Project Introduction & Environmental Definitions

This training day is normally the follow up to a previous project event, such as a launch day or survey, and is designed to develop and progress the initial interest that you have shown in 'wanting to do something about environmental issues in the workplace'. Part of the days' discussions is what that something should or could be, and what role you can play in supporting the TUC's major initiatives and concerns about our environment in general, and in the workplace in particular.

For those who may be relatively new to the field of environmental study the first challenge is likely to be the labyrinth of acronyms and definitions. It is therefore worth starting the course with a few pages of key concepts and definitions that have arisen in previous workshops and may arise today.

Role of union workplace representatives

Adaptation is an issue of organisational and personal change, and union workplace representatives have an important role to play in facilitating the process. The TUC / Carbon Trust Green Workplaces project has achieved improvements in the environmental performance of workplaces. These projects have been driven by union reps and employees through discussions with management.

Union representatives including union learning representatives (ULRs), safety representatives (SRs), and specifically green or environment reps, can act as climate change champions, building the case for inward-looking adaptation, raising awareness within their workplaces and driving change more comprehensively from the bottom-up.

ULRs could be instrumental in helping members to access the training they require to carry out their jobs safely and efficiently under future climate conditions. The Government is planning to introduce a new 'Right to Request Time to Train', with a target date of 2010. With the support of ULRs, employees could use this to request adaptation skills training. SRs are well placed to continue their work in ensuring employees are protected from unsafe and unhealthy working conditions due to current and future climate change. Unions are lobbying for the same rights to be granted to green reps as are currently offered to ULRs and SRs.

In order for workplace reps to incorporate adaptation into their roles, they will need appropriate support from their trade unions, such as training in climate change impacts and adaptation. Statutory provision of time-off for reps to receive this training would help in this regard.

(Source – TUC Changing Work in a Changing Climate)

Adaptation & Mitigation:

Adaptation: any adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities.

Mitigation: an anthropogenic intervention to reduce the anthropogenic forcing in the climate system; it includes strategies to reduce greenhouse gas sources and emissions and enhancing greenhouse gas sinks.

(Source: IPCC Fourth Assessment Report)

In general the definitions above mean mitigation measures are those actions designed to reduce emissions of greenhouse gases in order to achieve stabilisation of greenhouse gas concentrations in the atmosphere at levels that would prevent dangerous anthropogenic interference with the climate system. There are some further definitions of adaptation below, but in general adaptation refers to policies, actions and any measures taken to minimise or prepare for the effects of current and future climatic changes that are now unavoidable, even if mitigation measures could be achieved today. In the reality of current environmental trends mitigation is a wish, however, adaptation is a necessity and will have to take place, either planned or unplanned. This point was further emphasised in the TUC report 'Changing Work in a Changing Climate'.

Whatever the speed and success of efforts to cut greenhouse gas emissions, there is now a concurrent need to adapt to the climate change that is already occurring, and which is likely to accelerate over the next few decades. Climate models show that differences in levels of greenhouse gases emitted take around 40 years to have any significant influence on the degree of climate change experienced. This means that the changes we will experience until around 2050 have already been largely determined by our past and present greenhouse gas emissions.
The consequence is that while mitigation efforts by the international community are increasingly urgent, businesses, organisations and society at large will have to learn to cope with climate change over the medium (and longer) term. The question is, how will this adaptation take place? Will it occur in a planned, proportionate and cost-effective way, looking out for the needs of all groups in society and at work? Or will it occur in a more reactive and incoherent manner, at the expense of the welfare of the least well-off?
(Source – TUC Changing Work in a Changing Climate)

Adaptation is concerned with responses to both the adverse and positive effects of climate change. It refers to any adjustments – whether passive, reactive or anticipatory – that can respond to anticipated or actual consequences associated with climate change. It thus implicitly recognises that future climate changes will occur and must be accommodated in policy (Intergovernmental Panel on Climate Change – IPCC, 1996)

(Source: Adaptation to Climate Change, Rethinking the Role of Adaptation in Climate Policy, Pielke)

Adaptation – Changes to cope with the impacts of climate change, for example changing working practices to cope with higher summer temperatures, building bigger sea defences, diversifying crops, increasing irrigation or improving health services

(Source – TUC Go Green at Work)

Adaptation – Floods, storms and heat waves in recent years have tested the UK's emergency and local government services, business and resilience. These extreme events illustrate the challenges we will face adapting to climate change. The term 'adaptation' in this context refers to adapting to the effects of climate change that is already likely to happen as a result of past carbon emissions.

(Source – TUC Changing Work in a Changing Climate)

Outward-facing & inward-looking adaptation –

Outward-facing adaptation is primarily driven by an awareness of the strategic or commercial risks and opportunities facing the organisation. Adaptation options would generally focus on addressing climate risks to markets, products and processes, capitalising on any opportunities and 'climate proofing' products and services. In many cases, outward-facing adaptation strategies would be developed using a top-down approach, with decisions made by executives and technical advisors, with a goal to ensure the profitability and sustainability of the organisation under a future climate. It would safeguard job security and could minimise job churn and help create new employment opportunities.

Inward-looking adaptation is primarily driven by an understanding of the wider climate risks to employees and opportunities for creating better quality jobs. Adaptation options would focus particularly on the workforce and the workplace, and its systems and processes. Inward-looking adaptation strategies would address the implications of climate change and adaptation in areas such as working practices and conditions, equipment and skills, and health and safety. They would also involve equipping the workforce with the skills and training they need to perform their roles safely and efficiently in the face of climate change. Inward-looking adaptation strategies require mainstreaming across an organisation and would usually involve a bottom-up approach, consulting employees themselves with a goal of providing stable and good quality jobs under future climate conditions.

(Source – TUC Changing Work in a Changing Climate)

Sustainable Development

Most environmental managers would accept that sustainable development is one of their key goals, but providing a universally acceptable definition of sustainable development is not easy. The first definition of sustainable development was given by the World Commission on Environment and Development.
"development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

World Commission on Environment and Development (The Brundtland Commission)

Other definitions have inevitably followed, and include,

"development that brings about ecological, social and economic sustainability while contributing to the achievement of society's other goals."

Sutton, ISO14001 and Beyond.

"improving the quality of human life while living within the carrying capacity of supporting eco-systems"

C.J. Barrow – Environmental Management Principles and Practices

One problem faced by environmental managers is that the goal of sustainable development is not fully formed and its fundamental meaning is still debated. Interest in sustainable development is now well established and it is a professed goal of many governments, agencies and companies. In general it is about improving the lot of people and avoiding environmental degradation.

Carbon Management

Carbon management at a basic level is simply how an organisation manages its practices and procedures in relation to its CO_2 emissions. The Carbon Trust is a business-led government backed independent company, who attempt to cut through the complexity to help companies understand and manage the impact of climate change. In 2003-2004 the Carbon Trust successfully piloted the Carbon Management Programme with 50 leading UK companies. The Carbon Trust's 'Carbon Management Programme' is designed to help companies understand how carbon emissions and climate change affect their business. It provides tools and capabilities to identify the value at stake, manage the risks and realise opportunities.

Environmental Management

Environmental management at a basic level is simply how an organisation manages its practices and procedures in relation to all of its environmental impacts, including waste disposal, waste recycling and pollution, as well as its carbon emissions. In a more advanced form there may be a dedicated Environmental Management System (EMS), which co-ordinates the environmental objectives and standards across the organisation. This may include achieving, or attempting to achieve, the recognised environmental quality standard ISO14001. Below are a few textbook definitions of environmental management.

"a decision-making process which regulates the impact of human activities on the environment in such a manner that the capacity of the environment to sustain human development will not be impaired."

C.J. Barrow – Environmental Management Principles and Practices

"seeking the best possible environmental option to promote sustainable development."

C.J. Barrow – Environmental Management Principles and Practices

"The relatively new discipline of environmental management does not seek to manage the environment directly. Instead, it concentrates on the more indirect, but nonetheless effective, route of managing an organisation's activities that give rise to impacts upon the environment."

Sheldon & Yoxon, Installing Environmental Management Systems.