



Low Emission Strategies

Building on Good Practice

The Low Emission Strategies Partnership is a partnership of local authorities working together to reduce air quality and carbon emissions from road transport. They do this by promoting the uptake of low emission fuels and technologies, by developing tools and resources and sharing best practice. For further information visit www.lowemissionstrategies.org.uk

Or contact by email: info@lowemissionstrategies.org

Professional Recognition and Competency in Local Air Quality and Carbon Management

LES Partnership Workshop Report
April 2011

Report Prepared by Green Sphere on behalf of the LES Partnership

This report reflects discussions from an informal workshop held by the LES Partnership on the 27th September 2010. The meeting was hosted by Defra. The report reflects the broad consensus of discussions. It does not necessarily reflect the detailed opinions of all participants on all issues.



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Executive Summary

1. A workshop was held on the 27th September 2010. It was organised by the Low Emissions Strategies Partnership with the aim of promoting debate and exploring opportunities to maintain and improve professional recognition and competence in local air quality and carbon management.
2. Participants comprised representatives from Chartered Institute of Environmental Health (CIEH), the Department for Food and Rural Affairs (DEFRA), EMAQ, Environmental Protection UK (EPUK), Institute of Air Quality Management (IAQM), Local Government Regulation, Low Emission Strategies (LES) Partnership, University of Salford, University of the West of England (UWE).
3. The aims of the meeting were to: share progress and news on developments in policy, training provision and accreditation relating to local air quality and carbon management; identify opportunities and challenges, and explore potential for future collaboration.
4. Prior to the meeting, the LES Partnership had commissioned two short studies, one from the University of West England and one from the University of Salford, to investigate needs, current provision and future opportunities for training and professional development for air quality and carbon management professionals. These are available on the LES Partnership website: www.lowemissionsstrategies.org
5. The workshop explored three areas: (i) implications of the evolving policy context for local emissions management, (ii) course and content development, (iii) progress on and opportunities for accreditation. The Workshop report draws out the following conclusions:
 - C1 Participants noted that any moves to improve training provision need to take into account the implications of **reduced local resources** and the drive towards **localism**.
 - C2 There is potentially an opportunity for a **'national competency framework'** to help broaden skills, standardise provision and enhance professional recognition. This would need to work with existing provision and avoid duplication. The delivery mechanism would need to be simple and cost effective, ideally drawing on existing models from other fields.
 - C3 **Accreditation** should be considered alongside course provision and, if progressed, the development of a national competency framework. Potential accrediting bodies include IAQM and/or the Institute of Environmental Sciences.
 - C4 In the design of training provision, it is important to consider the balance between: (i) **flexibility and specificity** of courses, and (ii) the coverage of **technical skills** and **those relating to professional management and delivery**.
 - C5 There is a potential for the development of **new specialist training modules** in key areas.
 - C6 Provision of training and accreditation has an important role to play in helping to maintain and **strengthen professional recognition and competence in local emission management**. At the same time providers need to be confident that there is **sufficient demand** for the services they provide.
 - C7 The prospects for any new initiatives or provision will be enhanced by **good engagement** of stakeholders before and during development and by effectively **communicating the benefits** of resulting products and services to local authorities and their staff.

6. The workshop report makes the following recommendations to the LES Partnership and also to wider stakeholders for strengthening professional recognition and competence in local air quality and carbon management:
- R1 Explore opportunities for **recognising and supporting current course providers** in their efforts to provide improved training and wider choice of provision (for example through collaborative marketing/communications)
 - R2 **Explore opportunities for development of specialist modules** to expand and strengthen the scope of current provision (and also potential for collaboration with existing providers for delivery).
 - R3 Seek funding for and progress a detailed scoping study for the development of a **'national competency framework for air quality and carbon management'** (the study should seek learnings from other sectors and professions. It needs to ensure good stakeholder engagement throughout and seek to build a consensus with those stakeholders on any recommendations)
 - R4 Reflecting the shift of emphasis within LAQM from monitoring to action, encourage course providers **to continue and enhance their efforts to improve training and competency in professional management and delivery skills** for air quality and carbon management practitioners.
 - R5 Explore avenues to address **current knowledge gaps with regards training needs and provision for carbon management. In parallel seek to engage relevant carbon management stakeholders** more deeply, with a view to identifying opportunities to **strengthen integration of carbon management and air quality training**

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1 Introduction

1.1 Objectives and scope of meeting

This meeting was organised by the Low Emissions Strategies Partnership with the **aim of promoting debate and exploring opportunities to improve professional recognition and competence in air quality and carbon management**. Representatives of a number of organizations with an interest in this area attended:

Organisation	Representative(s)
Chartered Institute of Environmental Health (CIEH)	Howard Price
DEFRA	Robert Vaughan
EMAQ	Beth Conlan
Environmental Protection UK (EPUK)	Ed Dearnley
Institute of Air Quality Management (IAQM)	Clare Beattie
Local Government Regulation	Cassandra Harrison
Low Emission Strategies (LES) Partnership	Gary Mahoney (meeting chair)
University of Salford	Andrew Clark
University of the West of England (UWE)	Jo Barnes
Green Sphere	Rob Pilling (LES Programme Manager) Mark Wells (Project Associate)

The objectives of the meeting were to:

- i) Share progress and news on developments in policy, training provision and accreditation for local air quality and carbon management.
- ii) Identify opportunities and challenges
- iii) Explore potential collaborative action

1.2 Background

Prior to this meeting, the LES partnership commissioned two short studies to investigate needs, current provision and future opportunities for training and professional development for air quality and carbon management professionals. Important drivers behind this work were:

- i) A desire to strengthen the recognition and respect for an Air Quality Officers professional opinion through formal accreditation (e.g. internally across councils and externally at public enquiry)
- ii) A desire to ensure those responsible for emissions management within local authorities have the skills and support they need to be effective in their work
- iii) A desire to see stronger integration between management of air quality pollutants and reduction of greenhouse gasses, particularly in the transport sector

The first study from Salford University¹ provides a review of current training provision, and surveys the views of Air Quality Officers on their training needs. The study makes a strong case that the impact of current training provision could be improved by the development of a clearly accredited training route. It also identifies a demand for more tailored short courses covering relevant topics.

The second study provides an overview² of UWE's market research on current training provision in air quality and carbon management, demand for training, and describes the new course UWE have developed. The paper concludes that although there are a number of organizations running relevant training events, there is a need for 'formal and cohesive' training programs.

A summary³ of the key findings from the Salford study was provided to participants as a basis for discussions at the meeting.

2 Information and Developments Presented at Meeting

2.1 Policy Context

A summary was given of the DEFRA view of the policy and historical context framing the discussion, emphasising the overall trend in the direction of **localism** and **reduced resources**.

2.1.1 Historical context

Any project to improve training provision must recognise existing expertise in air quality management, and that the field of expertise in this area is much older than the LAQM framework. The landscape has also changed considerably since LAQM was introduced, for example with large increases in the number of AQMAs . These developments have increased our knowledge of the problems faced. In parallel with this, there has been increased use of actions plans to tackle these problems and increasing knowledge of how to deliver air quality improvements. To deliver these improvements, air quality officers are increasingly operating in the fields of project management and resource management. In summary, **the field has moved from understanding the issues to active problem solving.**

At the same time, air quality management has been **overtaken in importance by Climate Change**, which is now a higher policy priority. Air quality officers must now be able to work with other branches of government and policy effectively.

2.1.2 Skills base for air quality practitioners

A broad skill base and range of capabilities is needed, in addition to maintaining strong scientific skills and technical rigour in air quality. Training provision should recognise the need for more general professional skills, for example in the following areas:

- i) Effective working within organisation structures, including interacting with and influencing different branches of an organisation
- ii) How to use resources effectively
- iii) Good communications skills, both for communicating to the public and for negotiations within Local Authorities.

2.1.3 The implications of localism

Defra believe that **Localism presents an opportunity to raise air quality up the agenda**. This will require good communication, as authorities will be held to account locally rather than by central government. This in turn will make new demands of air quality officers. They will have to influence people by communicating air quality issues well, and be able to obtain and use resources effectively. DEFRA's role will shift away from prescription towards setting policy goals and providing a strategic framework within which local authorities can achieve them. It will be a matter for Local Authorities to decide the means to deliver air quality improvements on the ground.

2.2 Course Content and Development

Short summaries were given on new developments in course provision at UWE, Salford and EMAQ.

2.2.1 UWE

The Air Quality Management Resource Centre at **UWE has developed a series of short courses in air quality and carbon management** with HERDA funding. The courses are aimed at air quality and carbon management professionals, transport planners, land-use planners and councillors. The course is delivered as CPD via one day sessions, with trainees receiving theoretical and practical training. The whole course is made up of seven standalone one day courses, with one session run per month on a rolling basis. To complete the accredited CPD training, additional hours of study can be gained for accessing materials outside of the training day.

In the next 12 months **UWE plans to introduce a Masters level qualification**, which will have similar though possibly expanded content. The plan is to package the training days as 15 or 20 credit modules, with additional dissertation and research methods modules. Effective marketing of the course will be vital for its success, they would welcome ideas and potential assistance in doing so.

2.2.2 EMAQ

EMAQ was designed to meet the training needs of Local Authority professionals arising from new legislation, for example the Environmental Protection Act and the Environment Act. EMAQ recognises officers need knowledge, experience, and skills which combine to produce competency. EMAQ is principally about providing knowledge but some skills too. Experience is then gained through the workplace. The training is procured on a subscription basis, and they currently have over 200 Local Authority subscribers, with 9 training days on LAQM delivered at regional venues. Participation rates have increased on last year, despite wider trends, and they believe that their responsiveness to the demands of users *and* their fee paying managers has contributed to this.

EMAQ provides a 5 day modular course on Emissions Monitoring and has just commenced a similar course on the Essentials of LAQM which includes training in the basic science, local authorities' duties and the tools and technologies available to help manage air quality. It will look at transport planning and cover aspects of carbon management. It also includes one day on how to achieve improvements in practice, which covers management and delivery skills. This course is delivered over an c.18 month period, and is accredited by IAQM. The aim is proficiency rather than competence and employing Local Authority subscribers are responsible for monitoring their own practical requirements. This monitoring is achieved through a member of the Local Authority staff who is nominated as a mentor. Assessment is carried out via the EMAQ platform.

They are looking at incorporating elements of the climate change and carbon management agenda, potentially by the provision of new materials, but consider this field in its whole to be wider than their remit. They nevertheless keep in mind the possibility of expanding the provision by working with other providers to offer specialist courses which could provide training in topics such as air quality impact assessment, the links between air quality and carbon management, and biofuels.

2.2.3 University of Salford

Salford have offered a masters level course in Environmental Assessment and Management since Sept 2009. This course is aimed at those looking for a career in Environmental Protection, or for those in these fields looking for CPD. The course is an **MSc with 120 Credits, including a 15 credit module on air quality management and another on climate change.** Each module is delivered over 12 weeks and comprises lectures and workshops. Air quality topics include the air quality management framework, monitoring and technical issues. The climate change module includes several topics, such as emissions monitoring.

Salford currently provide materials aimed at carbon management training for businesses. They are **considering introducing modules from the MSc course as CPD units,** and recognise they may need to adapt the structure and content to professionals.

2.2.4 Other Courses – ‘The Low Emission Strategies Partnership Course Guide’

Participants noted that further training is provided by a range of providers across the country. Indeed, a course guide prepared by the LES Partnership gives a snapshot of current training and professional development provision for Air Quality and Carbon Management professionals. The information is compiled from information extracted from the Salford study⁴.

Participants provided feedback on the draft guide. It was noted that maintenance of the document overtime guide would have resource implications.

2.2.5 Low Emissions Strategies partnership activities

The partnership is developing, or has completed a number of resources that will be of practical use to local authority staff. These include:

- i) ‘Low Emission Strategies: Using the planning system to reduce transport emissions’, a guidance document published on the DEFRA website
- ii) Case studies covering implementation of a range of low emission strategies, policies plans, measures and initiatives
- iii) ‘Low Emissions Toolkit’, an emissions based assessment tool supporting green fleet management and planning based low emission strategies
- iv) ‘Procurement Guidance’, supporting low emission transport procurement
- v) SPD template for planning based Low Emission Strategies
- vi) Low Emission seminar presentations and materials
- vii) National Level impacts and benefits assessment for Low Emission Strategies

(Visit: www.lowemissionstrategies.org.uk for further information)

The partnership is **interested in developing training materials** that present these resources as a coherent whole, and assist officers in putting them into practice. They would look to take a prominent role in producing these training materials. To achieve efficient role out and dissemination of the LES approach, they would potentially seek to explore collaboration with existing training providers on delivery of these materials.

2.3 Accreditation

2.3.1 IAQM

IAQM have a strategic objective to promote the provision of training to its members, so **accreditation falls well within its remit**. However, the institute is mainly volunteer run and only has limited resources, so has adopted a **policy of accrediting when asked**. So far it has accredited three courses: the UWE course, EMAQ and the MSc in Air Pollution Management and Control at the University of Birmingham. The accreditation process involves a review of course content, and takes into account the experience of those delivering the course.

IAQM would support the development of an accredited national training route, but they lack the resources to do this themselves. IAQM would support any process to develop such a scheme, for example by supporting funding applications for an umbrella organisation.

2.3.2 CIEH

CIEH do not currently accredit courses in their own name. It works closely with the Environmental Health Registration Board, an OFQUAL registered body which in particular accredits the universities awarding environmental health degrees. CIEH do not rule out an accreditation role in the future, but is aware of advantages in using other bodies sometimes.

3 Key themes from discussions

3.1 Meeting the challenges of Localism and reduced resources

Improving skill levels among local authority officers in the face of decreased resources is a challenge that must be accommodated in any plans. Localism will place new demands on officers and the air quality community - training should anticipate this shift.

The following comments were made on consequences of budgetary constraints within local authorities:

- i) The development and maintenance of technical and delivery skills in air quality is at risk in a landscape of reduced resources.
- ii) Some local authorities are already planning to cut air quality monitoring.
- iii) If resources are reduced, there may be an increase in generalist environmental protection roles in authorities, with corresponding effects on training needs.
- iv) One approach is to focus on tactics to achieve “quick wins” that maximise training impacts in the short term.

A number of comments were also made on the consequences of the Localism agenda:

- i) Localism is about accountability to local people rather than central government. There are opportunities in this to engage local people and decision makers to raise air quality and carbon management up the agenda.
- ii) A key question is: how to encourage and enable local people, organisations and councillors to hold AQ performance to account? One suggestion was to somehow lever existing training provision and communication structures.
- iii) There is also an opportunity for the “air quality community” to provide leadership and develop good practices, which encourage local transparency and accountability
- iv) If localism leads to a loss of structure and consistency in local air quality management, it may increase the need for training as a means of standardising practice, and even simply knowing how to go about air quality tasks.

3.2 Air Quality Role – current situation (e.g skills/training of people in post) and issues

Discussions brought up the need for strong training provision for air quality officers and made the case for combining air quality with carbon management functions.

It was noted that existing air quality officers are generally highly trained, often qualified to Masters level. The following views were put forward on the air quality officer role:

- i) The present division of roles between air quality and carbon management is a barrier to the effective integration of these functions. Evolution of an “emissions management” role embracing both fields is an attractive proposition.
- ii) The training needs of air quality practitioners within local authorities and private consultancies were compared. The majority of skills needed in both roles are similar, though some differences were noted:
 - o local authority staff may work in smaller teams with less colleague experience to draw on, reducing the potential for training on the job.
 - o consultants are often recruited with a general science background, without any specific air quality knowledge, while LA officers tend to require some grounding in air quality.
 - o While delivery and interpersonal skills are important for both sectors, to be successful LA officers may be required to ‘champion air quality’, ‘work the system’ and apply certain leadership skills in ways not generally required within consultancies.

3.3 Carbon Management Role – current situation and issues

Whilst acknowledging limited knowledge in this field, a number of concerns were raised on the need for standardisation of good practice and the level of training amongst practitioners.

The participants noted that there were no specialists in carbon management present, and qualified their views accordingly. The following views were expressed:

- i) There is **less standardisation of skills** in carbon management – it is easier to provide evidence of skills in the air quality field.

- ii) Anecdotally, technical skills may be weaker amongst local authority carbon management staff. The strong technical skills of air quality officers could help compensate for this.
- iii) One participant voiced the concern that market research had indicated there was limited demand for specialised training in carbon management within local authorities.

3.4 Skills balance for local authority officers – what is needed now and in future

The need for delivery skills was generally accepted, and participants identified some specific skills and knowledge that should be included.

There was broad support for the view that to deliver improvements in air quality and carbon management officers need broad professional skills. Course providers either already included training in delivery skills, or were making steps to introduce it.

A number of views were put forward on the areas where officers needed knowledge, skills or experience, including:

- i) Effective **working within local authority structures**, including an understanding of how the structure works and how to influence its different branches.
- ii) In particular how to **influence the planning process**, for example understanding *when* and *how* to input into the process
- iii) Good **communication and interpersonal skills** for interacting with the public, councillors and within Local Authorities. This should include identifying appropriate arguments and means of communication.
- iv) How to **use resources effectively**, including project management skills. This should also include knowledge of what resources are available (e.g. stakeholder engagement teams).
- v) Increasingly LA officers may be required to ‘champion air quality’ and use leadership skills in order to get initiatives accepted and implemented
(author’s note: the term ‘willfull individual’ has been used in the past to describe a person with such attributes)

3.5 A “national competency framework”- a possible route forward

A training framework that builds on existing provision could provide more structured professional development.

One proposed route forward was to develop an over-arching national competency framework. This would make use of existing provision by drawing components into a formalised whole. The approach would provide an opportunity to standardise good practice, give professional recognition and encourage practitioners to acquire new skills to meet the shifting demands of the role. It could also harmonise the outcomes of training for new professionals and existing professionals, whilst recognising the need for different provision. The development of this option would require a commitment of resources. The IAQM and the LES partnership both voiced support for such an initiative.

One model for how a framework could be implemented is via a system of transferable credits. An example of this is provided by the Shell system in operation in the South West, which allows credits earned from different institutions to contribute to a single a qualification. It is likely that other learnings are to be found from reviewing how other sectors/professions manage competency and professional recognition.

As the professional body for Air Quality Practitioners, IAQM is one candidate for taking on the role of accrediting body for a national competency framework. It was noted, however, that IAQM is not presently resourced to do so.

3.6 Development of framework– potential benefits and challenges

A national competency framework gives the opportunity to broaden skills and embed good practice. Such a scheme would need to build on existing provision, and care would be needed to build consensus as to the exact nature of any proposed imitative.

Some participants supported the development of a national framework to bring the various specialised courses together. Various potential advantages of this approach were raised:

- i) It would contribute to improving the **overall skills balance** of air quality practitioners
- ii) It would **increase the value of existing provision** by bringing it together in a coherent way
- iii) If the LAQM framework is weakened or becomes less prescriptive in future, a more **standardised provision** would help prevent a regression to the non-coordinated situation that existed before LAQM was introduced.
- iv) It would help to strengthen the **professional recognition** of air quality professionals

A number of challenges in developing such a framework were identified by participants:

- i) In developing this route, it should be considered if something new is really being produced, and if it gives added value. It must **build on what is already there**.
- ii) Three participants stated that the **interpretation** of any national training route would be important. For example, how would it be viewed if someone was highly experienced, but not trained through this route. We should be cautious of a situation where someone needs the qualification to be an air quality officer *or* where it is seen as complete training in itself.
- iii) Any national framework would need to be **maintained as an ongoing commitment**, which would require resources.

One training provider stated that course provision would naturally adapt itself to the changing needs of local authority officers through market forces. Another participant said that the requirements of LAQM had shaped current training needs, and there is a risk that if this structure is removed then it will leave a vacuum, potentially leading to a loss of coherence and consistency in training needs and provision.

3.7 Other options for improving training

There is a need to develop additional modules to cover certain knowledge and skills.

There was broad acceptance of the view that *some new training modules* will need to be developed to fill gaps in existing courses. Differing views were expressed on how far these new materials should extend the scope of current provision. Fields identified where further modules could be needed included specialist technical topics (such as biofuels) as well as broader professional training (such as interpersonal/leadership skills).

It was highlighted that specialist courses present a challenge to providers because filling them can be problematic. One participant also said that *well targeted* narrow training can actually help ensure that courses are full.

3.8 Issues to consider in developing training provision

Important issues in designing new training provision include the cost, the time taken, and the value it represents to employers.

A number of general issues and challenges in improving training were raised by participants:

- i) Three participants highlighted that **the cost of training** is likely to be a key challenge, particularly in the current environment. Local Authority staff must be able to clearly present the benefits of training to their managers. There is often a tension between Local Authority resources and individual aspiration. MSc level courses can be seen as too much of a benefit to the individual to be funded by Local Authorities.
- ii) A related issue is **ensuring that courses** are sufficiently **well attended** to be viable.
- iii) The **time needed for training** is also an important limiting factor in up take.
- iv) To be successful, any training should be relevant to **employers needs**.
- v) The **cost effectiveness to providers** of any training provision is an issue. Linked to this is the challenge of filling specialised courses.
- vi) How would training be adapted **if the LAQM role changed?**
- vii) Undertaking even a **part time MSc course can be difficult** for local authority staff. There is a relatively low number of existing professionals using the part time MSc option.
- viii) One training provider stated that **course provision will automatically adapt to the changing needs** of local authority officers through market forces. Another participant said that the requirements of LAQM had shaped current training needs, and there is a risk that if this structure is removed then it will leave a vacuum, with only goals and targets for emissions in its place.

4 Conclusions

- C1 Any moves to improve training provision should take into account the implications of move to **reduced resources** and the **localism agenda**.
- C2 There is potentially an opportunity for a '**national competency framework**' to help broaden skills, standardise provision and enhance professional recognition. This would need to work with existing provision and avoid duplication. The delivery mechanism would need to be simple and cost effective, ideally drawing on existing models from other fields.
- C3 **Accreditation** should be considered alongside course provision and, if progressed, the development of a national competency framework. Potential accrediting bodies include IAQM and/or the Institute of Environmental Sciences.
- C4 In the design of training provision, it is important to consider the balance between: (i) **flexibility and specificity** of courses, and (ii) the coverage of **technical** and '**implementation**' skills.
- C5 There is a potential for the development of **new specialist training modules**.
- C6 Provision of training and accreditation has an important role to play in helping to maintain and **strengthen professional recognition and competence in local emission management**. At the same time providers need to be confident that there is **sufficient demand** for the services they provide.

- C7 The prospects for any new initiatives or provision will be enhanced by **good engagement** of stakeholders before and during development and by effectively **communicating the benefits** of resulting products and services to local authorities and their staff.

5 Recommendations

- R1 Explore opportunities for **recognising and supporting current course providers** in their efforts to provide improved training and wider choice of provision (for example through collaborative marketing/communications)
- R2 **Explore opportunities for development of specialist modules** to expand and strengthen the scope of current provision (and also potential for collaboration with existing providers for delivery).
- R3 Seek funding for and progress a detailed scoping study for the development of a **a 'national competency framework for air quality and carbon management'** (the study should actively seek learnings from other sectors and professions. It needs to ensure good stakeholder engagement throughout and seek to build a consensus with those stakeholders on any recommendations)
- R4 Reflecting the shift of emphasis within LAQM from monitoring to action, encourage course providers **to continue and enhance their efforts to improve training and competency in professional management and delivery skills** for air quality and carbon management practitioners.
- R5 Explore avenues to address **current knowledge gaps with regards training needs and provision for carbon management. In parallel seek to engage relevant carbon management stakeholders** more deeply, with a view to identifying opportunities to **strengthen integration of carbon management and air quality training**

6 References

- [1] Feasibility Study of the Development of a National Qualification in Air Quality and Greenhouse Gas Emissions Management (Andrew Clark *et al*, January 2010)
- [2] Professional Qualifications for Air Quality and Greenhouse Gas Management: Prospects and Opportunities (plus addendum) (Air Quality Management Resource Centre,, University of the West of England, Bristol October 2008)
- [3]* Headlines from survey on training needs and provision for Air Quality and Carbon Management Professionals (LES Partnership, September 2010)
- [4]* Air Quality and Carbon Management Draft Course Guide (LES Partnership, Sep 2011)

*indicates that reference provides summary information drawn from Ref 1