

# Air Quality in Scotland

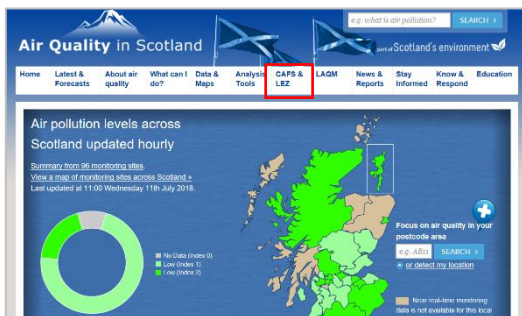
Welcome to the sixth Scottish Air Quality Database (SAQD) stakeholder's newsletter. This newsletter is produced on behalf of the Scottish Government by Ricardo Energy & Environment (Ricardo) and is designed to provide regular updates and news regarding the SAQD and local air quality matters to all stakeholders. 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 [info@scottishairquality.co.uk](mailto:info@scottishairquality.co.uk).

## NEWS

### CAFS AND LEZ DEDICATED PAGES ON WEBSITE

There is now a standalone Tab for the CAFS and LEZ pages on the Air Quality in Scotland Website. These were introduced to make it easier for users to locate information on CAFS and progress on the ever-nearing implementation of low emission zones in Scotland.



### CLEANER AIR FOR SCOTLAND (CAFS) STRATEGY

The minutes from the most recent CAFS Governance Meeting (June 2018) are now available on the Air Quality in Scotland website site [here](#).

### LOW EMISSION ZONES (LEZ) PAGE UPDATE

The Second meeting of the LEZ leadership group took place on the 14<sup>th</sup> March 2018. The minutes

to that meeting can be found on the LEZ pages [here](#).

In addition, the Glasgow City Council have provided their latest update report (dated 20<sup>th</sup> March 2018) on the implementations of Glasgow's Low Emission Zone. This can also be found on the LEZ page of the Air Quality in Scotland Website under Glasgow Low Emission Zone section.

### LAQM ANNUAL PROGRESS REPORT SUBMISSION 2018

As of the end of August 2018, 12 Local Authorities have had their Annual Progress Reports (APR) approved and published on the Air Quality in Scotland website (<http://www.scottishairquality.co.uk/news/reports?view=laqm>). If a local authority has already obtained approval and their APR has not yet been published on the website, please send it through to [david.hector@ricardo.com](mailto:david.hector@ricardo.com).

### UKAS CALIBRATION CERTIFICATES

All SAQD sites have UKAS accredited Quality Assurance/Quality Control (QAQC) audits carried out every six months. For reference, you can now access the UKAS certificates of Calibration for Summer 2017 and Winter 2017/18 audits in the LAQM pages of the website [here](#).

## CLEAN AIR DAY – 21<sup>ST</sup> JUNE 2018

Clean Air Day, co-ordinated by Global Action Plan, was a chance to find out more about air pollution, share information with your friends and colleagues, and do things to make the air cleaner and healthier for everyone. Events were held in Edinburgh, Glasgow, Dundee, Aberdeen and Inverness. Staff from Ricardo's measurement team attended events in Edinburgh and Glasgow to help raise awareness of air pollution.

### EDINBURGH – THE MOUND

Ashleigh Norrie and Jacob Humphries were out and about supporting Edinburgh's Summer Summit, engaging with locals on air pollution issues and highlighting the availability of alternative monitoring techniques and the benefits they provide.



### GLASGOW – GEORGE SQUARE

Susannah Telfer and Stephen Gray manned a stand in Glasgow's George Square for Clean Air Day to engage with the public and other professionals on how we can actively improve the air we breathe and obtain information/data on air pollution.



Clean Air Day 2019 will be on Thursday 20<sup>th</sup> June, visit Global Action Plan [website](#) for more information.

## SCOTTISH ENVIRONMENT PROTECTION AGENCY (SEPA)

The Year of Young People has provided the perfect opportunity to promote the benefits of clean air through this year's Clean Air Day. Air pollution is one of the biggest direct environmental risks to human health, but because it's invisible, people give it very little thought. Providing educational activities within schools is an excellent way to get across the importance of air quality in Scotland, demonstrating how small changes can improve our health and the environment for future generations.

On 21<sup>st</sup> June 2018, communities, schools and workplaces across the UK came together to

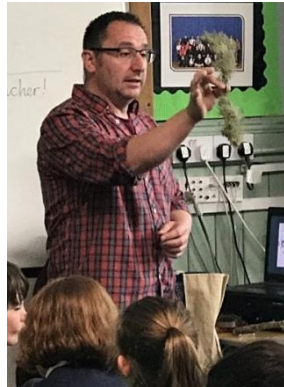


celebrate Clean Air Day. Environmental Protection Scotland (EPS), coordinated much of the events held during this year's Clean Air Day, in Scotland. Staff from the SEPA contributed by running a series of programmes with schools across Edinburgh, along with manning a stall in Edinburgh's George Street during the day itself.

SEPA staff's Clean Air Day events started with a talk to pupils at Sciennes Primary School in Edinburgh. Dr Colin Gillespie, SEPA's Principal Air Scientist, presented an overview on air pollution to three classes at the school.



Dr Gillespie informed the pupils: “We don’t really think about the pollution we generate as we go about our daily activities, and how we contribute to poor air quality, let alone the wider environmental effects this can have on remote areas of Scotland.”



Dr Gillespie provided an insight into the life of lichens and other sensitive indicators of poor air quality. The class had spent the previous week looking at lichens found on trees across Edinburgh and were shown the types of lichen found on twigs from clean air environments, against those in polluted areas. The school has an active environment group and the pupils were keen to understand how we affect our environment with our activities. Gregor Hutchison, teacher at Sciennes Primary School, was delighted to see the school actively participate in Clean Air Day.

“Learning about Clean Air Day in Primary 6 was a fantastic opportunity for learners to discover and investigate the type of air that they breathe in every day. As a class, we were quite concerned to find pollution loving lichen on the trees in the areas surrounding the school. Being able to be a part of the Clean Air Day demonstrations at the Mound and George Street was an exciting and memorable experience for the pupils and they were so delighted to be part of a demonstration and be able to show such passion for a subject that will affect them more than the adults who pollute the air each day” **Gregor Hutchison.**

The school’s Deputy Headteacher was also grateful for our participating: “Dr Gillespie provided excellent and engaging workshops for our pupils which were extremely useful in providing a big picture and helping our children

to understand that every day should be a Clean Air Day” **Lucy Gallagher.**

During the week of 18-22 June, a competition to encourage children of primary school age to think about the air quality around their school was run. Schools who participated in the competition were encouraged to use the national Learn About Air teaching package ([www.learnaboutair.com](http://www.learnaboutair.com)), a dedicated teaching resource for use in the classroom, and to spend resource, to learn about air quality and the things we can all do to help improve the air we breathe.

Following the week-long learning activities, schools submitted posters, promoting solutions such as encouraging active travel, cycling and walking to school. One of the winners from St Mary’s Roman Catholic Primary school in Edinburgh was Lucy Curran. The winning entries from the other participating schools, and Lucy’s winning design, are currently being made into banners to be displayed at each of the school’s gates. Air



Monitors Ltd sponsored the banner competition. Jim Mills, Managing Director of Air Monitors Ltd said: "As a company dedicated to monitoring air quality, we were delighted to sponsor this excellent initiative, which will help the next generation to better understand the sources and effects of air pollution and most importantly, how they can do their bit to improve air quality."



On Clean Air Day, SEPA staff set up one of our particulate monitors to provide real-time data on George Street, Edinburgh. The public were interested to see that even the local building renovations affected the particulate levels on the streets kerbside. The public were encouraged to participate with hands-on demonstration taken from the Learn About Air teaching pack that illustrates how individuals contribute to poor air quality as we go about our daily activities.



Further information is available at the following links:

- Learn about air – [www.learnaboutair.com](http://www.learnaboutair.com)
- Environmental Protection Scotland - <https://www.ep-scotland.org.uk/>
- Scottish Environment Protection Agency – [www.sepa.org.uk](http://www.sepa.org.uk)

#### CALL FOR LOCAL AUTHORITIES

SEPA are looking for volunteers across Local Authorities to trial Scottish Government’s new Planning and Air Quality Training Package.

If you want more information, please contact Graham Applegate by phone or email on 01786 452410 / [graham.applegate@sepa.org.uk](mailto:graham.applegate@sepa.org.uk).

Contact: Colin Gillespie

#### LOCAL AUTHORITY

In this section, we plan to showcase local authority’s contribution to Local Air Quality Management (LAQM). The aim of this section will be to provide information on what air quality initiatives the local authority is

undertaking, and the experiences gained. If you would be interested in contributing, please send an email to [info@scottishairquality.co.uk](mailto:info@scottishairquality.co.uk). Many thanks to Bronah Byrne, Environmental Health Officer (Team Leader) at South Lanarkshire Council, for contributing to this issue!

#### SOUTH LANARKSHIRE COUNCIL

Raising awareness of air quality issues together with communicating the actions that can be taken to help improve air quality are a priority for South Lanarkshire. To help achieve this South Lanarkshire has recently launched an innovative ‘story map’ which is accessible through all of the council’s digital platforms. ‘[The air that we breathe](#)’\* is an interactive ‘one stop shop’ for all resources and advice relating to air quality in South Lanarkshire.

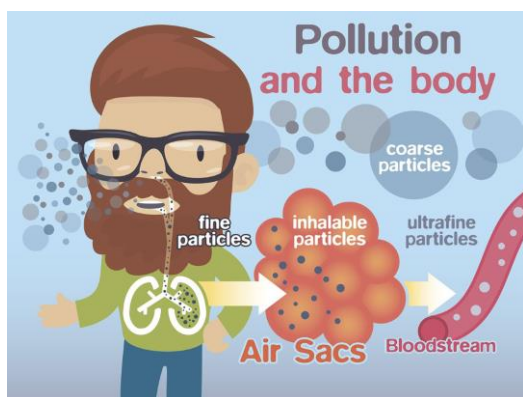


\*‘The air that we breathe’ highlighting the differences in NO<sub>2</sub> concentrations in Rutherglen from 2010 to now.

A diverse range of information is available via the story map including historical and present-day air quality, interactive mapping allowing users to compare how South Lanarkshire has evolved since 1890 as well as modelling of air

quality pre and post major road changes which resulted in 5,000 less vehicles travelling through the town of Rutherglen and the resultant impact on air quality.

Information on measures everyone can take, however small or large, to help improve air quality is also available via the story map and includes links to educational resources, active and sustainable travel information, electric and hybrid vehicles, log burners, smoke control areas as well as eco fleet advice. There is also links to health information and advice which will be particularly useful for people with medical conditions that may be affected by pollution, such as asthma, bronchitis and emphysema.



Hopefully visitors to the story map will find this resource interesting, informative and inspiring!

\*<https://southlanarkshire.maps.arcgis.com/apps/MapJournal/index.html?appid=0217ea65fd9d4373b33c123e500e5508#>

Contact: Bronah Byrne

### [SAQD QAQC ACTIVITIES](#)

Ricardo have completed the summer six monthly audits. After each local authority audit, a summary of the auditor's findings should have been emailed to you. If you have not received an audit summary, please contact [info@airqualityscotland.co.uk](mailto:info@airqualityscotland.co.uk).

## QUESTION AND ANSWERS SECTION

This section will provide answers to frequently asked questions that relate to different aspects of LAQM ranging from Local Site Operator (LSO) duties to advanced data analysis queries. If you have a question you would like to be answered in this section, please contact [info@scottishairquality.co.uk](mailto:info@scottishairquality.co.uk).

*Q: What if I have not been able to attend the annual SAQD training whilst an auditor has been at site?*

*A:* Please contact Ricardo and we will be able to meet you at the next scheduled six-monthly audit. Additionally, you can download the full PDF Scottish Local Site Operators Manual [here](#). Likewise, Ricardo have created YouTube videos outlining various LSO and cleaning calibration procedures, which are available [here](#).

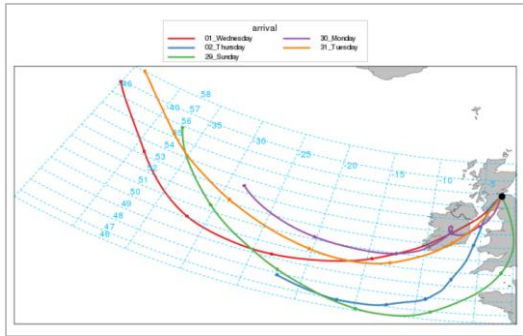
*Q: How do I access the new 'Scotland Air Pollution Forecast' weather forecast feature?*

*A:* A recent update to the Air Quality in Scotland website introduced a 'Five Day Air Mass Origin' and 'Meteorological Map' section to the [Air Pollution Forecast](#) tab of the website.



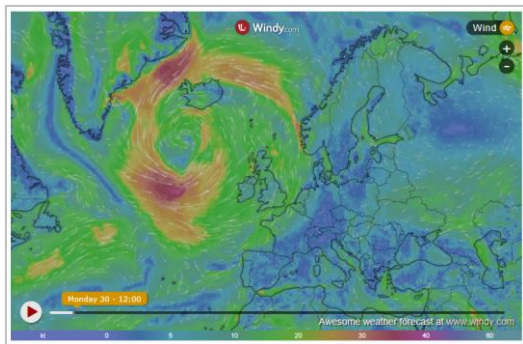
Air Pollution Forecast

The air mass back-trajectory plot shown below provides data from the HYSPLIT forecast model (NOAA HYSPLIT). The plot illustrates where the air masses that affect Scotland have travelled from over the 96-hour period up to each of the upcoming forecast days.



NOAA HYSPLIT

The interactive Meteorological forecast maps, illustrated below and developed by [Windy](#), provide an up to nine day forecast for a variety of different meteorological elements. Also provided is the weather forecast for the coming days for the four major cities (Edinburgh, Glasgow, Aberdeen and Dundee) in Scotland. Please note that the pollution data shown in the Windy maps is not supported by Ricardo.



Windy

Weather conditions are an important factor in forecasting air pollution - they can affect pollutant emissions rates, chemical reactions in the atmosphere, and how air pollution is dispersed. For example, when the weather is cold and still, emissions from motor vehicles and building heating systems will be increased whilst dispersion will also be poor, allowing pollutants to build-up more rapidly. In the summer, warm weather and long hours of sunshine can increase the risk of photochemical ozone pollution forming.

## STAY CONNECTED

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