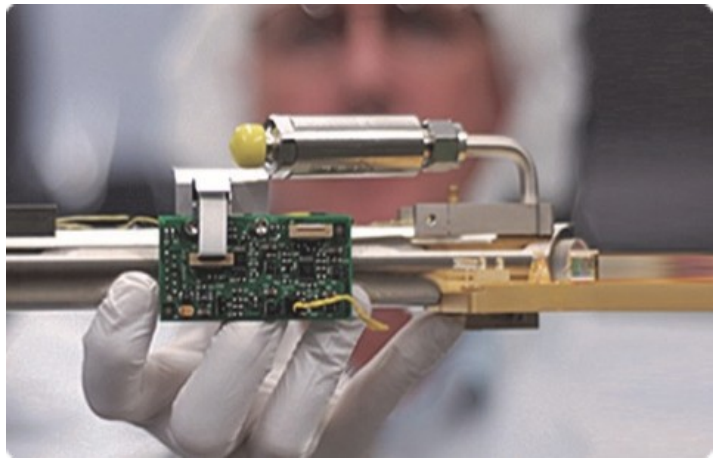
🌐 Headquartered in Santa Clara, CA (USA)
EU Office in Geneva (Switzerland)

🏢 Global footprint

© 2026 Picarro Inc.

Cavity Ring-Down Spectroscopy (CRDS)

- Laser-based → Methane & Ethane
- High-reflectance mirrors → long optical path
- Small cavity → ppb precision and accuracy / fast response
- Light decay rate (time-based) → self-referencing, no drift

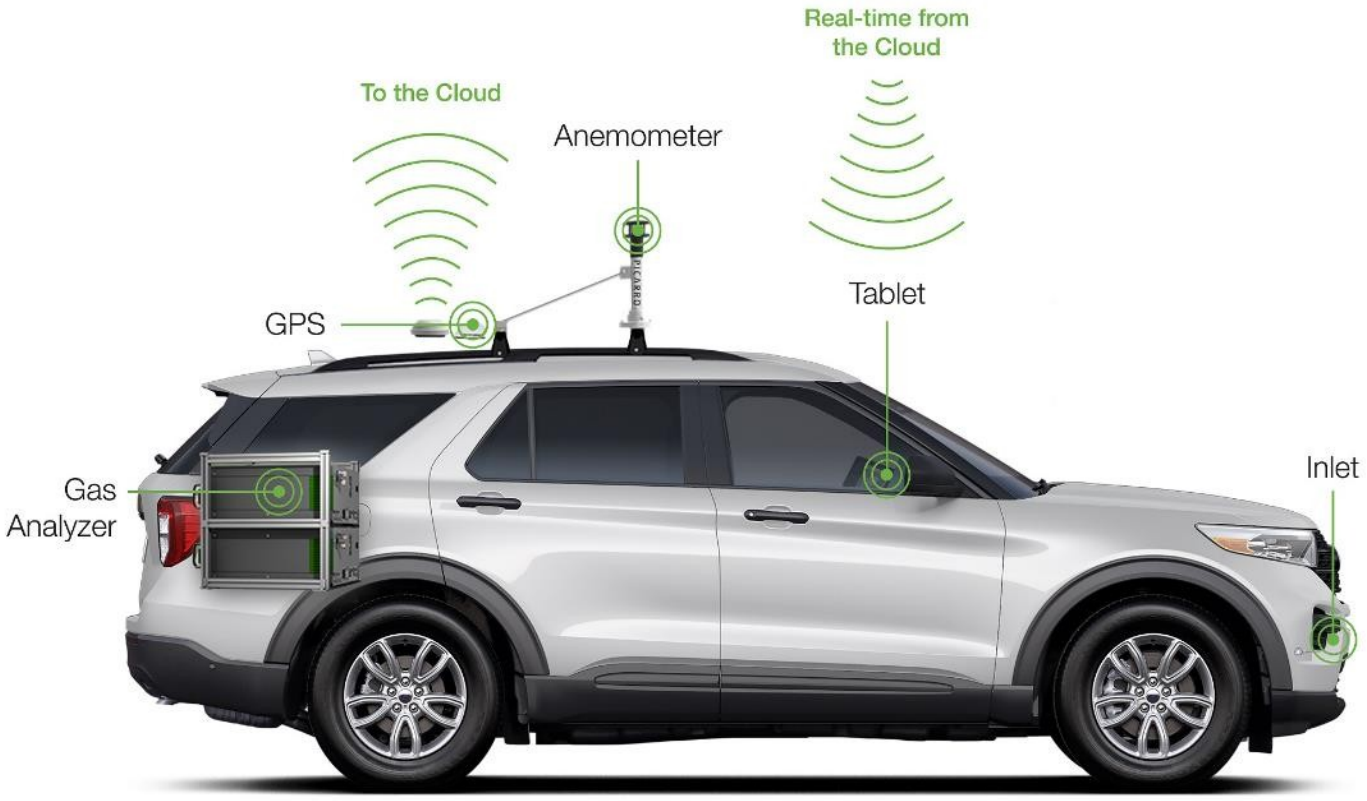


© 2026 Picarro Inc.

- Trusted by **100+ operators across 20+ countries**
- 25’000 km/week of network inspected / 7M+ leaks
- Presence at Local (CIG, UNI) and EU (CEN) working groups

© 2026 Picarro Inc.

Advanced Mobile Leak Detection (AMLD) for 10+ years



Hardware

- **PPB methane/ethane instrumentation (CRDS)**
- Anemometer
- **Insensitive to weather conditions**
- Inertial GPS
- Cloud connected

Software & Analytics

- Machine learning algorithms
- Atmospheric plume modeling computation
- **Source discrimination** to avoid false positives
- Leak characterization estimation (risk, situation, …)
- **Flow rate quantification**
- Advanced analytical solution

© 2026 Picarro Inc.

2-step Approach for Compliance to EU Methane Reg.

STEP 1: Vehicle

- Emissions Quantification

For each methane plume detected by the system, the emission (flow) rate of a source is calculated by directly measuring the concentration profile and instantaneous wind as the vehicle transects a gas plume

$$Q = u \iint [C(y,z) - Co]\, dy\, dz$$

- Site Level (FOV)
- Areas at high probability of leak(s)

© 2026 Picarro Inc.

2-step Approach for Compliance to EU Methane Reg

STEP 1: Vehicle

- Emissions Quantification

For each methane plume detected by the system, the emission (flow) rate of a source is calculated by directly measuring the concentration profile and instantaneous wind as the vehicle transects a gas plume

$$Q = u \iint [C(y,z) - Co]\, dy\, dz$$

- Site Level (FOV)
- Areas at high probability of leak(s)

STEP 2: Leak Confirmation

- Concentration is sufficient
- Reconciliation site – source

© 2026 Picarro Inc.

2-step Approach for Compliance to EU Methane Reg.

STEP 1: Vehicle

- Emissions Quantification

For each methane plume detected by the system, the emission (flow) rate of a source is calculated by directly measuring the concentration profile and instantaneous wind as the vehicle transects a gas plume

$$Q = u \iint [C(y,z) - Co]\, dy\, dz$$

- Site Level (FOV)
- Areas at high probability of leak(s)

STEP 2: Leak Confirmation

- Concentration is sufficient
- Reconciliation site – source

Formally recognized by OGMP 2.0 for Level 5 (TGD 01/26 for Distribution)

© 2026 Picarro Inc.

Tackle Multiple Gas Industry Challenges

- Shareholders Demand
- Sustainability in Ops
- ROI

- New Standards
- Local/ International Regulations

- Changing Customer / Legislator / Regulator Expectations
- Gas affordability

Why it matters

Tackled in isolation, emissions compliance is a pure cost. Addressed together, these challenges become an opportunity — and a path to ROI.

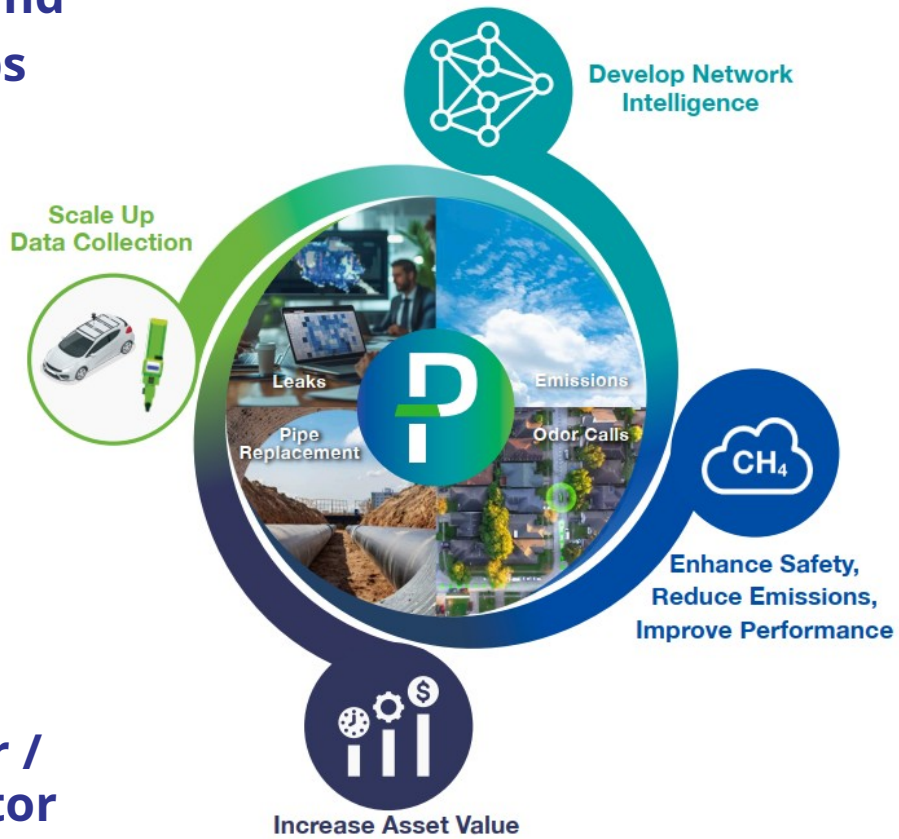
© 2026 Picarro Inc.

Tackle Multiple Gas Industry Challenges

- Shareholders Demand
- Sustainability in Ops
- ROI

- New Standards
- Local/ International Regulations

- Changing Customer / Legislator / Regulator Expectations
- Gas affordability



Lower OPEX

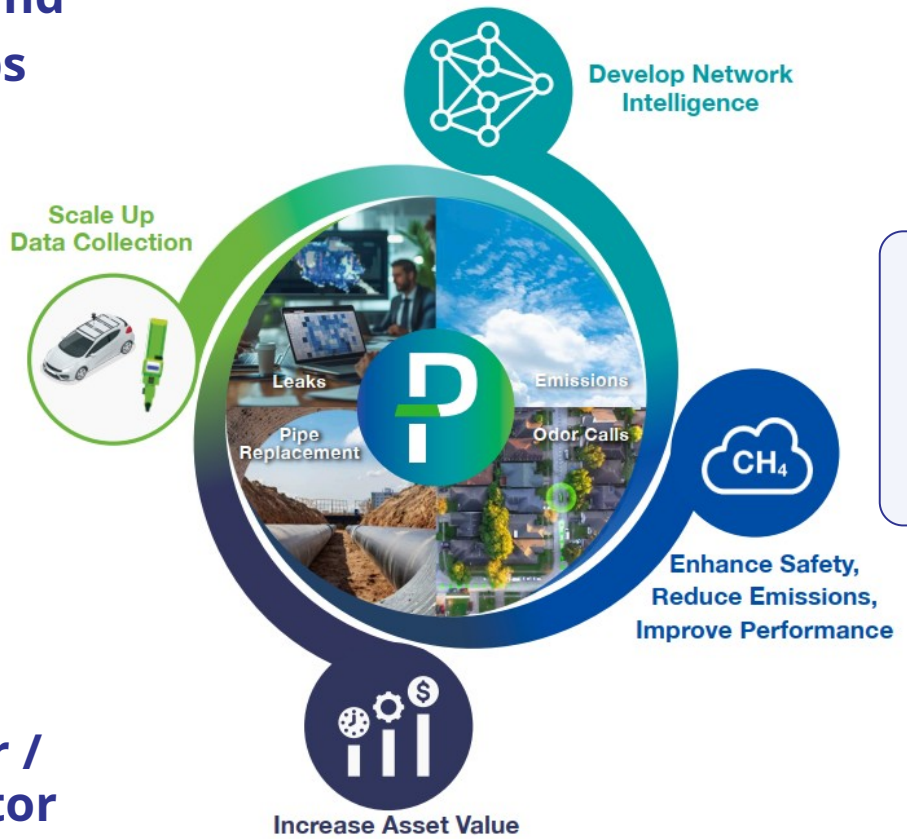
© 2026 Picarro Inc.

Tackle Multiple Gas Industry Challenges

- Shareholders Demand
- Sustainability in Ops
- ROI

- New Standards
- Local/ International Regulations

- Changing Customer / Legislator / Regulator Expectations
- Gas affordability

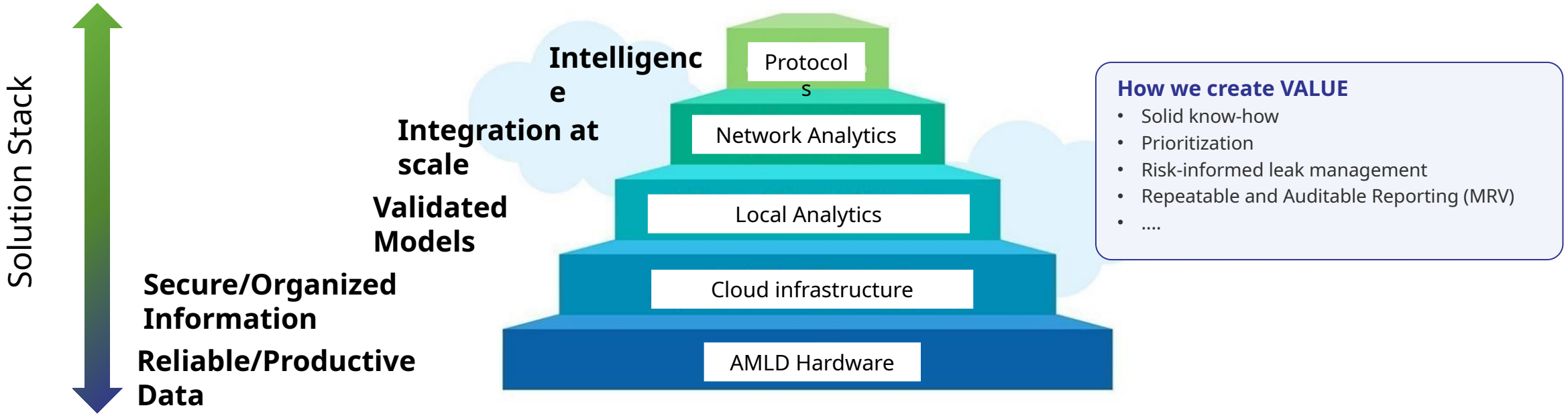


Lower OPEX

How we lower OPEX
- Less Emergency calls and repairs
- Balancing of planned repairs between seasons
- Targeted repairs
- Less gas leaking
- IT / Ops process improvement

© 2026 Picarro Inc.

From Leak Detection to a Fully Integrated Solution



How we create VALUE

- Solid know-how
- Prioritization
- Risk-informed leak management
- Repeatable and Auditable Reporting (MRV)
- ....

AMLD is only a fraction of the solution

Only a fully integrated solution is an investment, rather than a cost

© 2026 Picarro Inc.

Francesco Ciocca
Regional Director
Tel: +41 77 819 5141
Email: fciocca@picarro.com

PICARRO

gas.picarro.com