

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.

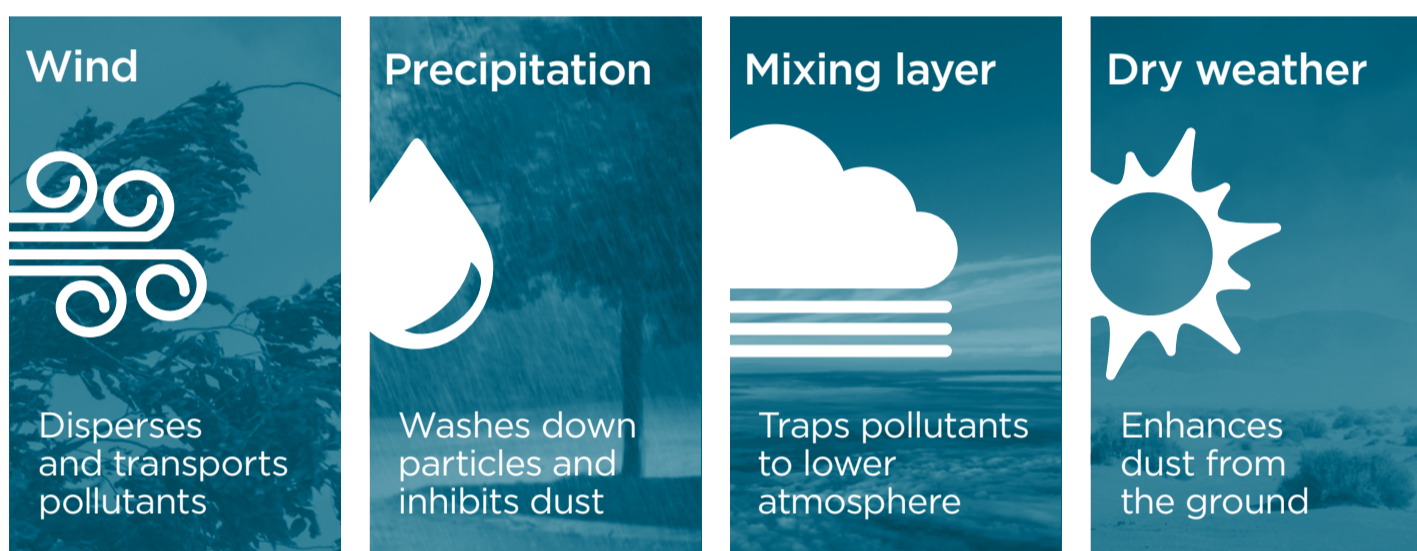
Use the data in your air quality monitoring system to:

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

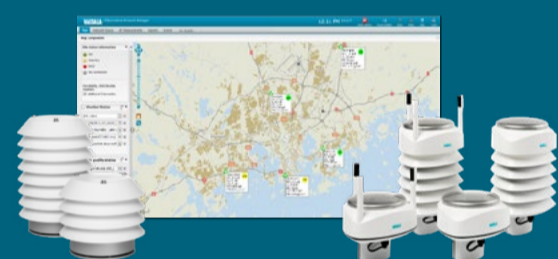
Consider the weather

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



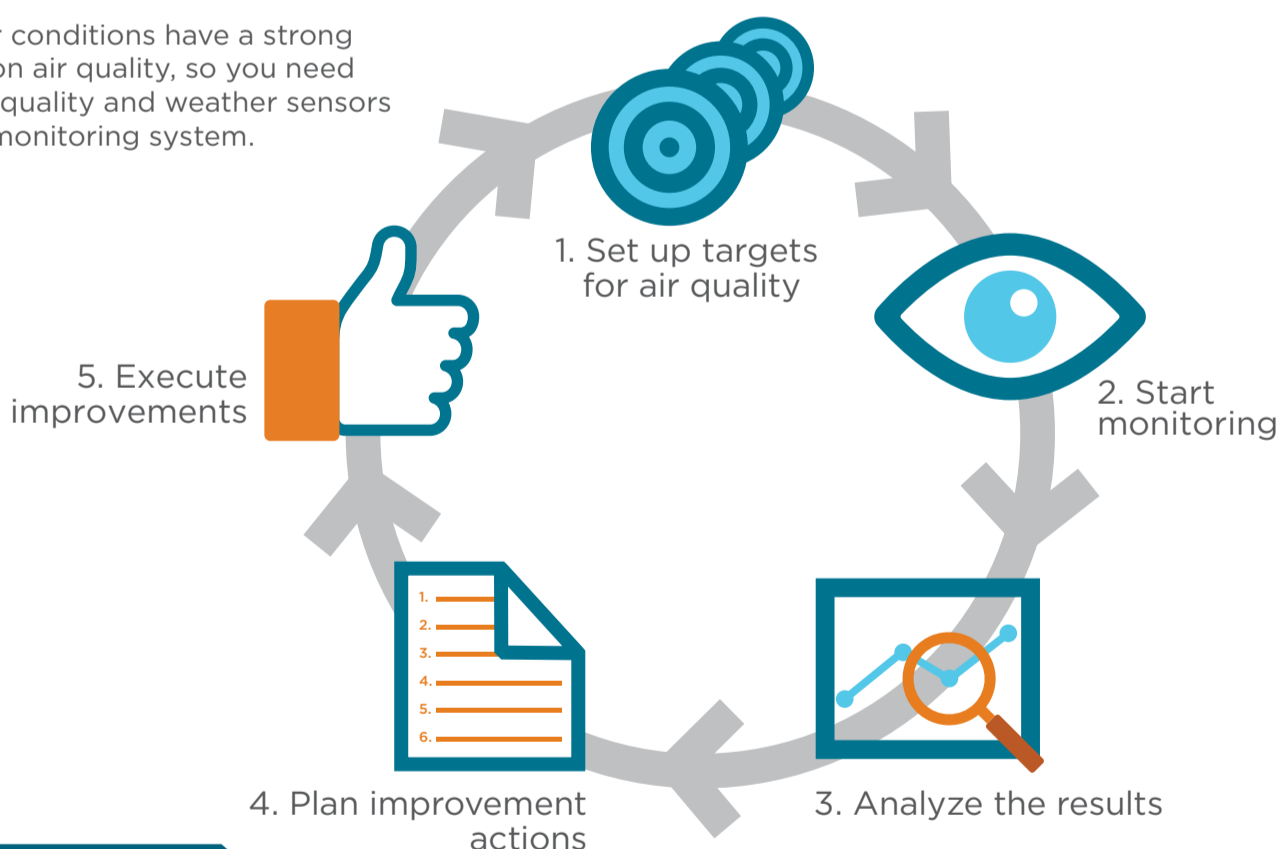
Vaisala has the solution



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

The cycle: measure to improve

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



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

Vaisala is here to help

Weather and environmental insights are the greatest catalysts for successful maritime operations — both onshore and offshore. From sensors to systems and digital services, Vaisala empowers maritime leaders to confidently meet new challenges and harness new opportunities.

Our customers depend on Vaisala to:



Master the weather to master the sea



Leverage oceans of insight



Embrace the currents of innovation



Become champions of sustainability