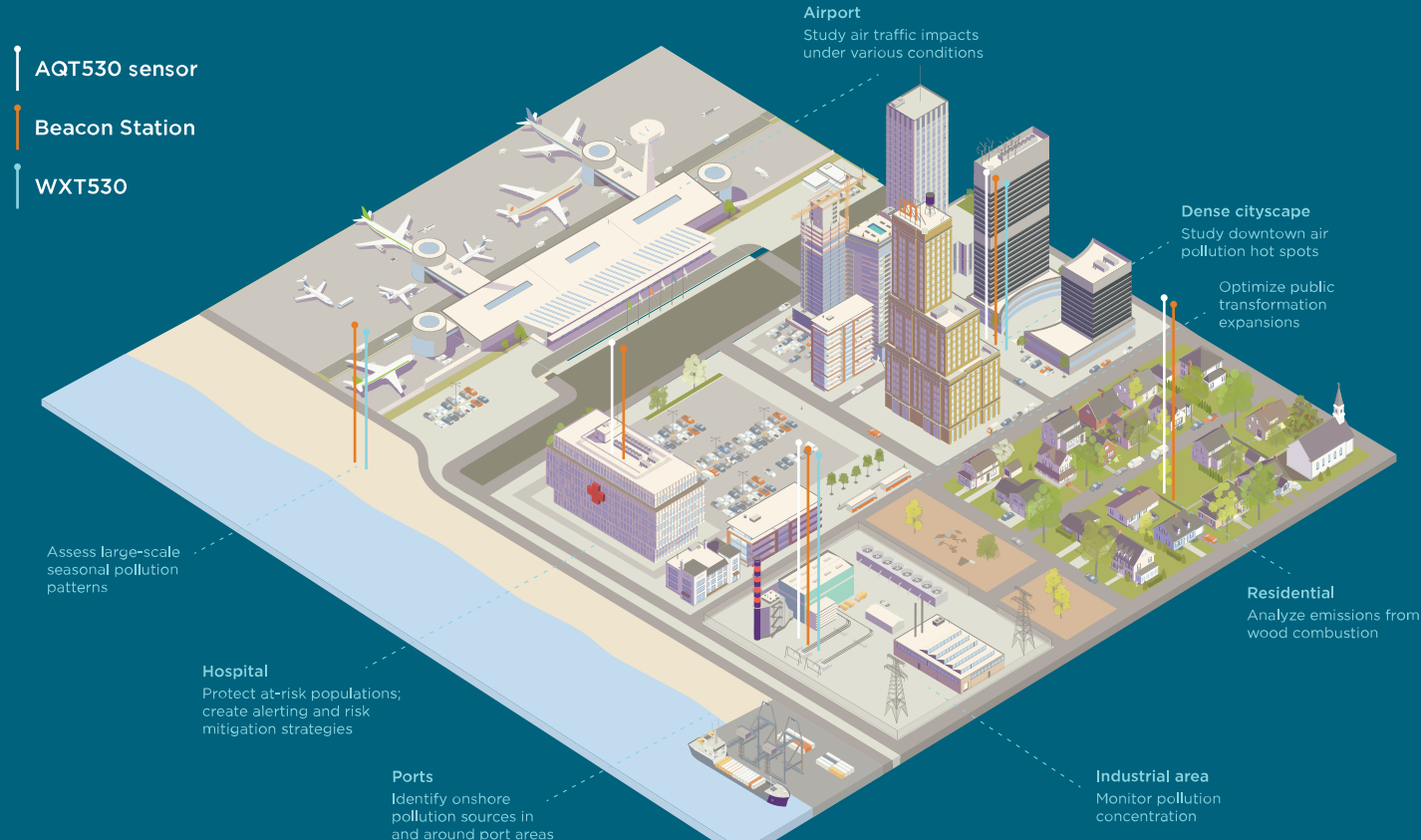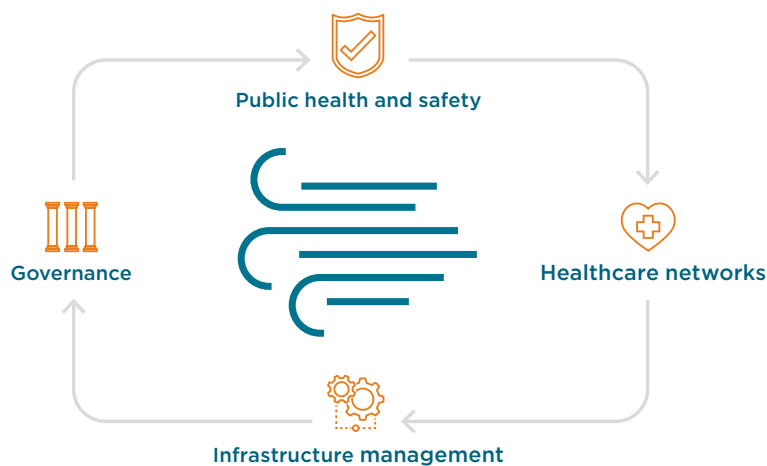# VAISALA

Air quality is urgent for everyone.

Here's what a smarter sensor network looks like.

A modern, dense air quality (AQ) network combines AQ and weather data for full situational awareness and immediate intelligence.

Public health and safety

Healthcare networks

Infrastructure management

Governance

- AQT530 sensor
- Beacon Station
- WXT530

Airport
Study air traffic impacts under various conditions

Dense cityscape
Study downtown air pollution hot spots

Optimize public transformation expansions

Residential
Analyze emissions from wood combustion

Assess large-scale seasonal pollution patterns

Hospital
Protect at-risk populations; create alerting and risk mitigation strategies

Ports
Identify onshore pollution sources in and around port areas

Industrial area
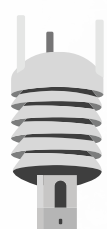Monitor pollution concentration

In this sample network, AQ and weather sensors work in harmony and can be placed freely — and cost-effectively — for highly localized insights. They can integrate with existing network infrastructures or utilize Vaisala's cloud-based system, depending on user needs.

Key technologies

Air Quality Transmitter AQT530

Vaisala's next-generation sensor providing reliable insights about top-priority pollutants including nitrogen dioxide (NO_2), nitrogen monoxide (NO), ozone (O_3), and carbon monoxide (CO), as well as $PM_{2.5}$ and PM_{10} particulate matter.

Weather Transmitter WXT530 Series

Vaisala's robust and accurate multi-parameter weather transmitter measuring six of the most important weather parameters — wind speed and direction, air pressure, temperature, humidity, and rainfall.

Vaisala Beacon™ Station

Vaisala's compact, scalable, plug and play platform for weather and environmental observation stations. It uses the optional cloud-based Wx Beacon UI for data management and visualization.

Why a modern AQ network matters so much

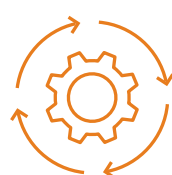**The public benefits of enhanced air quality measurement go beyond health advisories and safety.**

With the right access to the right information, people gain a deeper connection to their environment and new ways of thinking about business and community.

This is especially important as people strive for smarter communities while dealing with significant global trends like climate change and rapid urbanization.

Vaisala is here to help

Vaisala solutions are unique in the market because they combine AQ and weather intelligence for substantially improved awareness and decision-making. We'll help you enhance your existing AQ network or build a new one — all using the most trusted, easy-to-deploy systems on the market.

Our customers depend on Vaisala for:

- Exceptional products grounded in science and innovation
- Insight every day
- Smarter, safer, more sustainable urban communities
- Inspired solutions rooted in the Finnish Way

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vaisala.com/airquality