

Professional Education and Training for Sustainable Development in the UK and the Netherlands

Summary

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Background

The majority of Small and Medium-sized Enterprises (SMEs), which play such an important part in the EU economy, are still not benefiting to any great extent from environmental education and training or the support in place to help them. As a result most SMEs, and in particular the small and micro enterprises, are failing to take advantage of the benefits associated with many aspects of environmental improvement, in particular those associated with waste minimisation and the adoption of cleaner technologies. As a result they are failing to improve their competitiveness and failing to contribute to a more sustainable future.

This new work, which concerns the UK and the Netherlands, specifically explores the difficulties faced by SMEs, focusing on environmental education and training, both academic and vocational, in the following three industrial sectors:

- Printing;
- Food and Drink;
- Speciality Chemicals.

The work therefore complements previous studies, highlighting recent changes and offering a more detailed examination of the ‘SME problem’.

Objectives

The study has three main objectives:

- to identify the professional education and training provision required in relation to SMEs as part of the move towards sustainable development;
- to highlight the job profiles required in SMEs and by organisations assessing the performance of SMEs [e.g. the regulator];
- to point to the role of actors involved in the process of change.

Method

The method of approach has been a conventional one involving a literature review, a large number of consultations and synthesis of the findings into this report. To provide a clear and detailed picture of SME needs and their views of current education and training provisions, case study SMEs were interviewed, 6 in the UK and 4 in the Netherlands. These companies:

- covered all three chosen sectors;
- covered all sizes of SME, micro, small and medium;
- were reasonably typical and hence representative of the sector;
- had significant environmental impacts (either pollution load or resource consumption);

Additional consultees included:

- national training organisations and bodies;

- universities and colleges;
- relevant trade associations and professional bodies;
- other education and training providers;
- support organisations;
- large companies;
- the main regulator/s.

A regional approach was taken in each country to gain a more detailed understanding of the issues, the main focus being the Midlands region of England and the Overijssel region of the Netherlands. Naturally some national organisations were also consulted.

Main Findings

General Needs and Main Drivers

SMEs make a significant contribution both to the UK and Dutch economies and to environmental damage and resource consumption. Many smaller SMEs are unregulated (falling below thresholds) or fail to participate in voluntary agreements (Netherlands). Those SMEs that are regulated, while meeting minimum emission limits, still tend to be wasteful of resources, despite the fact that they often operate with very tight profit margins. There remains, therefore, a strong need to reduce wastage and pollution, for the sake of the environment, to strengthen competitiveness and to secure and increase employment.

Regulation remains the key driver of end-of-pipe pollution control, while cost reduction, risk reduction, regulation and increasingly supply chain pressures are driving the uptake of EMS (ISO 14001) and waste minimisation activities. While new regulation triggers a wave of both supply of and demand for conferences, workshops etc. (particularly in the UK) it is the move to ISO 14001 and increasing interest in waste minimisation that are the longer-term drivers of the demand for environmental education and training. Other drivers, such as employee concerns, concern for the local community etc. are very much secondary.

Responsibilities, Skills and Competency Needs

Environmental duties and responsibilities can cut across many roles, from purchasing, marketing and finance to production management, plant maintenance and equipment operation. Many SMEs however do not recognise this and mostly see environmental responsibilities as being purely related to regulatory compliance, pollution control and waste disposal issues. Responsibility is also seen as mainly resting at the managerial level rather than with shopfloor staff, although seemingly less so in the Netherlands than in the UK.

In the main, key environmental responsibilities rest with health and safety, quality management and other production/technical staff in medium-sized SMEs and with a technical director or MD in the smaller SMEs. Multi-tasking is the common approach with environmental roles and responsibilities being added to existing 'core' business responsibilities. The latter are largely seen as being the most important, with environmental responsibilities being secondary. Some medium sized SMEs, however, do however take a more integrated approach and in some cases employ specialist environmental or HS&E managers.

UK SMEs see the key skills and competencies as being those associated with regulation, EMS and waste minimisation rather than those associated with, for example, design or purchasing. The Dutch SMEs, while still concerned with regulation and liability issues, tend to take more interest in EMS, energy efficiency, waste minimisation and even design for the environment, green purchasing, environmental investment appraisal etc.

In the main, environmental skills and competencies tend to be ‘grafted-on’ , staff being recruited as they always were for their core skills and then trained in the additional environmental areas. While most SMEs do not see qualifications as being important per se, some medium-sized SMEs are employing environmental managers with environmental degrees and/or relevant experience.

SME Activities and Preferences

Environmental training and education is mostly conducted in a reactive and ad hoc way in SMEs, with very few using any form of training needs assessment or making specific provisions in terms of budgets or staff development plans. The training itself is still dominated by self-help, on-the-job and informal internal training, topped-up by external seminars and short courses. In the main companies are accessing training relating to:

- environmental regulation;
- environmental management;
- waste minimisation.

The consensus is that training provisions need to be low cost, very concise, modular/flexible, sector specific and easily accessible. Key providers include:

- trade and industry organisations;
- publicly-funded bodies;
- government departments and agencies;
- not-for-profit organisations;
- universities and other higher education establishments.

The Regulators

In the UK the Environment Agency employs hundreds of staff covering most environmental disciplines including pollution prevention and control, waste minimisation, flood defence, fisheries, conservation etc. Responsibilities are well defined. The Agency is aspiring to a situation whereby training is needs driven, competency requirements being set out in accordance with roles and responsibilities and the corporate plan. Much of the training is done in-house through the National Training Service although some external organisations are used.

In the Netherlands the regulatory responsibilities are divided between the provincial and local authorities and the National Inspectorate. Most staff are qualified to degree level as in the UK. In terms of ongoing training there is no national training organisation or plan, and hence training is done on an ad-hoc basis, often through material provided through the environment ministry (VROM) and occasionally through the use of consultants. There are, however, various higher education and vocational courses designed for inspectors.

Education and Training Provisions

There is no shortage of environmental courses, seminars, workshops etc. in either the UK or the Netherlands, these being provided by higher education establishments and various trade/industry, publicly-funded, not-for-profit and commercial organisations. In many cases the training is done through partnerships involving business support organisations and other local and national organisations.

In terms of vocational qualifications, in the Netherlands there is quite a wide range of part-time environmental MBO and HBO courses (mostly relating to environmental technology and co-ordination), while in the UK NVQs and SVQs are starting to play a part with a handful that are 'environmental' (including a standard for Environmental Management) and many more that are related to correct process operation and hence to waste minimisation. Sector-specific and occupation-specific national organisations (the NTOs in the UK) are helping to develop the appropriate standards and qualifications.

Private sector provisions, in particular commercially run conferences and consultancy services, are generally seen as being costly and often inappropriate. While there are still inappropriate provisions being promoted, increasingly providers are meeting the specific demands and needs of industrial SMEs, much of the more recent material being sector-specific and more carefully focused. More and more low-cost distance learning courses, workshops and flexible in-company packages are being provided, from publicly-funded organisations and programmes (e.g. the Senter/BMDs in the Netherlands, the Environmental Technology Best Practice Programme in the UK), trade and professional bodies, not-for-profit organisations (e.g. Groundwork in the UK), universities/colleges and, in the Netherlands, trade unions. Large companies are also starting to take a role through offering assistance with EMS (e.g. Rover in the UK).

While almost every conceivable type of provision is represented the overall picture can be very confusing for SMEs. Many SMEs get bombarded with literature from the public and private sectors and often get confused over what is worth accessing. Increasingly training providers are gaining accreditation from professional bodies (such as the IEM in the UK) to help give SMEs confidence in the quality of the services and products they are offering.

Other Support Mechanisms

In terms of support, there are mechanisms in place in the UK and the Netherlands to promote environmental improvement and its benefits and to provide guidance and to a lesser extent hands-on assistance.

In the UK there is great variation across the country and numerous regional initiatives in addition to those operating nationally (e.g. the Environmental Technology Best Practice Programme - ETBPP). Business Link, which aims to be the one-stop-shop for SMEs, is little-used for environmental advice, many local Business Links offering no environmental services. In some cases not-for-profit organisations (such as Groundwork and BEA) are in competition with each other and consultants offering services, for example in terms of providing environmental reviews and assistance with EMS (ISO14001). Again the picture can be a confusing one for SMEs, 'initiative fatigue' turning them off environmental improvement.

Increasingly, however, the ETBPP, the Environment Agency, the Government Offices, local authorities, Chambers of Commerce, not-for-profit organisations and others are working together to try and provide a more co-ordinated approach that better reaches small companies. Regional strategies, networks and co-ordinating bodies are being established in some areas to achieve this.

The situation appears somewhat simpler and more homogeneous in the Netherlands where the BMDs (Company Environmental Service organisations) and the Senter (Innovation Centres) provide regionally based support and training, co-ordinating their activities with local colleges, trade associations etc. They also provide most of the projects and services associated with the Cleaner Production Programme.

Barriers

While considerable efforts have been made to make courses and other material more suitable and accessible, and to promote training and its benefits, numerous barriers still persist, particularly in the UK. Demand for environmental education and training is still lowest from small and micro SMEs, in the UK and the Netherlands. Companies themselves perceive the main barriers as being:

- resources constraints, human and financial;
- accessibility, lack of local or on-site provisions;
- suitability, material often being too general or designed for larger companies.

These barriers are certainly real enough, particularly in the UK. There are however additional barriers:

- lack of awareness of the real benefits and cost-saving opportunities;
- poor awareness of skill/competency needs to capitalise on opportunities;
- poor awareness of provisions/support options to meet these needs.

There are also two key external factors which influence awareness of benefits, needs and provisions:

- the extent to which support networks are in place and properly co-ordinated;
- the extent to which support networks are active in reaching SMEs.

Most environmental support tends to be passive (informing rather than directly assisting), often due to budget constraints. As noted above, in the UK many SMEs are confused about the roles of the various players and the value of the provisions. This seems to be less of a problem in the Netherlands.

Concluding Remarks and Recommendations

Most of the findings here were also true in the early 90's as previous ECOTEC work shows, although the situation is improving. More and more SMEs are being reached by various initiatives and programmes and these SMEs are gradually improving their practices. The pace of change is slow, however, with many SMEs still unaware of the regulatory 'stick' and/or the waste minimisation 'carrot' as they apply to their business.

In the UK many smaller firms are confused by the wide range of support organisations, initiatives and provisions. In fact it appears that uncoordinated activity has often been counter-productive through its 'initiative fatigue' effect. In addition the passive help provided has often not been enough to kick start improvement programmes. The way ahead, therefore, has to involve better co-ordinated, better directed and more active support and training provisions.

While far from all Dutch SMEs have positive attitudes to environmental improvement, the Dutch approach to environmental education, training and support, combining quite active sectorally and regionally-led initiatives, appears to be reasonably successful, reaching an increasing number of SMEs. The relatively high percentage (29%) of smaller SMEs (less than 100 staff) adopting environmental management systems is an encouraging sign that progress is being made. In the Netherlands, therefore, one would encourage more of the same, involving the BMDs, the Senter and the trade associations to take forward the Cleaner Production Programme 2 and other projects and programmes.

Not surprisingly, many of the recommendations that apply to the UK also apply to the Netherlands. In most cases it is a matter of degree, the Netherlands being in many respects just a few years further down the same road. Overall we would recommend that support and encouragement is given to:

- better co-ordinated and planned training for the Dutch regulators, perhaps making use of the UK Environment Agency model (NL only);
- continuing promotion of environmentally-related cost benefits, in particular to smaller SMEs, through provision of sector-specific case studies and detailed environmental review work;
- the greater use of environmental training needs assessment (TNA), in particular focused on competitiveness issues including waste minimisation and energy efficiency;
- the continuing development of environmental occupational standards and qualifications and the integration of environmental management ideas into other standards (e.g. those relating to manufacturing processes).
- the continuing integration of environmental, health and safety and quality management methods and systems. Waste minimisation and energy efficiency, for example, should be promoted as an integral part of good business practice and TQM;
- continuing development of SME-appropriate and sector-specific provisions that are quality assured by professional and trade bodies;
- the continuing provision of hands-on, practical and locally/regionally-based support;
- the greater use of low-cost direct support activities, for example through graduate placement schemes, subsidised consultancy etc.;
- greater encouragement for supply chain initiatives;
- the simplification and improved co-ordination of support and training provisions at a regional level so as to reduce confusion and initiative fatigue (UK only).

While far from perfect, in many ways the Dutch model represents a good and reasonably successful one for other Member States to follow, offering a streamlined, direct and practical approach to SME environmental education, training and support. The UK is also improving its practices through better regional co-ordination (e.g. as is happening in the West Midlands and Wales) and greater efforts to reach SMEs (e.g. the Government's new Small Business Service, which aims in part to improve Business Link) and to promote lifelong learning in industry (e.g. through the UFI initiative).

Finally it is worth noting that certain regions, countries (including the Netherlands), and industrial sectors offer models that can be used to improve the overall effectiveness of environmental education, training and support throughout the EU. Such 'good practice' models should be investigated further to allow more rapid progress towards sustainable development.