

09:15	Registration	
10:00	Welcome and Introduction	Andrew Taylor, Scottish Government
10:15	Air Quality in Scotland	David Hector, Ricardo Energy & Environment
10:45	How can we protect Scotland's most vulnerable lungs from air pollution?	Irene Johnstone, British Lung Foundation
11:15	Tea/Coffee Break	
11:35	Every Breath we take; the effects of Air Pollution Across the Life-course	Professor Stephen Holgate, University of Southampton Faculty of Medicine
12:05	Young Scots tackling air pollution	Dr Colin Gillespie, SEPA
12:30	Spotfire data analysis tools integration in the SAQD	Kieran Walesby, SEPA
12:50	Lunch	



**The Scottish
Government**
Riaghaltas na h-Alba



Ricardo
Energy & Environment

Air Quality in Scotland

Scottish Air Quality Database and Website Annual Seminar

David Hector - Ricardo Energy and Environment

24th January 2017

1. Scottish Air Quality Database and Website (SAQDW) 2017
2. SAQDW and CAFS
3. Functions within SAQDW and new additions
4. Air Pollution in Scotland
5. Interesting Air Quality analysis
6. QA/QC
7. Your SAQD
8. Questions

Scottish air Quality Database and Website



- Pilot study – 2006
- Project officially launched April 2007 – c.50 monitoring sites in the database
- January 2017 – 95 automatic sites
- New SAQDW contract Jul 2016 – Jun 2019
- Award winning AQ Website
- SEPA – New data analysis pages
- Website is important element in helping to Deliver Cleaner Air for Scotland



The Team



Ellis Marshall-Padkin



Sam Copsey



Brian Stacey



Stephen Stratton



David Hector



Stuart Sneddon



Susannah Telfer



Stephen Gray



Paul Willis



Rebecca Rose



Ashleigh Norrie



John Stedman

Scottish Air Quality Database (SAQD) and CAFS

Transport:

A Scotland that reduces transport emissions by supporting the uptake of low and zero emission fuels and technologies, promoting a modal shift away from the car, through active travel (walking and cycling) and reducing the need to travel.



Health:

A Scotland which protects its citizens from the harmful effects of air pollution, reducing health inequalities.



Legislation and Policy:

A Scotland where all European and Scottish legal requirements relating to air quality are as a minimum complied with.



Placemaking:

A Scotland where air quality is not compromised by new or existing development and where places are designed to minimise air pollution and its effects.



Communication:

A Scotland where all citizens are well informed, engaged, and empowered to improve our air quality.



Climate Change:

A Scotland that reduces greenhouse gas emissions and achieves its renewable energy targets whilst delivering co-benefits for air quality.



- Provides High Quality Data
- Informs Policy
- Educates

SAQDW and CAFS– Introduction of PM_{2.5}

- CAFS was published in November 2015;

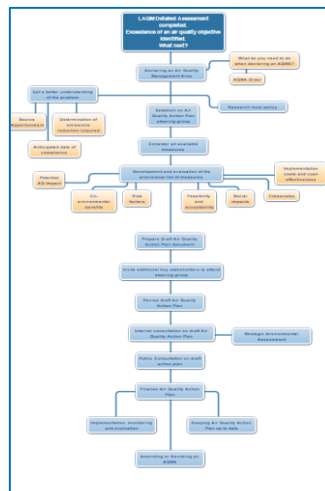
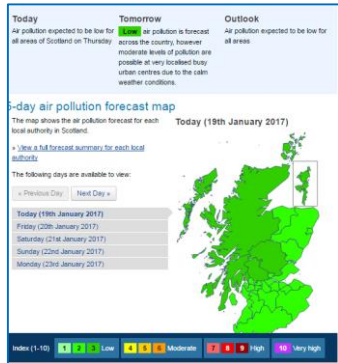
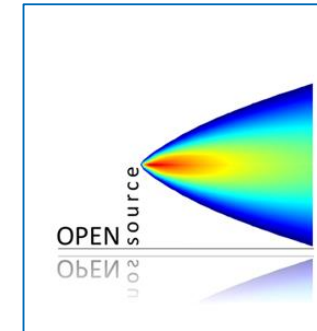
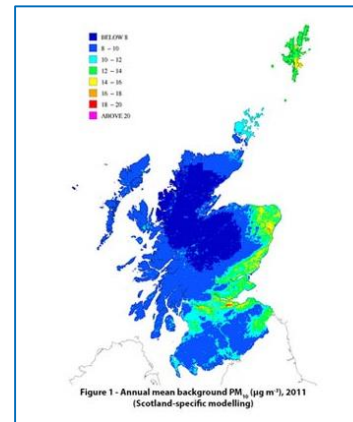
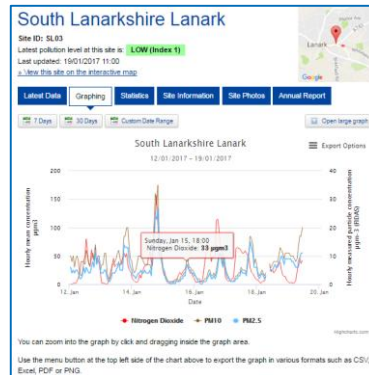
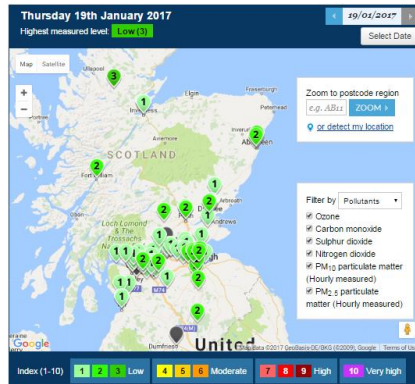
“include in legislation as Scottish objectives World Health Organisation guideline values for PM_{2.5}”

“Establish a PM_{2.5} monitoring network”

1st April 2016 The Air Quality (Scotland) Regulations were amended to include the annual mean objective of 10 µg/m³ for PM_{2.5}

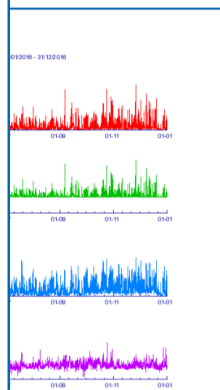
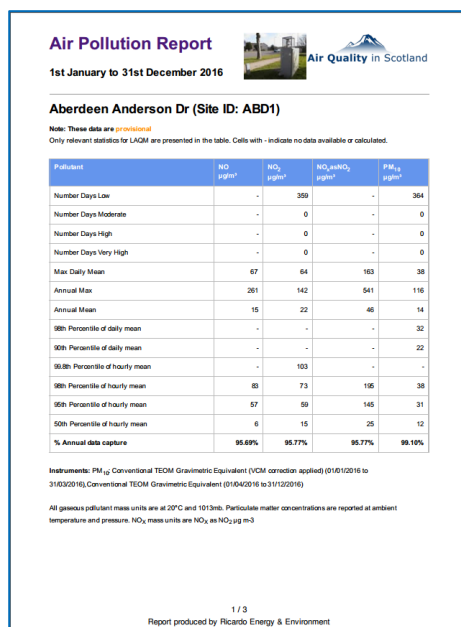
- Nov 2015 – **14** PM_{2.5} sites (8 Local Authority sites)
- Jan 2017 – **25** PM_{2.5} sites (19 Local authority sites)
- @ 12 Local authorities

Functions within the Website

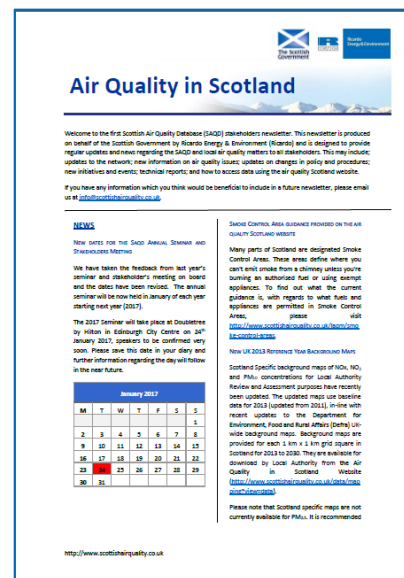


Recent New additions to the Website

- Newsletter
- AP Reports <http://www.scottishairquality.co.uk/>
- SEPA data analysis tools
- CAFS Page <http://www.scottishairquality.co.uk/air-quality/CAFS>
- News Alert Emails – are you included?



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Report produced by Ricardo Energy & Environment



Air pollution in Scotland 2016 – FoE article



NEWS

Home | UK | World | Business | Politics | Tech | Science | Health | Education | Entertainment

Scotland | Scotland Politics | Scotland Business | Edinburgh, Fife & East | Glasgow & West | Hi

Number of pollution zones in Scotland rises to 38

15 January 2017 | Scotland

Share



Scotland's Most Polluted Streets Revealed - 5 New Pollution Zones Declared

[Click here to Take Action for Clean Air](#)

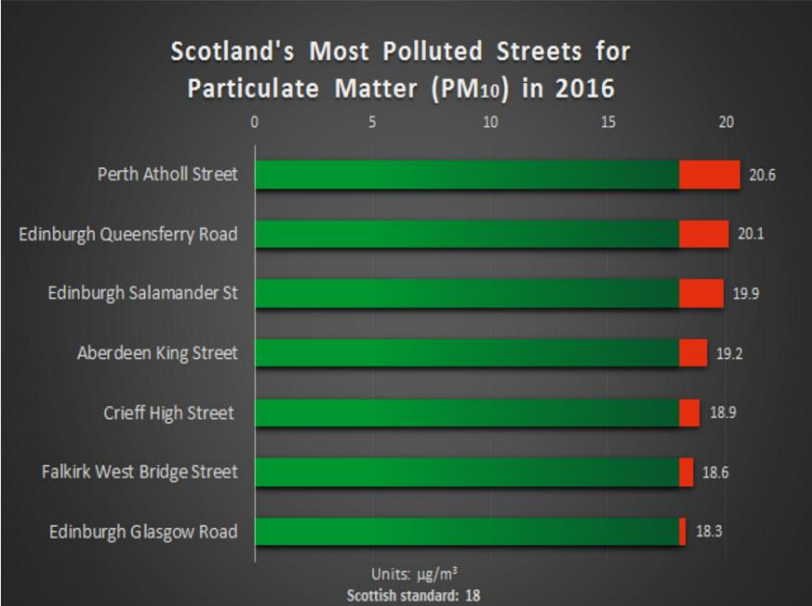
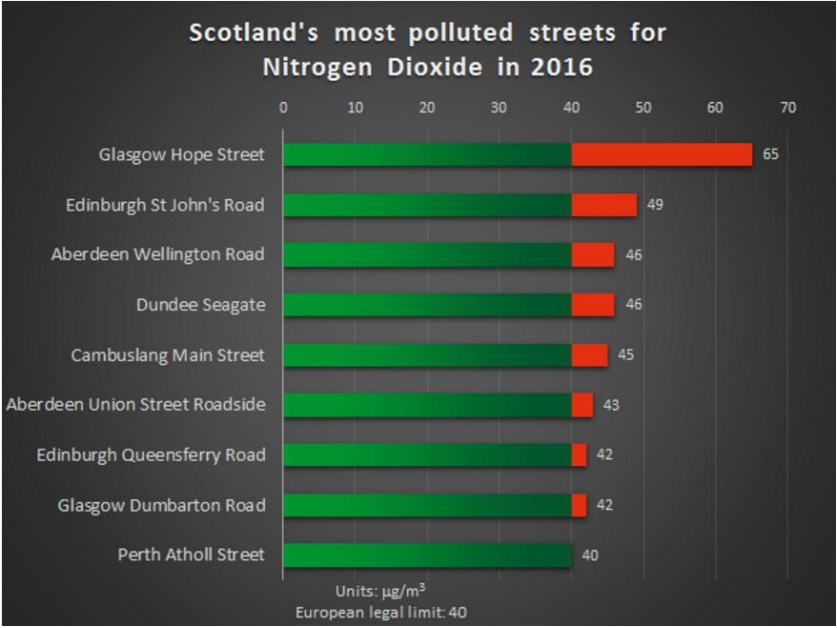
Friends of the Earth Scotland today published a list of Scotland's most polluted streets in 2016, showing that streets in many parts of Scotland continue to have unsafe and illegal levels of toxic pollution seven years after a legal deadline and despite a Government plan to comply with clean air obligations.

There are now a total of 38 Pollution Zones in Scotland where air quality safety standards are regularly broken, up from 33 last year. In 2016 new official Pollution Zones were declared in Linlithgow and Newton in West Lothian, Johnstone and Renfrew in Renfrewshire, with another new one in Edinburgh's Salamander Street coming into force later this month.

Scotland's Air Pollution Zones



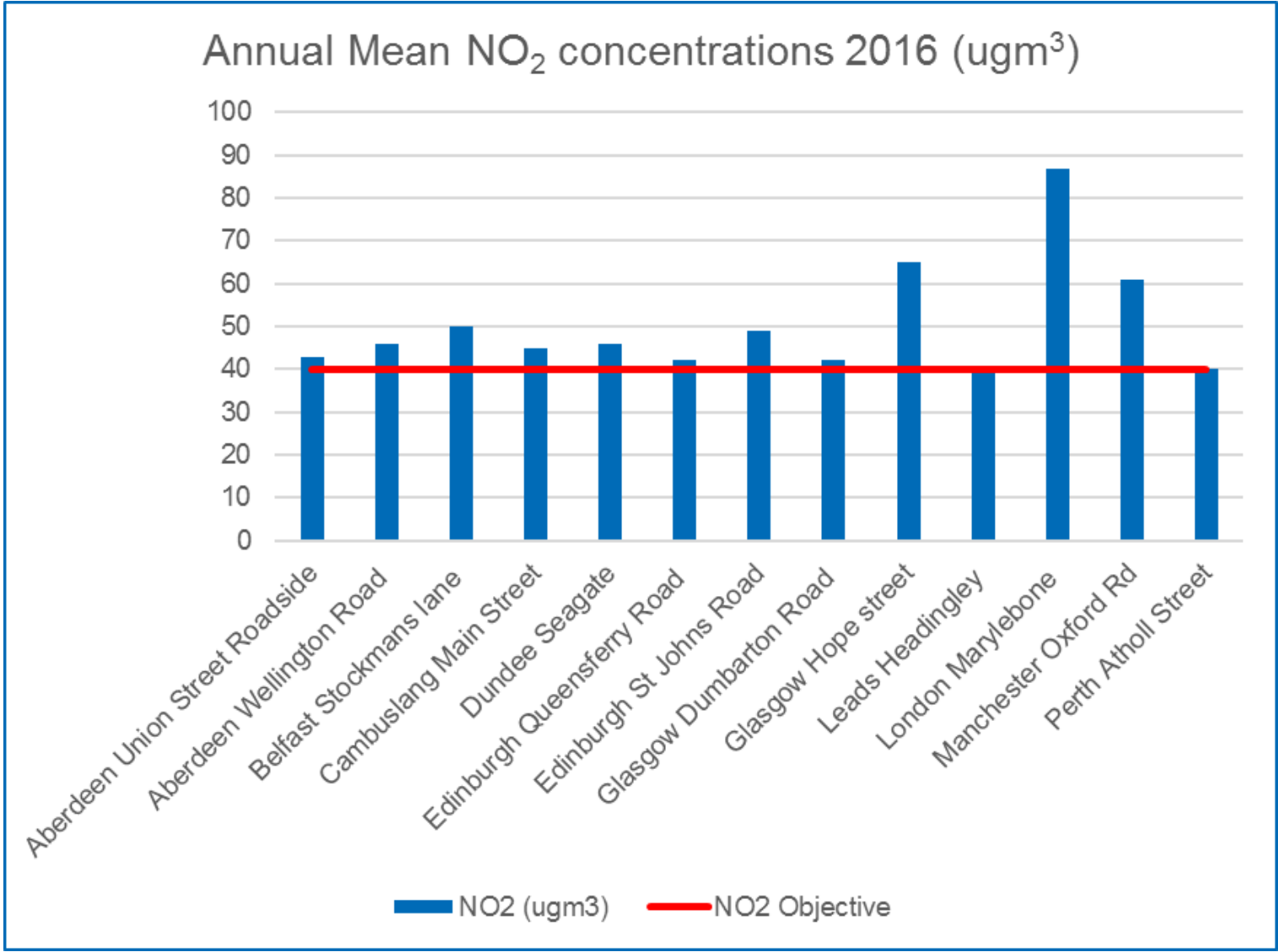
Area	Pollution Zones	Most polluted street
Highlands	1	Inverness High St
Aberdeen	3	Wellington Rd
Perth & Kinross	2	Atholl St, Perth
Dundee	1	Seagate
Fife	2	Agincourt Crescent, Dunfermline
Falkirk	4	West Bridge St
East Lothian	1	High St, Musselburgh
Edinburgh	6	St John's Rd
West Lothian	2	Linlithgow High St
South Lanarkshire	3	Cambslang Main St
North Lanarkshire	4	Shaughhead Ave, Coatbridge
Renfrewshire	3	Johnstone High St
Glasgow	3	Hope St
East Dunbartonshire	2	Roman Road, Bannockburn

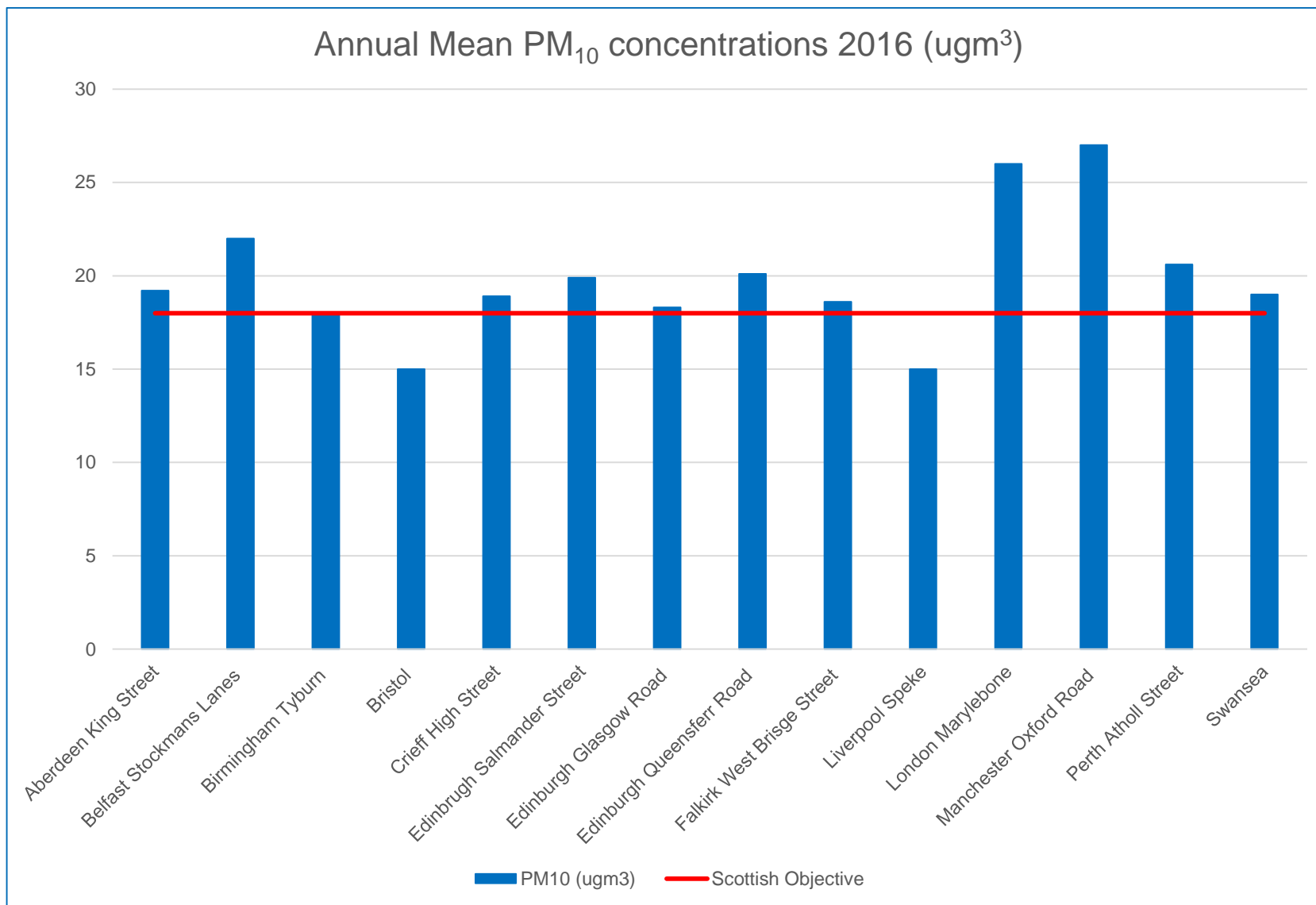


Air pollution in Scotland



- FoE Article
 - Raises awareness but ignores lots of good work being undertaken by the Scottish Government and Local Authorities
 - Sense check:
 - Provisional data is being used
 - Doesn't take into consideration site locations – Kerbside
 - Review long term trends to see what happening
 - PM₁₀ target is 18 µg/m³, most stringent in Europe
- Exciting developments and work being undertaken:
 - CAFS
 - Introduction of PM_{2.5} objective (10 µg/m³)
 - Increase in Monitoring and AQMAs (now 38 from 33 last year)
 - Large number of awareness raising activities – e.g. Twitter, Apps, Education Programmes





Long Term Trend at the Most polluted sites in Scotland

- Interactive Reports



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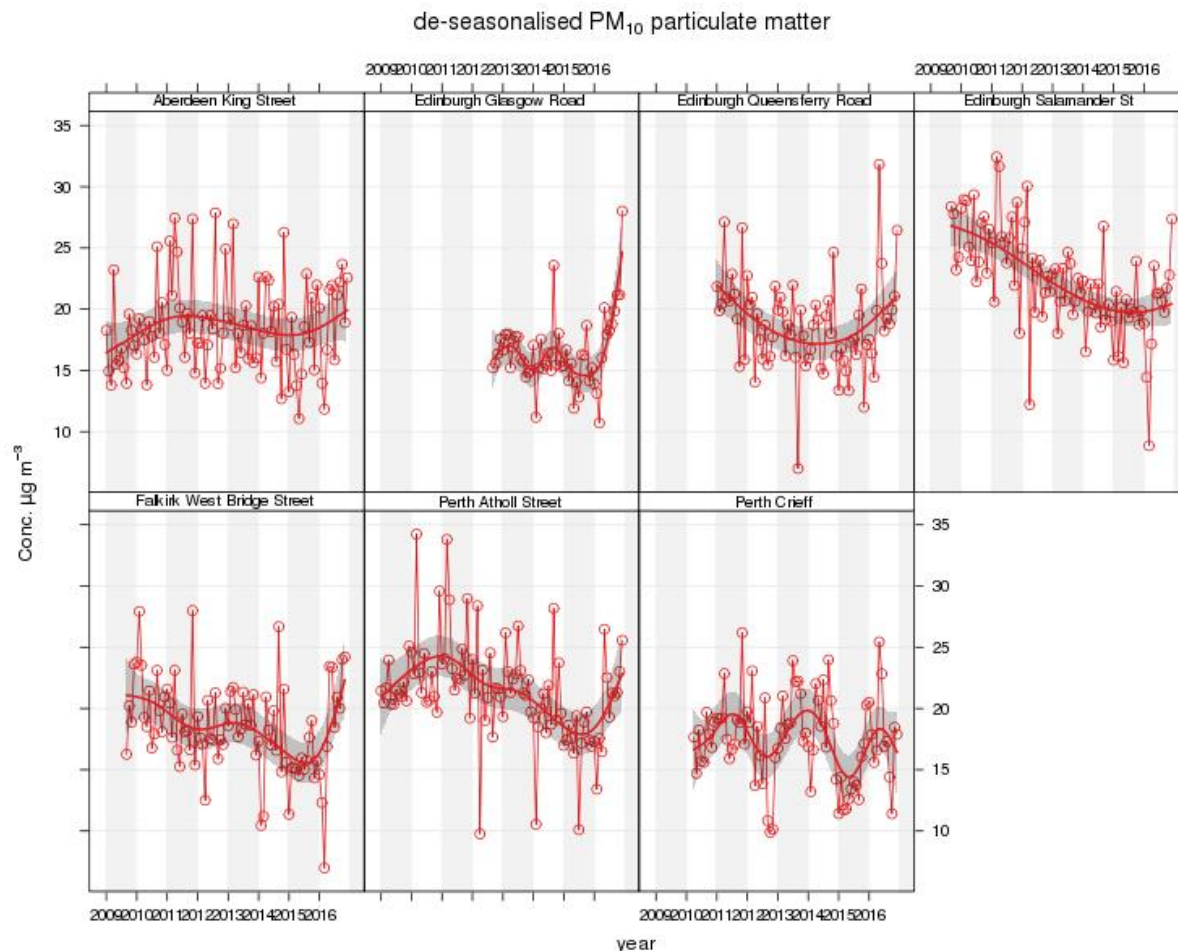
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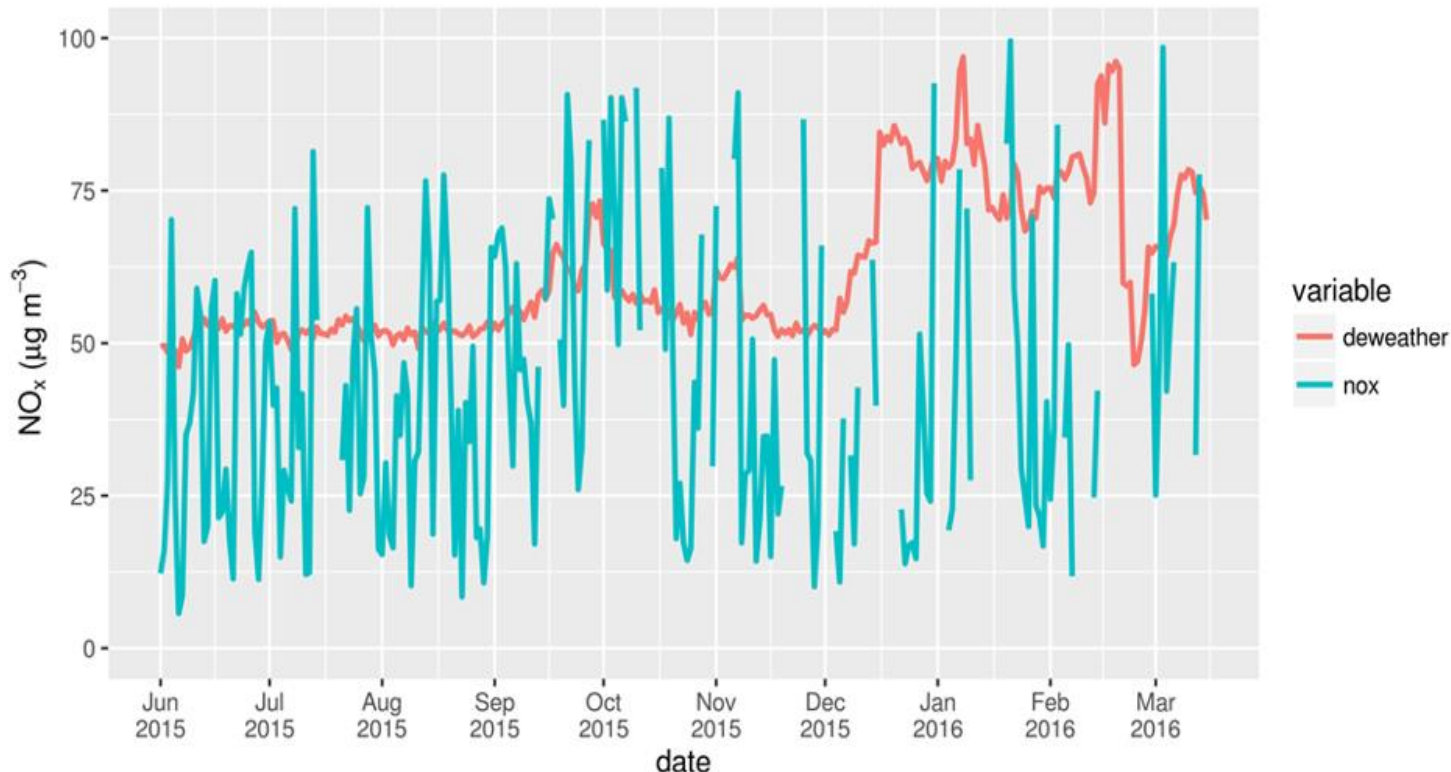
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Interesting Air Quality and Data Analysis Event: FRB Closure

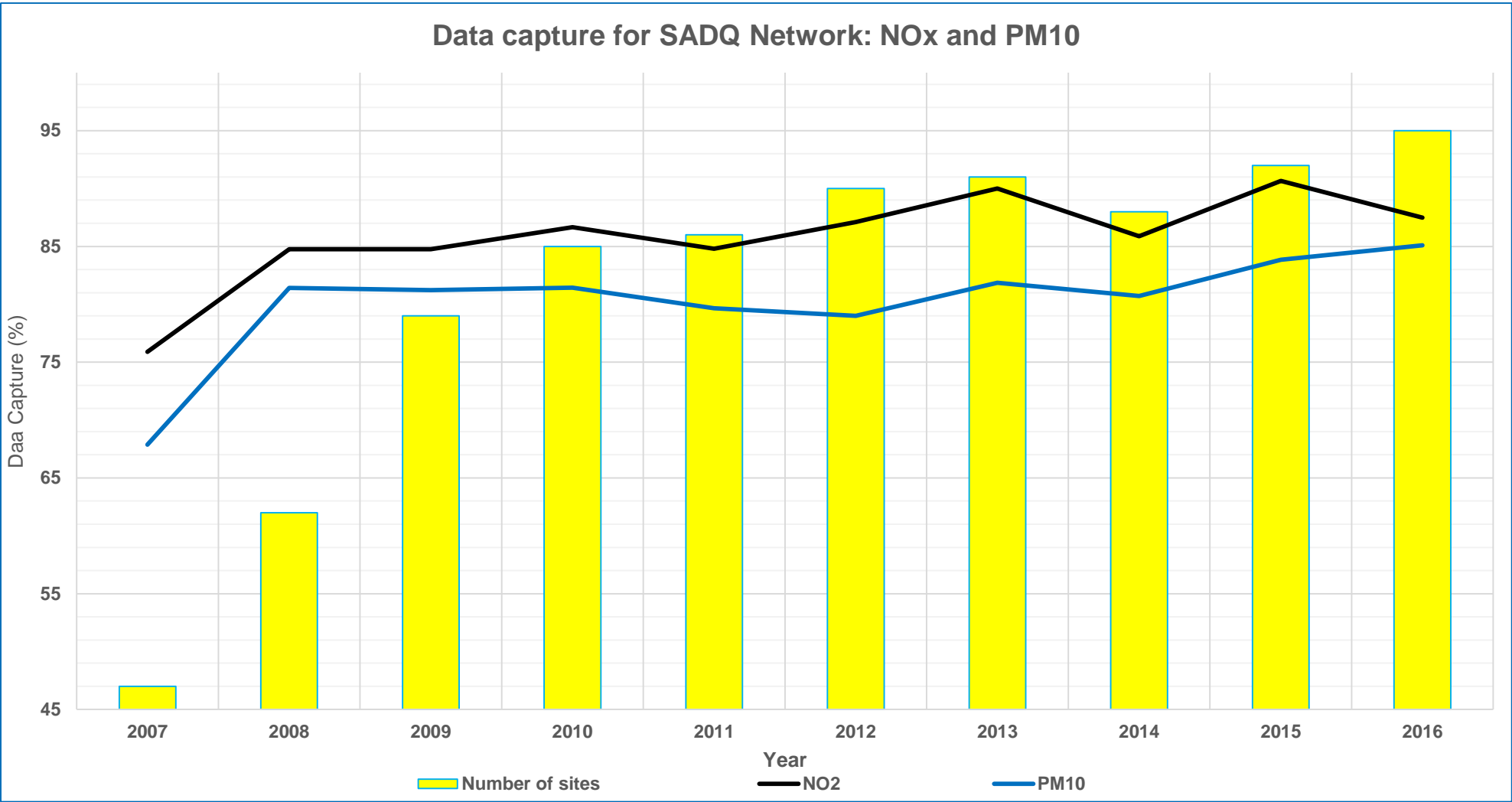
- Fife Council commissioned a report to assess West Fife's air quality before, during and after the Forth Road Bridge closure from Dec 2015 to Feb 2016

Figure 21: Daily averaged monitored NO_x plotted against modelled de-weather adjusted daily average NO_x



Quality Assurance/Quality Control

- Importance of calibrations
 - Essential to the QAQC process
 - No cal data, we are unable to ratify
 - Reliance on autocal data
 - LSO training
 - LSO manual available of the Website
 - Youtube channels
 - Ricardo audits
- New Sites – Ricardo will provide support in locating sites.
 - Important to get it right
 - Renfrewshire – new Johnstone site
- Change in reporting of data 2016
 - Reporting to one decimal place in line with AURN
 - Reporting of negative gaseous concentrations in datasets
- Data capture Trend

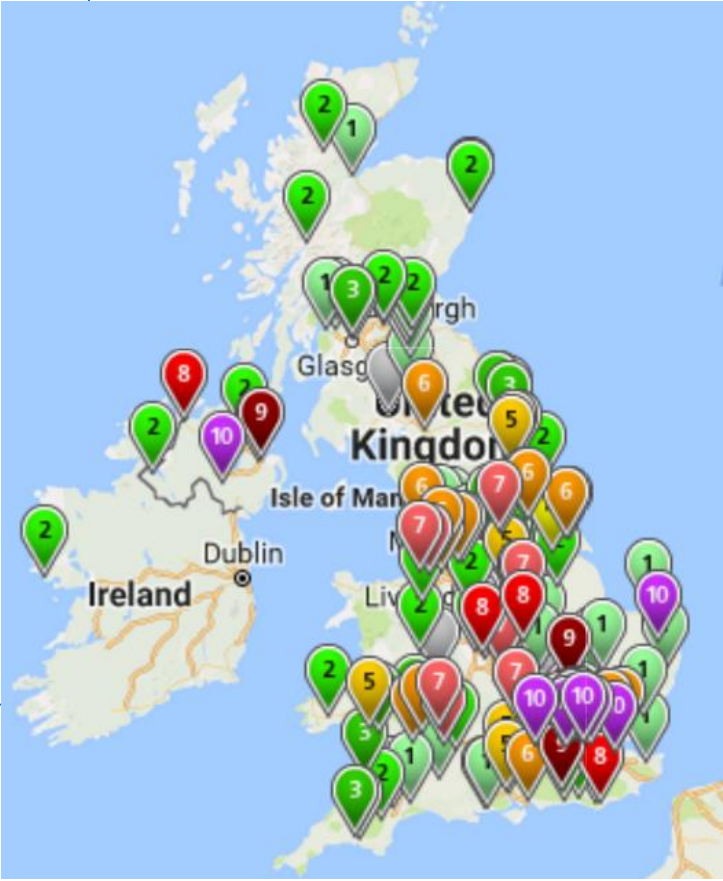
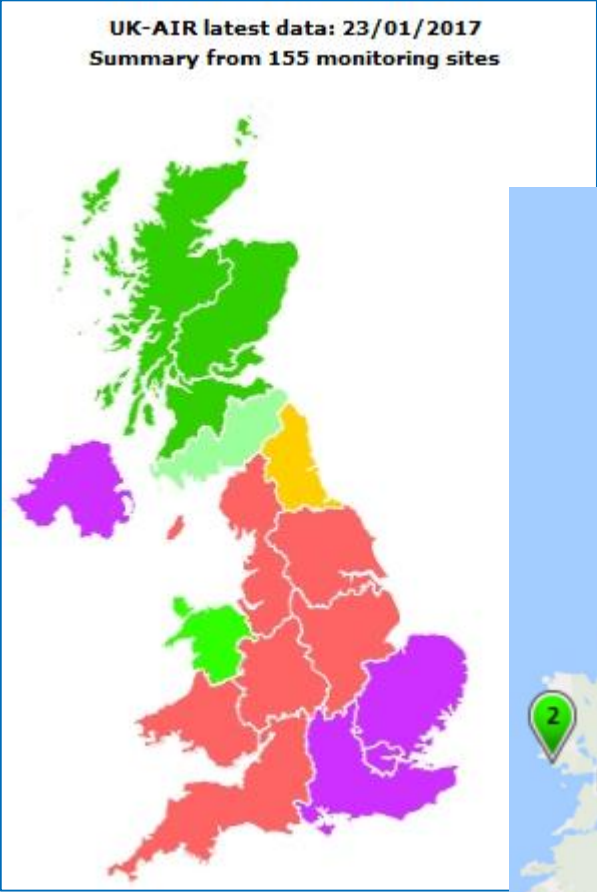


Your Scottish Air Quality Database and Website



- Feedback
- Suggestions
- Use it as a way to show of the work you are doing (events, Action Plan, Initiatives etc)
- Library of Information
- One stop shop for Air Quality in Scotland

Air pollution in Scotland – could be worse



Questions



David Hector
SAQD Project Manager
Ricardo Energy & Environment
18 Blythswood Square, Glasgow, G2 4BG, UK
David.hector@ricardo.com