

# EU and OGMP 2.0 Compliance

High accuracy, low cost, and automated reporting

October 2025



### **Xplorobot Smartphone Integrated Laser OGI**

US EPA OOOO a/b/c and Subpart W, EU regulations, and OGMP 2.0 Level 4 and 5

### 1. Tunable Diode Laser Absorption Spectroscopy (TDLAS)

Sensor acquires methane concentration data (PPM-m) at a rate of 10 Hz

#### 2. Anemometer and Thermometer

Continuous measurement of wind speed and ambient temperature

### 3. Trigger

To tag emissions and catalog components in equipment

#### 4. Smartphone

Records high-resolution images, GPS data, and enables sensor to Cloud connectivity

#### 5. Xplorobot Mobile App

Visualizes methane in real-time, records tagged emissions, and creates compliance records for non-emitting components



# Xplorobot Laser OGI detection rage is approved for 50m

With a flow rate detection threshold of 1 g/hr; up to wind speeds of 20 mph

**Hard-to-access components** 



**Emission on tank from the ground** 



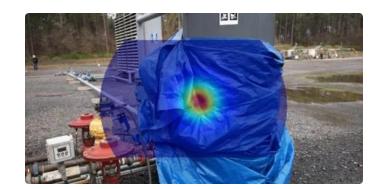
**Detection from a vehicle** 

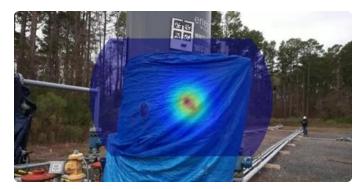


# **Xplorobot Laser OGI detects emissions that Infrared OGI cannot**

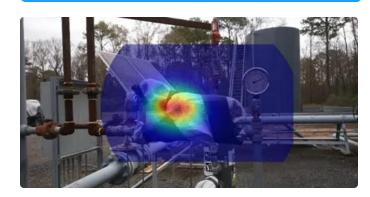
Our next focus is buried pipelines

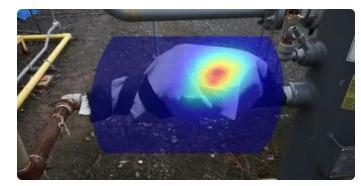
### **Emissions under tarps**



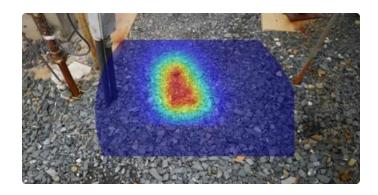


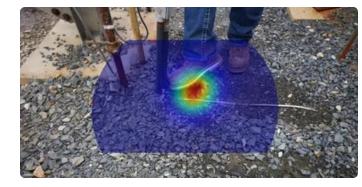
### **Emissions under insulation**





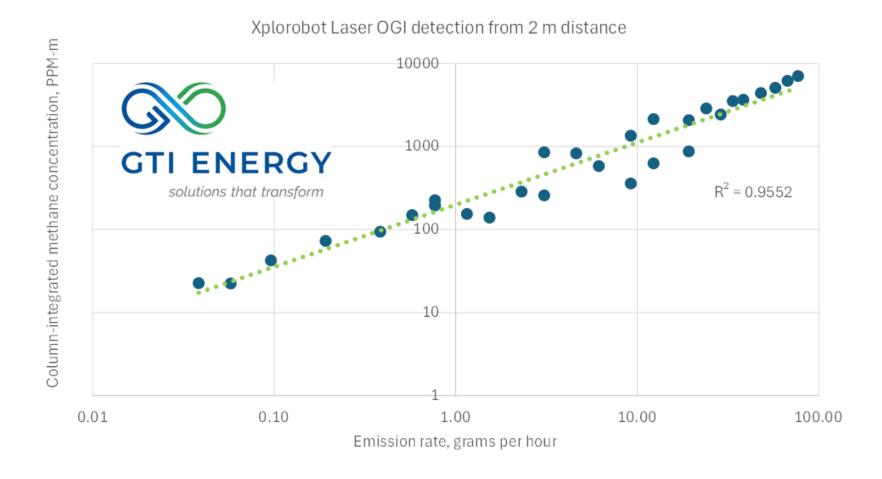
### **Emission from buried tubing**





### **Xplorobot Laser OGI**

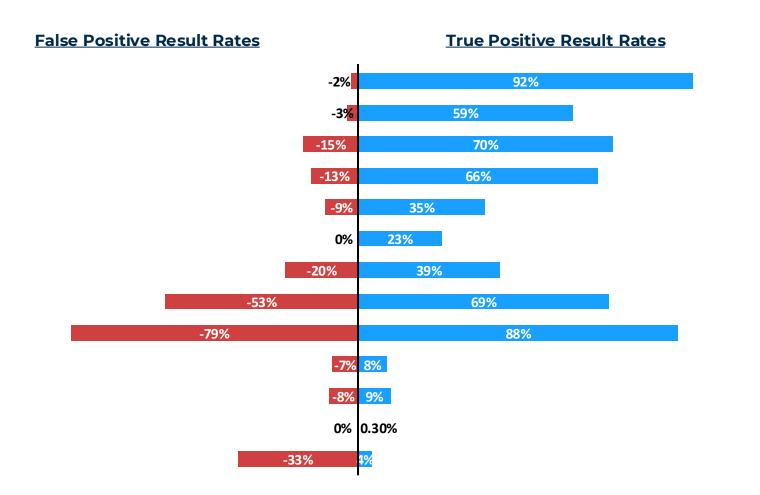
Tested at GTI Energy Lab in Chicago—Demonstrated a Minimum Detection Limit of 0.04 g/hr





### **Xplorobot Laser OGI**

Achieved best-in-class results at METEC\* in 2023



<u>Technology</u>	<u>Aggregate Score</u>
∞ xplorobot	90%
<b>D</b> (8 Point Sensors)	56%
<b>F</b> (8 Point Sensors)	55%
L (6 Point Sensors)	54%
C (6 Point Sensors)	26%
J (2 Scanning / Imaging Device)	23%
<b>B</b> (1 Scanning / Imaging Device)	19%
A (8 Point Sensors)	17%
E (16 Point Sensors)	9%
I (1 Scanning / Imaging Device)	1.2%
H (1 Scanning / Imaging Device)	1.3%
K (1 Point Sensor)	0.3%
<b>G</b> (1 Scanning / Imaging Device)	-29%

<sup>\*</sup> METEC is the Methane Emissions Technology Evaluation Center at the Colorado State University sponsored by the US Department of Energy. METEC provides independent blind testing for all methane detection technologies for the US market.

### Xplorobot meets the EU and OGMP 2.0 Level 4 and 5 requirements

Digital Compliance Database and Al-Driven Tagging

# Component-level compliance records for all emission sources:

- Automatic digital catalogue of all inspected components
- Every component is identified and tagged by AI during inspection
- Results, locations, and classifications stored in a secure database
- Full traceability and audit-ready compliance records
- Inspection coverage, GPS route, and dwell time confirmed from digital data

# 

### Emission sources to be mitigated



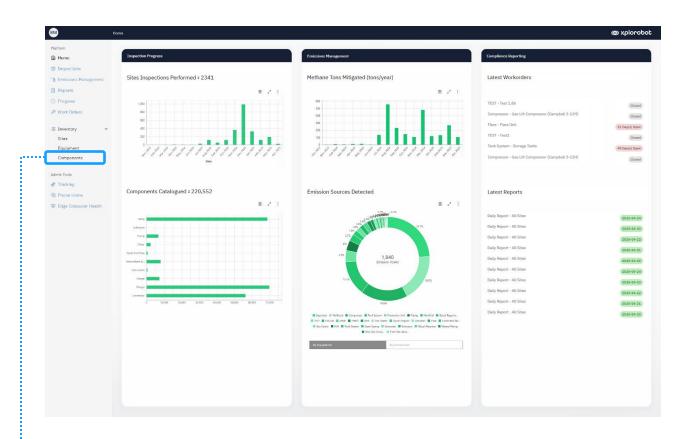


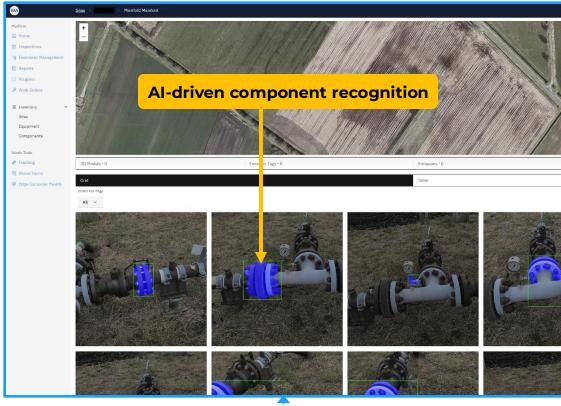




# **Methane Emissions Management Database**

Automates emission tracking, repair close-out, and regulatory reporting

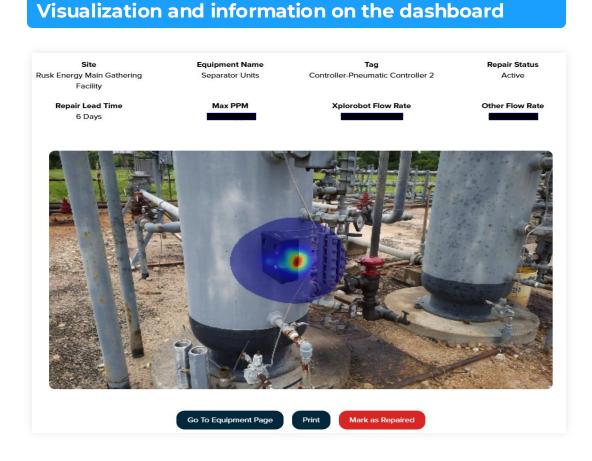






# **Xplorobot Digital Emission Tag**

Documents all information on emissions to enable repairs and reporting



### **Compliance database entries**

**Date:** 2024-06-12

**Time:** 13:26

**Operator:** Rusk Energy

Site: Main Gathering Facility

**Equipment:** Separator X

**Component:** Pneumatic Controller X

Maximum concentration: XXX

**Emission Rate Estimate:** XXX

**Emission Rate Confirmation:** XXX

**GPS Coordinates:** 29.746 -96.574

Wind Speed: 6.7 mph

**Atmospheric Pressure:** 101.62 kPa

**Repair Status:** Active

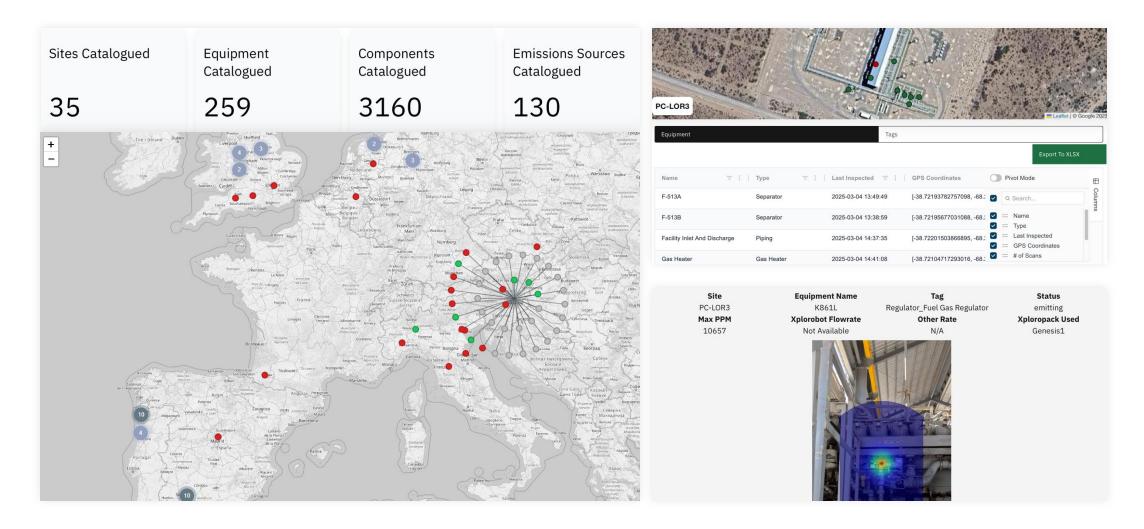
Repair Lead Time: 6 days

# Xplorobot is enabling compliance for operators worldwide





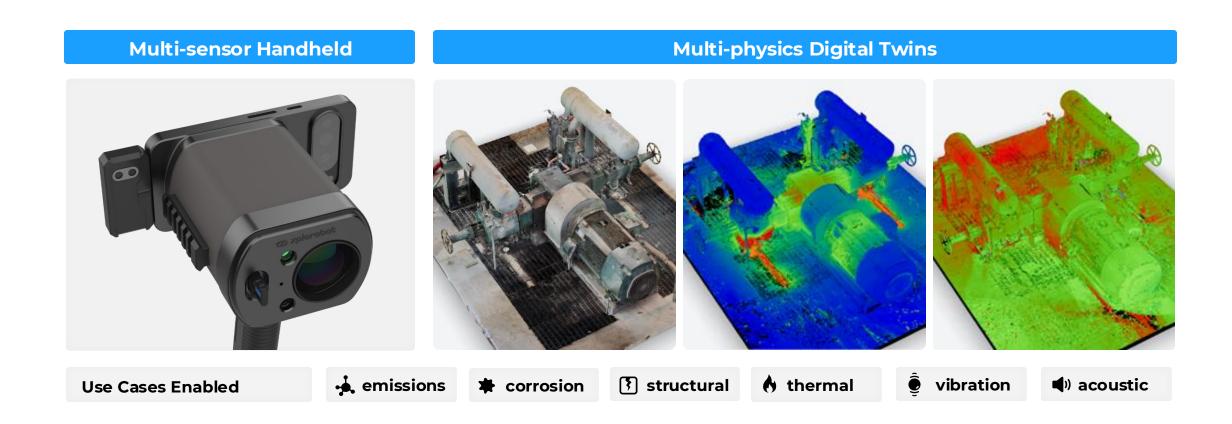
# 2025: Expansion in Europe and Italy





# **Next Steps: Multi-physics Digital Twin Platform**

Technology developed, ready for piloting with operators



# **Conclusions**



# From detection to digital compliance.

- Xplorobot allows operators to go beyond simple leak detection and enter the era of *digital compliance*, fully aligned with OGMP 2.0 Level 5 and the new EU Methane Regulation 2024/1787

- Our objective is to make methane emission monitoring **faster**, **smarter**, **and verifiable**, transforming every scan into a documented step toward net-zero operations.

# a xplorobot

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