



Methane emissions quantification technologies - reconciliation and validation

01 DEC 2021
BART WAUTERICKX
CEO THE SNIFFERS

Environmental & Integrity Service Provider



Emission Management Pipeline Integrity



35 Countries Worldwide experience



9.000 Executed Projects



Innovative Technologies, Equipment and Applications



Reliability
ISO 9001- 14001 // ISO 17025 Lab















Realizing your Environmental, and Sustainability Ambition Safe, Compliant, and Efficient Pipeline Operations

Level 1

Venture / Asset Reporting

- Single, consolidated emission factors
- Only applicable where company has limited information sharing

Level 2

Emission Category

- Report emissions based on methane emissions categories
- Estimates based on emission factors

Level 3

Emission Source Level

- Emissions allocated to individual source types
- Estimates based on generic emission factors

Level 4

Emission Source Level

- Emissions allocated to individual source types
- Estimates based on specific EFs and direct measurements

Level 5

Site Level

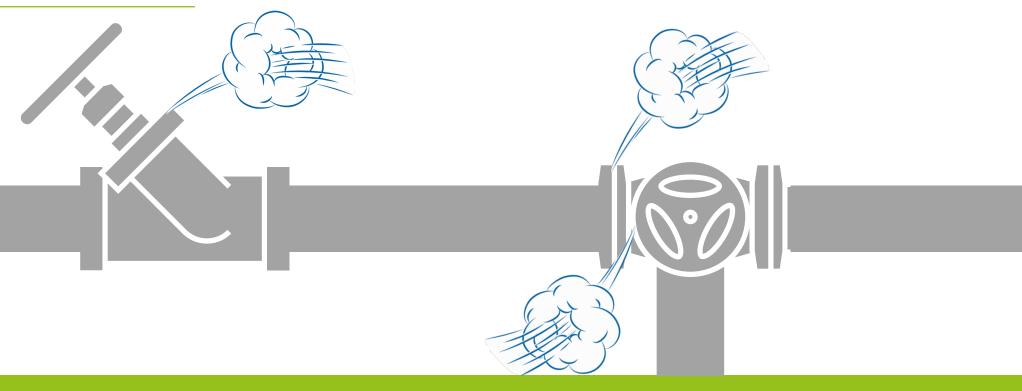
- Emissions allocated to individual source types
- Reporting based on site-level measurements to reconcile source and site level emissions estimates





A Reporting against OGMP2.0

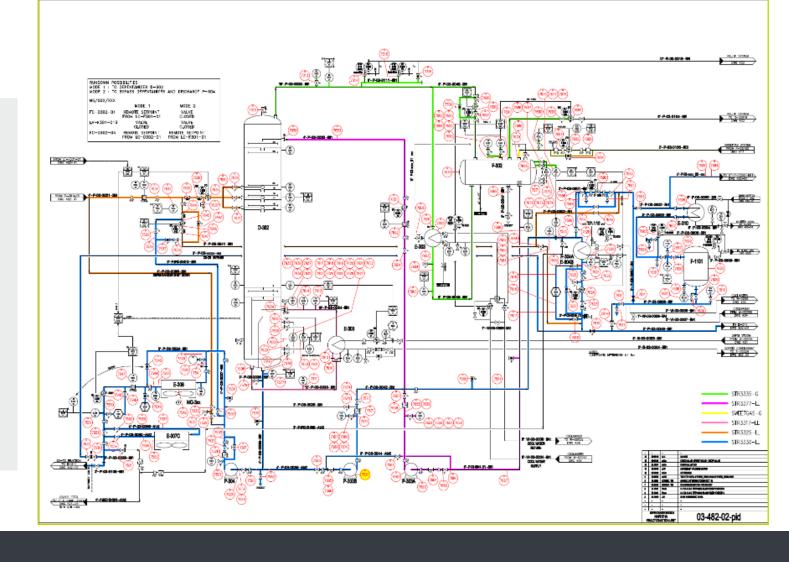
Fugitive Emissions are unintended emissions to the atmosphere





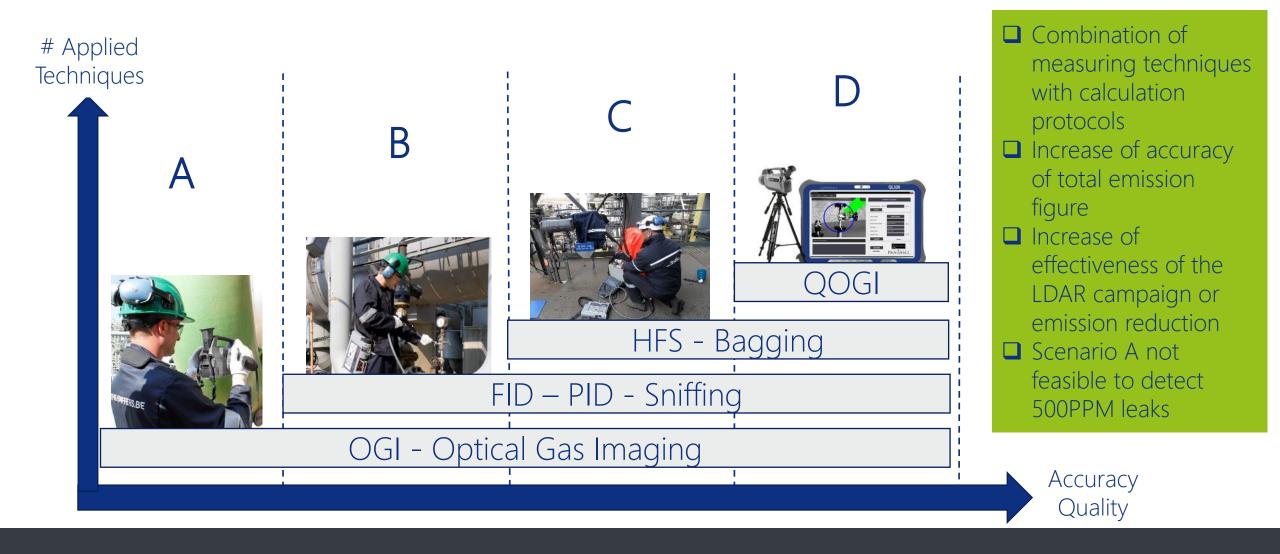
For every Component

- Unique ID
- Unit, section, process unit and location
- P&ID
- Stream Composition PFD
- In-scope /out scope
- Response Factors

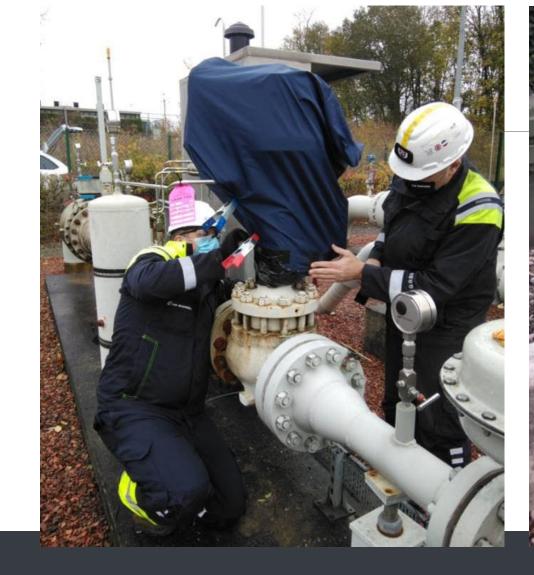




Complete Inventory Information









Venting emissions
Emission Quantification of Valves & Regulator with Bagging









Venting emissions
Emission Quantification of Vents with Bagging

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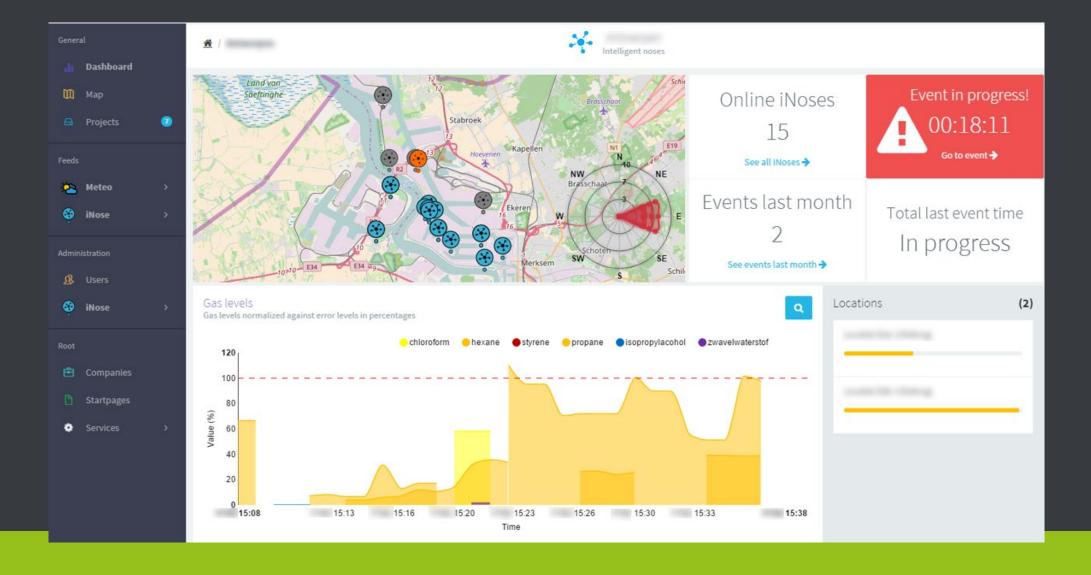
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🖎 Report Example – TSO

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Site-level measurements
Remote Sensing Networks - Reverse Dispersion Modeling



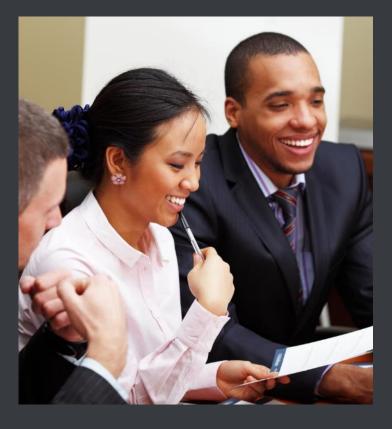


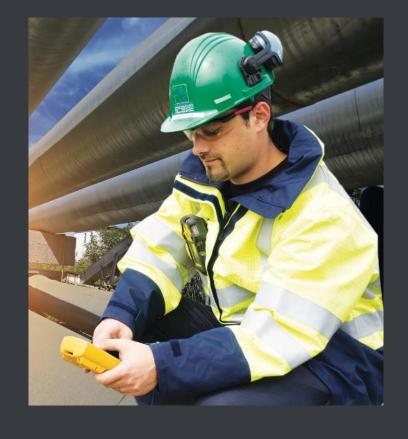
Remote Sensing: Cloud UI – Event dashboard













Bart Wauterickx CEO



The Sniffers Poeierstraat 14 2490 Balen, Belgium



+32 14 31 88 88



Contact@The-Sniffers.com



Realizing your Environmental and Sustainability Ambition

