

Air Quality in Scotland



Welcome to the 27th Scottish Air Quality Database (SAQD) stakeholder's newsletter. This newsletter is produced on behalf of the Scottish Government by WSP and is designed to provide regular updates and news regarding the SAQD and local air quality matters to all stakeholders. This may include; updates to the network; new information on air quality issues; updates on changes in policy and procedures; new initiatives and events; technical reports; and how to access data using the Air Quality in Scotland website.

If you have any information which you think would be beneficial to include in a future newsletter, please email us at rca.aq-monitoring-scotland@wsp.com.

NEWS

Air pollutant exposure evidence review report published

A new report published in July, which can be found [here](#), has been published reviewing the substantial evidence base that has been developed in relation to air pollutant exposure and population level health effects in Scotland.

It indicates that health effects occur at air pollutant concentrations which do not exceed current air quality objectives, as is the case for most of the Scottish population. While the air quality objectives are based on health evidence and are, in many ways, proxies for exposure to air pollutants, the actual relationship between measured or estimated concentrations and individuals' exposure to those pollutants is complex.

The key findings indicate that while a substantial evidence base exists, including monitoring networks, modelling, emissions inventories, and demographic data, its application for comprehensive population exposure assessment and inequality tracking has limitations. The current monitoring network, primarily designed for compliance with air quality objectives, overrepresents urban areas and, in particular, roadside locations compared to population distribution. Modelling offers comprehensive spatial coverage and predictive capabilities but requires consistent protocols for comparability.

Domestic solid fuel burning - effects of PM2.5 on health outcomes report published

A report, also published in July and found [here](#), assesses the potential health benefits of further policy actions affecting domestic solid fuel burning in Scotland. Three policy options were taken forward for more detailed modelling: burn less; burn better; and targeted stock upgrades.

Several key messages emerged from the studies analysis, these include:

- Most of the existing health effects of domestic solid fuel burning are in urban areas.
- More work is needed to improve emission factors, by both testing in the [UK](#) and reviewing testing done elsewhere, and also on the costs and availability of very low emission appliances.
- The modest improvement from Policy 3 could also be related to the fact that many stoves, especially in urban areas, will have been installed relatively recently.
- Policy 1 (Burn Less) was modelled as a uniform 1% reduction in emissions across Scotland. However, the impact of an information campaign of this nature is likely to be more nuanced and could potentially

be more successful in urban areas, where the health impacts are greatest. A 1% reduction may be conservative and a larger reduction in fuel use might be achievable through more far-reaching action.

- The three scenarios are not mutually exclusive and there may be additive benefits from implementing a more comprehensive, mixed approach. Information campaigns, as well as having an effect in and of themselves, can help facilitate more interventionist measures.
- The outcomes emphasise the importance of considering spatial and demographic variations when developing policy, as the impact of interventions can potentially differ across Local Authorities, between urban and rural areas and on different demographic groups.

New Science tower in Angus will allow for real time emissions tracing

A new 100m high facility, The Scottish Observatory for Atmospheric Research (SOAR), has been opened in Angus for the monitoring of Greenhouse gasses and air pollutants. The tower enables monitoring at both 50m and 100m above ground to supplement modelling with real time data.

Professor Mathew Williams, lead scientist at the University of Edinburgh, said: 'SOAR's location in Scotland fills a critical gap for the UK and Europe. It can sample air from the North Atlantic, from the northern UK and from the European continent depending on wind direction. It is already revealing regional patterns of greenhouse gas emissions that help test our understanding and thereby improve our knowledge.'

SOAR is part of the UK Deriving Emissions linked to Climate Change (DECC) network and

an expanding international network of atmospheric observatories supporting countries in monitoring their emissions under the UN Paris Agreement.

SAQD QAQC ACTIVITIES

The WSP air quality field team began the 6 monthly UKAS accredited monitoring site audits on the 8th June 2026, this has now been completed. The service round should now be well underway, looking into any issues raised at the audits. These audits are part of the quality assurance quality control process and help ensure the sites are working properly and meet the relevant UK and international standards. The data will also be used within the data ratification process, with Quarter 2 of 2026 currently being ratified, and help ensure compatibility with the UK standard objectives and other UK networks. UKAS accredited calibration certificates for these audits can be obtained from the LAQM pages on the Air Quality in Scotland website.

If an audit summary has not been provided after the visit has been completed, or you are unclear on any of the recommended actions, please contact either the auditor who undertook the visit or rca.ag-monitoring-scotland@wsp.com. Can you please then pass these on audit information to your ESU's in advance of the service so that any issues can be investigated.

QUESTION AND ANSWERS SECTION

Question: When should I turn the instrument in and out of service mode when completing a calibration?

Answer:

All gaseous instruments within the network have the ability to be turned into "service mode", many sites also have data loggers with a "service mode" button. It is vitally important that these are switched on as soon as you arrive at site. Sudden changes in temperature

when you open the hut doors can cause changes to the data. Service mode also prevents any calibration data appearing on live data streams where they potentially may trigger an alert. On finishing the calibration and completing the filter change, please let the instrument settle back down to ambient levels before switching back into sampling mode. It is a good idea to make a mental note of what the concentrations were before the calibration began, to use as a reference.

Question: What are useful items to have on site?

Answer: A fire extinguisher may be required to be onsite depending on the outcome of your fire risk assessment. If there is one on site this should be checked annually by a certified professional. It is recommended that an in-date first aid kit is kept at the site in case of any

accidents. If any items are used this should be noted, so that a replacement can be obtained if required. A pair of tweezers is advised for use of handling filter paper. A dustpan and brush are advised for keeping the site clean and tidy. Old equipment such as out of date scrubbers, regulators, empty cylinders and old paperwork should be removed from the site and properly disposed of to make sure there is sufficient working room for LSO's, ESU's and the QAQC unit.

STAY CONNECTED

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