

29-30 November 2021

# OGMP 2.0 Implementation Conference

Methane Reduction Projects

LDAR program

Thomas Höllbacher, Technical Lead Methane  
Global Production Operational Excellence, Wintershall Dea AG  
[Thomas.hoellbacher@wintershalldea.com](mailto:Thomas.hoellbacher@wintershalldea.com)



# Leak Detection and Repair

## Detection by Optical Gas imaging

### Sniffing

- Sniffing between 700-800 sources/day, concentration measurement, converted into loss using correlation tables (detection limit 9-100.000 ppm)

### Optical Gas Imaging (IR camera)

- OGI, between 2000-5000 sources/day, only qualitative, converted into loss using Leak-no-leak factors (detection limit 5.000-100.000 ppm)



# LDAR - Findings

## Detection by sniffing and OGI: Pilot in Germany:

### Gas dehydration Plant 1

- Total number of sources: 2451 (information from P&ID's)
- 7 registered leaks\*; total leakage rate **3656 kg/yr**
- 6 of the leaks above the repair threshold value of 1000ppm
- 5447 Sm<sup>3</sup> = 5 apartments gas consumption/year

### Gas dehydration Plant 2

- Total number of sources 2926 (information from P&ID's)
- 4 registered leaks\*; total leakage rate **119kg/yr**
- 1 of the leaks above the repair threshold of 1000ppm
- 177 Sm<sup>3</sup> = 1 apartment 2 months gas consumption



Picture of plant 1 Völkersen, Gas North, Germany