

OPENAIR: effective, sustainable air quality monitoring for local governments



What is OPENAIR?

OPENAIR is a project that helps local governments measure air quality effectively and sustainably so they can improve the health and wellbeing of their communities.

For the first time in Australia, experts in smart technology and sustainability have worked in close consultation with local governments to understand their needs and challenges when monitoring air quality, and to develop a standard for best practice air quality monitoring using smart low-cost sensing systems.

This process has informed a series of practical factsheets and a comprehensive guidebook, through which OPENAIR provides guidance for using smart low-cost sensing systems and outlines best practice for all aspects of local government-led air quality monitoring.

OPENAIR is coordinated by the NSW Smart Sensing Network (NSSN) and delivered in partnership with the NSW Department of Planning and Environment, University of Technology Sydney, University of Sydney, Australian National University, Western Sydney University, and University of NSW.

OPENAIR is made possible by the Smart Places Acceleration Program under the NSW Government's Digital Restart Fund.



LOCAL AIR QUALITY ISSUES NEED LOCAL SOLUTIONS

Air quality and temperature are often local phenomena. The quality of air near a busy road intersection is much worse compared to a neighbourhood just a short distance away. Winter smoke from wood heaters leaves high areas and ridges and settles into valleys and low-lying areas. On a hot summer day, the temperature in a street with many mature trees will be several degrees cooler than a nearby street with fewer trees.

Governments have a range of planning and development approaches, interventions, community programs and other tools they can use to prevent or reduce pollution and heat, and their impacts. However, the right approach depends on local context and conditions – what’s appropriate for one location may not be for another.

Evidence-based policy and decision-making rely on data, but many local governments do not have access to local air quality data. Smart low-cost sensing devices can solve this problem by providing affordable, relevant data.

GUIDANCE FOR LOCAL GOVERNMENT, GUIDED BY LOCAL GOVERNMENT

OPENAIR is about building capacity among local governments. Our resources have been developed in consultation with eight NSW councils, each with different situations and challenges.

OPENAIR resources include factsheets, a Best Practice Guide, templates and reference material. Together, these cover all aspects of air quality monitoring with smart low-cost sensing systems, from planning and setting up a network to analysing and using air quality data to create impact.



BUILDING AN OPENAIR COMMUNITY

OPENAIR is building Australia’s first community of practice around smart low-cost air quality monitoring, in which local governments can all align with commonly recognised methodologies and can share their experiences and lessons with each other.

OPENAIR is leading the way in establishing best practice air quality monitoring using smart low-cost sensing systems – first in NSW, then potentially across the whole of Australia and the world.



FIND OUT MORE AND ACCESS OPENAIR RESOURCES

This factsheet is part of a suite of resources designed to support local government action on air quality through the use of smart low-cost sensing technologies. It is the first Australian project of its kind. Check the project website for resources and updates on post project collaborations: www.openair.org.au



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