

Scottish Air Quality Database  
Annual Seminar  
26<sup>th</sup> March 2015

- Action Planning Resource
  - Why?
  - How it has been developed?
  - Overview of the resource.

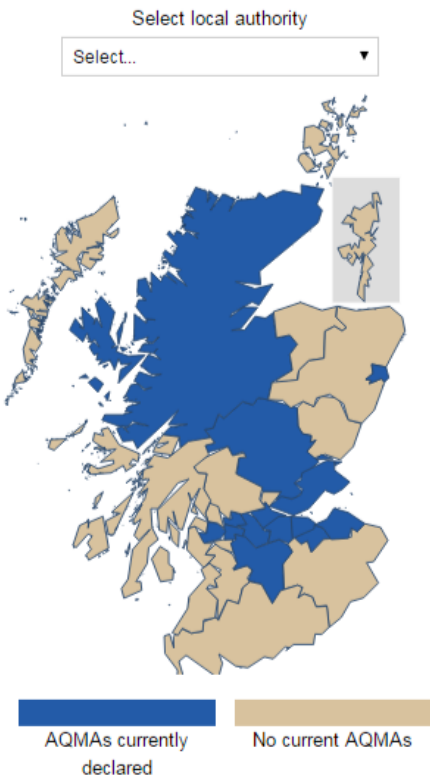
# Air Quality Management Areas in the Scotland



## Air Quality Management Areas

The following table summaries the local authorities across Scotland that have declared active AQMAs. Select a local authority to view more information and contact details. Use the dropdown to select a different local authority, which may contain details of revoked AQMAs in addition to those that are active.

Local authority	AQMAs (current and revoked)
<a href="#">Aberdeen City Council</a>	3
<a href="#">City of Edinburgh Council</a>	5
<a href="#">Dundee City Council</a>	1
<a href="#">East Dunbartonshire Council</a>	2
<a href="#">East Lothian Council</a>	1
<a href="#">Falkirk Council</a>	5
<a href="#">Fife Council</a>	2
<a href="#">Glasgow City Council</a>	3
<a href="#">Highland Council</a>	1
<a href="#">Midlothian Council</a>	1
<a href="#">North Lanarkshire Council</a>	6
<a href="#">Perth &amp; Kinross Council</a>	2
<a href="#">Renfrewshire Council</a>	1
<a href="#">South Lanarkshire Council</a>	1
<a href="#">West Lothian Council</a>	1



- Map filters:
- ☒ All current AQMAs
  - ☐ Revoked AQMAs
  - ☐ Only AQMAs for PM<sub>10</sub>
  - ☐ Only AQMAs for NO<sub>2</sub>
  - ☐ Only AQMAs for SO<sub>2</sub>



# Air Quality Management Areas in the UK

**Table 2-1 Current UK-wide status of Air Quality Management Areas (AQMAs) and Action Plans (as of Jul 2014.)**

Region	Total LAs	Number of LAs with AQMAs	For NO <sub>2</sub>	For PM <sub>10</sub>	For SO <sub>2</sub>	For Benzene	LA's with Action Plans submitted	LA's with Action Plans awaited
England (outside London)	291	189	468	40	6	0	166	84
London	33	33	33	29	0	0	33	1
Scotland	32	13	21	21	1	0	10	7
Wales	22	10	36	1	0	0	6	6
N. Ireland	26	12	23	6	0	0	13	5
<b>TOTAL</b>	<b>404</b>	<b>257</b>	<b>581</b>	<b>97</b>	<b>7</b>	<b>0</b>	<b>228</b>	<b>103</b>

*Note: some of the LA's with Action Plans awaited have already submitted earlier Action Plans (for other AQMAs or other pollutants). Hence the total of the two right-hand columns is greater than the total number of LA's with AQMAs.*

- **Revise and strengthen action planning**
- There is a clear need to refocus action planning away from diagnosis to delivery. Despite LAQM having been established for many years now, progress with implementing action plans has been disappointingly slow. The main barriers to successful implementation are common to most local authorities and include:
  - lack of political will and public support for radical measures
  - lack of funding for large infrastructure projects
  - difficulties in engaging all local authority departments in the action planning process
  - a general lack of resources for air quality work.
- Although a wide range of action plan measures have been implemented by many authorities, the majority of these have tended to be measures that are relatively inexpensive, politically acceptable and easy to implement, which often means that their impact on air quality can be low. This isn't to say that such measures do not make an important contribution, as success is judged on the overall impact of an action plan.
- However, another issue associated with action planning is the lack of robust quantification of measures that have been implemented, making it difficult to assess how effective different measures have been in reducing emissions. It may be the case that the action planning process could be made more effective by switching to a focus on emissions reduction outcomes, whilst retaining a concentrations i.e. objectives based for the review and assessment side of LAQM.



- Q9** Do you agree there needs to be more focus on action planning and delivery? Do you have any suggestions on how to improve delivery? What have been the main barriers to effective delivery to date?
- Q10** Do you agree that local authorities should be provided with more detailed advice and guidance on what action they can take to make their action plans more effective?

**Q9 Do you agree there needs to be more focus on action planning and delivery? Do you have any suggestions on how to improve delivery? What have been the main barriers to effective delivery to date?**

23 consultees agreed that there should be more focus on action planning. One consultee offered no specific comments and the remaining 10 made various suggestions around action planning without specifically supporting more focus.

The key suggestions for improving delivery were:

- More focus on effective measures;
- More focus on reducing emissions at source, so less need for action planning;
- Effective action plans should be a legal requirement on local authorities;
- Better co-ordination and joint working between local authority departments;
- A national air quality action plan is required;
- Stronger focus on air quality in the planning system;
- A requirement to update all action plans regularly;
- More effective assessment of plans by the Scottish Government;
- Better fleet composition data;
- Stronger political commitment to action;
- Inclusion of air quality in Joint Health Protection Plans;
- Strengthened requirement for air quality in Single Outcome Agreements;
- Better enforcement of health messages.

The main barriers to effective delivery are considered to be:

Lack of corporate responsibility for action within local authorities;  
Perception of air quality as a constraint on development;  
Lack of resources;  
Lack of local authority control over some sources, especially the trunk road network;  
Euro standards failures;  
Increased proportion of diesel vehicles in the overall fleet;  
Development outwith urban centres encouraging private car use.





**Q10 Do you agree that local authorities should be provided with more detailed advice and guidance on what action they can take to make their action plans more effective?**

The breakdown of responses to this question was;

Agree – 31

Disagree – 1

No specific comments – 2

Consultees clearly believe that there is a strong need for improved guidance in relation to action planning. Seven consultees made the point that there is already a lot of guidance available, but that it needs to be consolidated into one easily accessible resource, preferably online. Eight consultees felt that best practice examples should be a key component of guidance. One consultee suggested that research is needed to identify gaps in current guidance. Consultees also suggested that it would be useful to have more feedback and constructive criticism on submitted action plans.

Other suggestions for information that should be covered by guidance included:

- Planning;
- Climate change co-benefits assessment;
- Simple spreadsheet and toolkits;
- Public health benefits of measures;
- Mitigation measures;
- Green infrastructure.

The consultee that disagreed ~~was of the view that efforts need to be focused on taking action, not producing further guidance.~~

**SG response** – the Scottish Government will undertake a review of existing action planning guidance and draw this together into an easy to use online resource. We will identify any information gaps that need to be filled, using the above points as a guide.

~~We will similarly assess the availability of spreadsheets and toolkits, with the intention of developing a methodology that can be used by local authorities to quantify and demonstrate potential emissions reductions.~~

Finally we will review our approach to action plan assessment, with the aim of providing more effective feedback to authorities.



- to provide Local Authorities with
  - a best practice air quality action planning resource,
  - incorporating all of the necessary information and tools
  - from declaration of an Air Quality Management Area (AQMA) to the development and implementation of an Air Quality Action Plan (AQAP).
- Project identified 3 tasks
  - Review of existing guidance
  - Review of existing tools and the development of a central repository
  - Development of an interactive flow chart and central repository within the Air Quality in Scotland Website



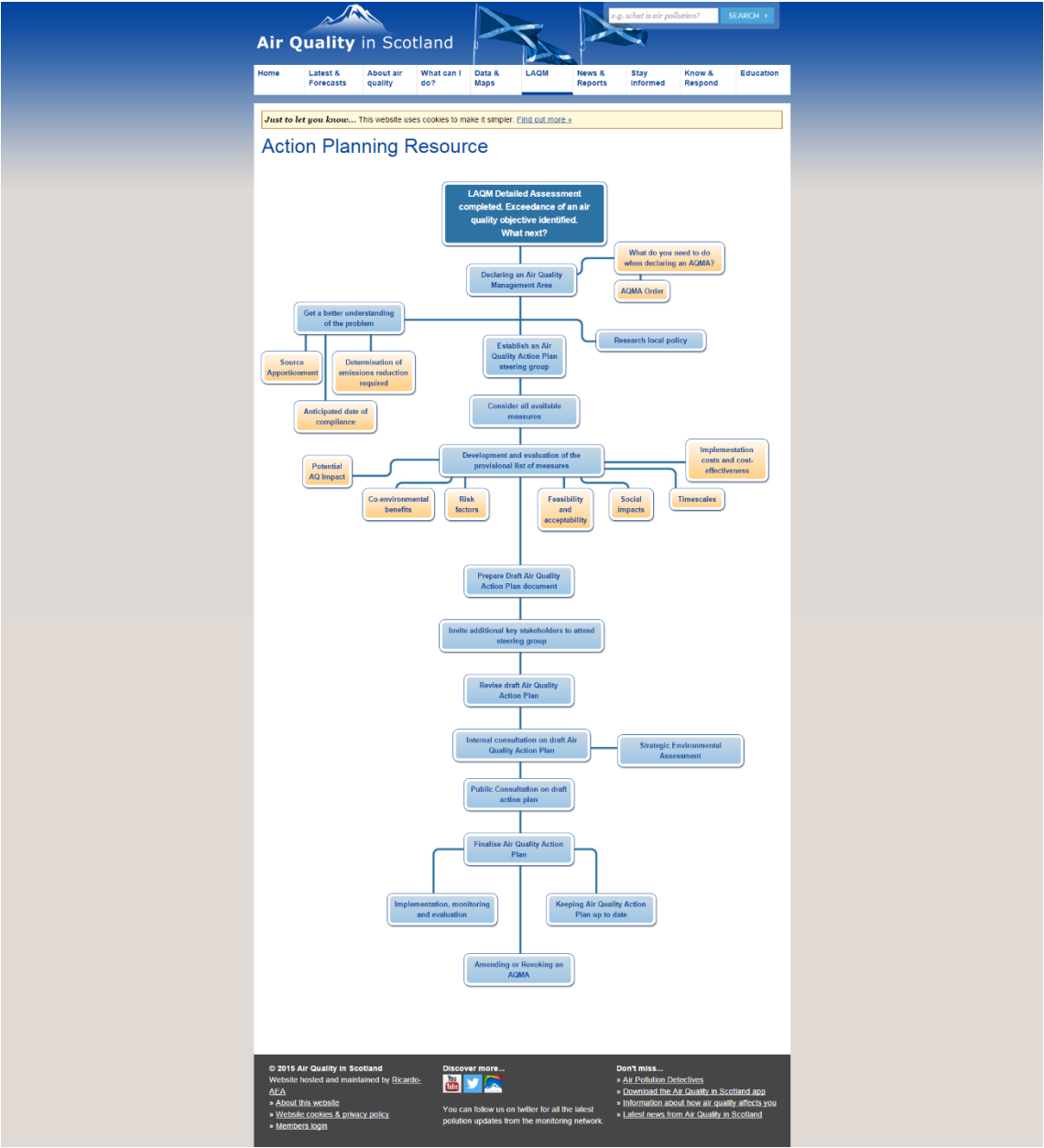
- Set up a small working group
  - Key stakeholders
    - 3 Local Authority (LA) representatives and 1 SEPA representative
  - The draft outline tool was shown to the group – positive feedback
  
- Role of group
  - To meet periodically and provide feedback on the project as it develops.
  - Assist with identifying what the resource should include
  - Test tool /resource as it develops

- Monitoring data
- Background data
- Transport Emission Models
- Activity Data
- Pollutant Emission Data
- Screening Assessment Tools
- Modelling – AQ concentrations
- Misc. Tools
- Guidance and Case Studies



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


Name	Produced by	Purpose	Platform	Last updated	Current availability	Country of origin	Evidence of application	Ease of Use	Perceived Use
Annual Average Daily Traffic Flows	<a href="#"><u>DfT</u></a>	Provides estimated traffic flows on every link of the 'A' road and motorway network in Great Britain. The data are for the years 2000 to 2013.	CSV Microso ft Excel	2014	<a href="http://www.dft.gov.uk/traffic-counts/">http://www.dft.gov.uk/traffic-counts/</a>	UK	Review and Assessment Reports AQ assessments	1	2
Road Traffic and Speed statistics	<a href="#"><u>DfT</u></a>	Average daily motor vehicle flows by road class, GOR and country	PDF	2014	<a href="https://www.gov.uk/government/collections/road-traffic-statistics">https://www.gov.uk/government/collections/road-traffic-statistics</a> <a href="https://www.gov.uk/government/collections/road-traffic-statistics#publications-released-during-2014">https://www.gov.uk/government/collections/road-traffic-statistics#publications-released-during-2014</a>	UK		1	2
Pollutant Emission Data									
Road Transport Emission factor toolkit	Bureau Veritas and Ricardo-AEA	The toolkit allows the user to calculate vehicle emissions for multiple road links based on vehicle fleet composition, traffic speeds and road type. This version supersedes any previous road transport emission factors made available	Microso ft Excel	July 2014	<a href="http://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html">http://laqm.defra.gov.uk/review-and-assessment/tools/emissions-factors-toolkit.html</a>	UK	Review and Assessment Reports AQ assessments	2	2
Exempt Model - dealing with cold start emissions	Ricardo-AEA	Calculates the excess emissions from vehicles with cold engines. There are 2 spreadsheets – basic and advanced	Microso ft Excel	2008	<a href="http://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html">http://laqm.defra.gov.uk/review-and-assessment/tools/emissions.html</a>	<b>Ease of use:</b> 1. Limited instruction required 2. More detailed guidance required 3. Training required  <b>Perceived Use:</b> 1. Used by both LA and Consultants 2. Limited use by LA 3. Used mainly by Consultants 4. Limited use			
Emission factor database	Ricardo-AEA	This database contains the emissions factors used in the 2012 UK National Atmospheric Emissions Inventory (NAEI), as well as factors specially designed for local inventories	CSV Microso ft Excel	2014 (2012 data)	<a href="http://naei.defra.gov.uk/data/ef-all">http://naei.defra.gov.uk/data/ef-all</a>				
1 * 1km emission estimates	Ricardo-AEA	Provides high level emission estimates for 2012 for each 1 * 1km grid square in the UK	ASCII Grid format files, which can be used in most GIS softwar e	2014 (2012 data)	<a href="http://naei.defra.gov.uk/data/map-uk-das">http://naei.defra.gov.uk/data/map-uk-das</a>	UK	Used by Local Authorities when compiling Emission Inventories	2	2 possibly 3



<http://preview.scotarc.aeat.com/laqm/action-planning-resource>







e.g. what is air pollution? SEARCH ▶

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## Action Planning Resource

### 6. Consider all available measures

When preparing an air quality action plan, steering groups should initially undertake a provisional evaluation of all possible measures that could improve air quality within their AQMA(s). This provisional evaluation is required to demonstrate that the authority has considered all possible options when developing the plan. The list of all possible measures will be somewhat specific to the AQMA in question and the sources which it is targeting, however, a list of measures commonly considered within action plans can be found here:

When developing the initial list of measures for initial evaluation, the steering group should use local knowledge but also information generated by the source apportionment exercise. The aim of the action planning process is to identify and prioritise practicable, feasible and acceptable actions/ measures that have the potential to improve air quality within the AQMA. Importantly, the review of existing local policy should feed into this process, as it may identify measures that are being progressed through ongoing work which could be incorporated or modified to help support the objectives of the air quality action plan.

The Policy Guidance LAQM.PGS(09) states that Air Quality Action Plans must focus on 'effective, feasible, proportionate and quantifiable measures' and provide 'evidence that all available options have been considered on the grounds of cost effectiveness and feasibility'.

By discussing each of the initial list of all possible measures within the steering group and documenting reasons for exclusion or inclusion for further evaluation, it should be possible to develop an initial short-list of measures for further evaluation.

Example measures for initial consideration

Co-environmental benefits

Risk factors

Feasibility and acceptability

Social impacts

Timescales

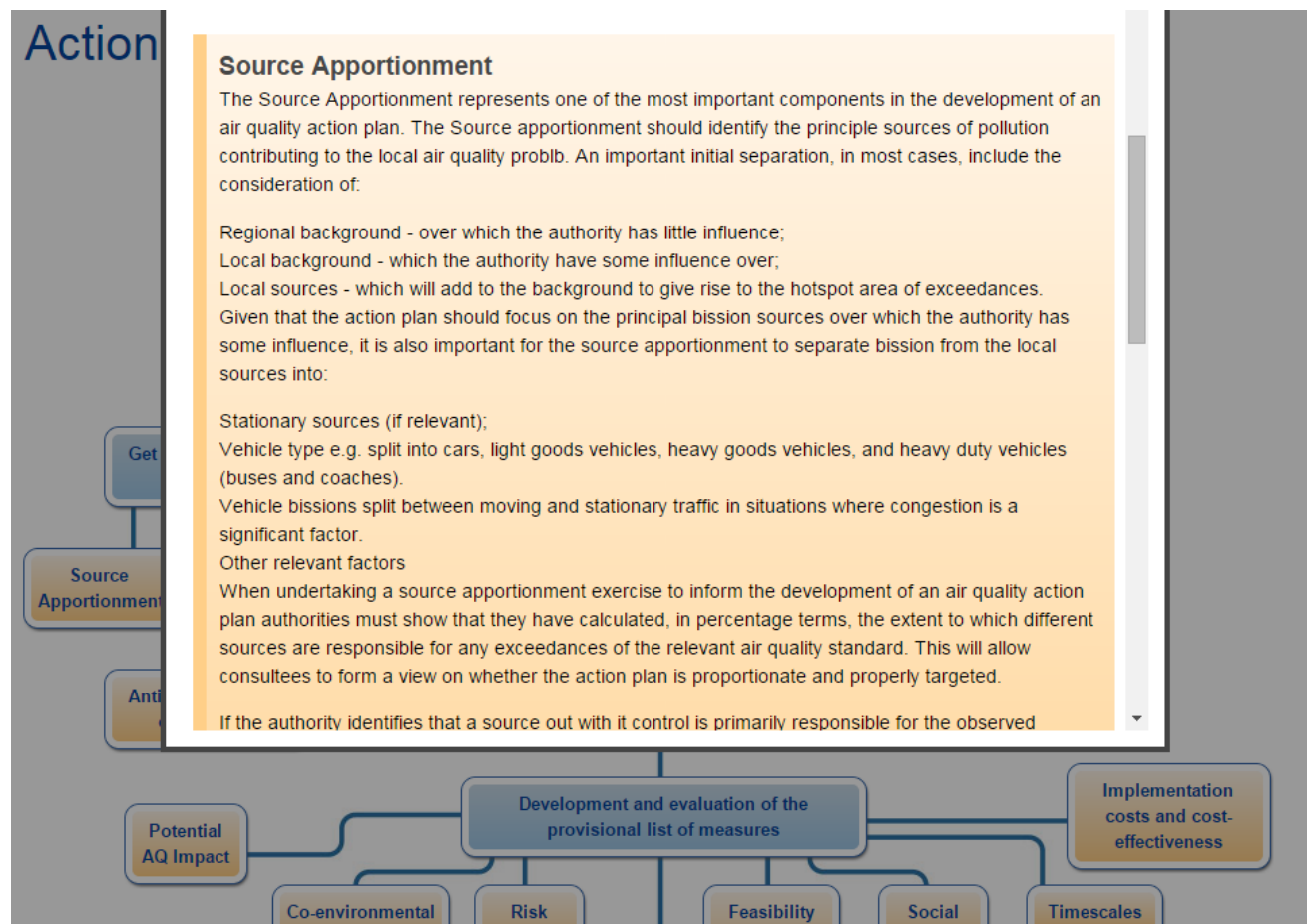
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- Links to relevant tools and guidance
- Short videos demonstrating the use of tools





2014 EFT2014\_v6.0.2.xls [Compatibility Mode] - Excel

FILE HOME INSERT PAGE LAYOUT FORMULAS DATA REVIEW VIEW DEVELOPER

Clipboard Font Alignment Number Styles Cells Editing

2014

Select Pollutants		Select Outputs		Additional Outputs		Advanced Options		Click the button to:	
<input checked="" type="checkbox"/> NOx	<input type="checkbox"/> Carbon Dioxide	<input checked="" type="checkbox"/> Air Quality Modelling (g/km/s)	<input type="checkbox"/> Breakdown by Vehicle	<input type="checkbox"/> Emissions Rates (g/km)	<input type="checkbox"/> Source Apportionment	<input type="checkbox"/> Euro Compositions		Run	
<input checked="" type="checkbox"/> PM10	<input type="checkbox"/> Hydrocarbons	<input type="checkbox"/> Annual Link Emissions	<input type="checkbox"/> PM by Source	<input type="checkbox"/> Alternative Technologies		<input type="checkbox"/> Output % Contributions from Euro Classes		Clear Input	
<input type="checkbox"/> PM2.5									

Please Select from the Following Options:

Area	Year	Traffic Format
Scotland	2014	Detailed Option 2

Select 'Basic Split' or 'Detailed Option 1 to 3' above

Export Outputs

☐ Save Output to New Workbook

File Name:

SourceID	Road Type	Traffic Flow	% Car	% Taxi (black cab)	% LGV	% Rigid HGV	% Artic HGV	% I

Intro Quick Start QA **Input Data** Output Output\_PM

READY 90%

## What is next?

- Working group and Scottish Government to review and comment
- Resource updated following comments
- Test version will be made available for wider comment



# Any questions?

# Thanks for listening

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