

Case Study. National Grid: Continuous monitoring of emissions

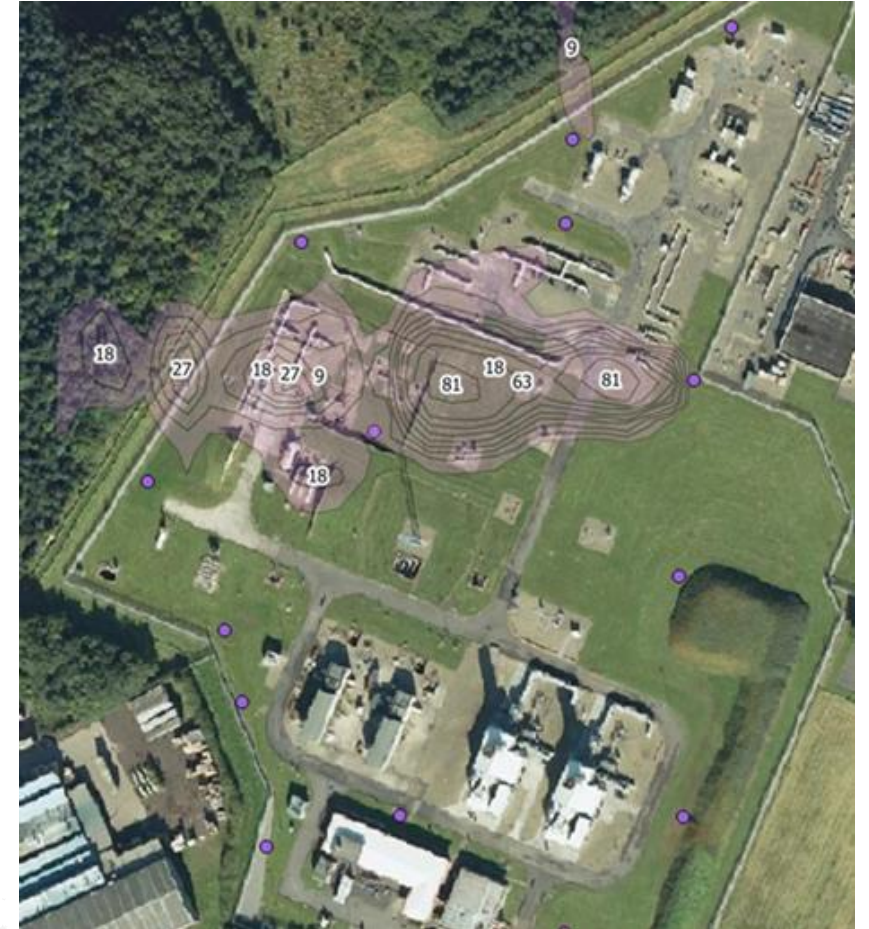
Best Practice: Equipment Leaks; Continual Improvement

The Issue

- Compressor station leaks covered by periodic LDAR, meaning small leaks may last long time (until the next LDAR)
- Develop cost-effective method to monitor and quantify fugitive emissions

The Approach

- Install multiplexed, highly accurate and sensitive gas analyser at several locations on boundary fence of compressor station.
- Combine with wind speed, direction and temperature data to identify location and determine emission rate



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The Result

- Two outputs –probability map showing where emissions originate from and emission rate quantification.
- The system monitors continuously providing updated emission rates and leak detection once an hour.
- Uncertainty reduced to ~25%
- Being rolled out across more assets

