

Setting up a port air quality monitoring system

The challenge: Port air quality needs to be improved

- International maritime traffic causes more than 50,000 premature deaths every year in Europe alone (Centre for Energy, Environment and Health)
- Air quality at ports has been the #1 priority since 2013 (ESPO environmental report, 2019)

Emissions from vessels, truck traffic, and operations are just a few sources of air pollution. But since actual emission sources and amounts are not known, it's very difficult to make improvements.

The solution:

Set up a real-time air quality monitoring system.

An air quality monitoring system is essential for understanding and mitigating port emissions.

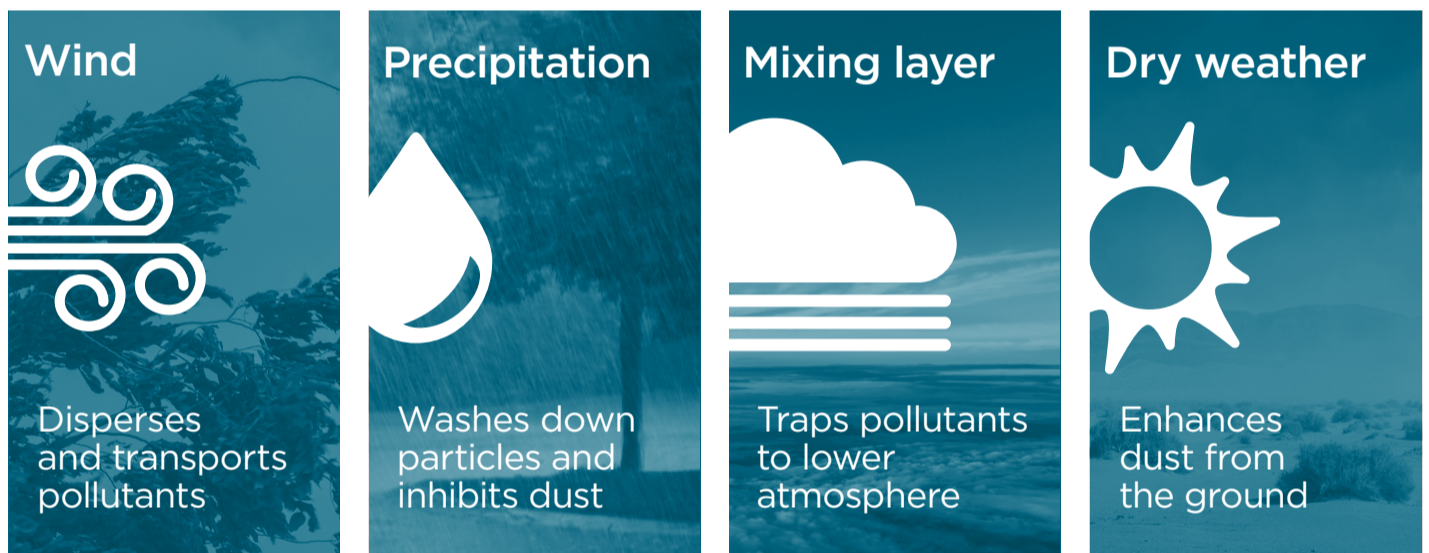
Use the data in your air quality monitoring system to:

- Determine emission sources and amounts
- Prioritize and track the results of improvements
- React quickly to sudden leakage accidents such as poisonous gases

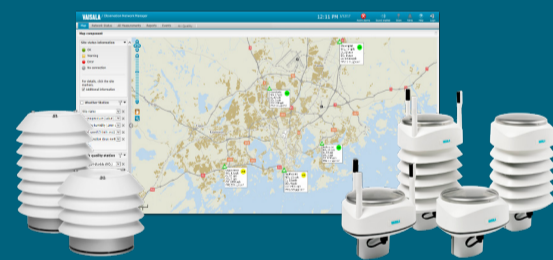
Consider the weather

Weather conditions have a strong impact on air quality, so you need both air quality and weather sensors in your monitoring system.

How weather affects air quality



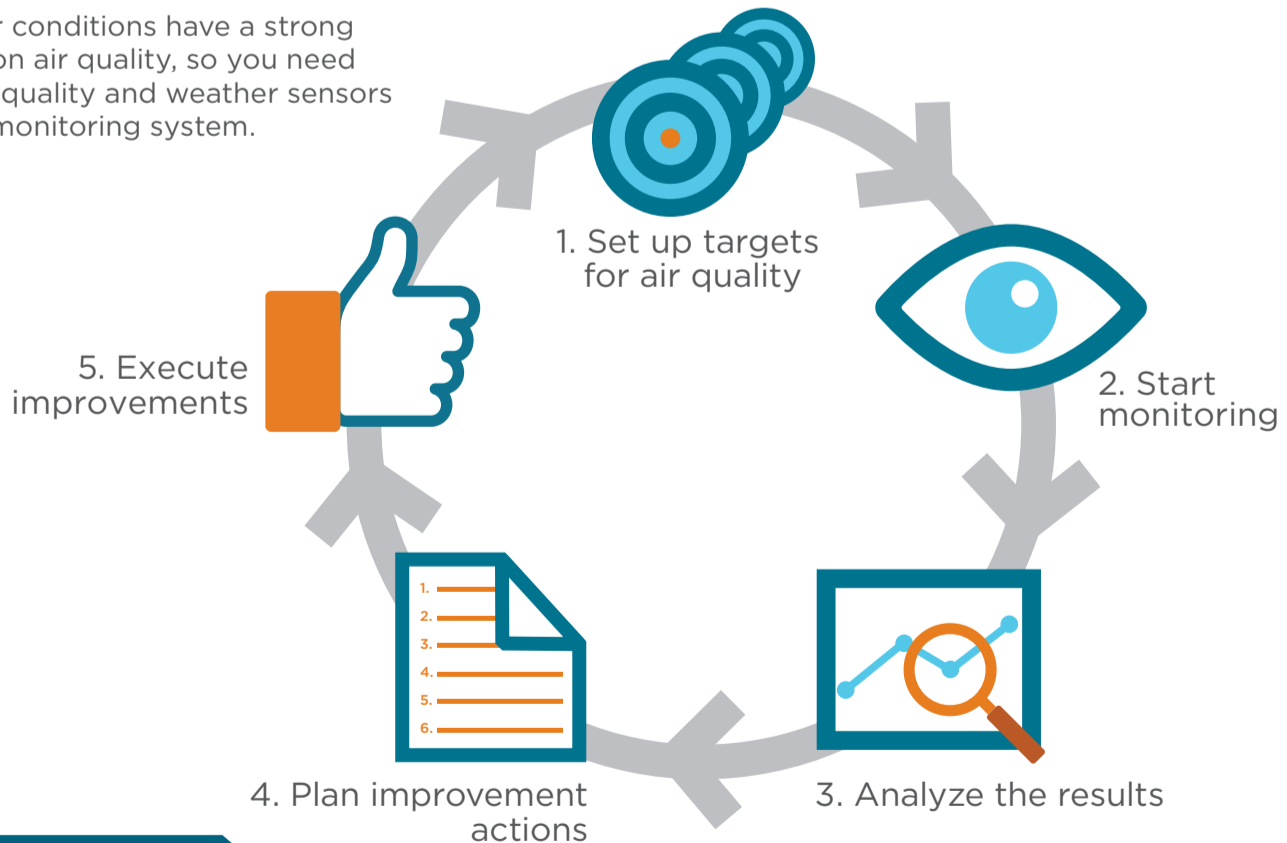
Vaisala has the solution



- Air quality sensors
- Weather sensors
- Network and data management system

The cycle: measure to improve

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The benefits

The benefits of an air quality monitoring system go far beyond cleaner air.

- **Improve** health for workers and surrounding communities
- **Strengthen** community and stakeholder transparency
- **Justify** current and future improvement measures
- **Reinforce** ports as the cleanest way to transport goods