



## MEETING REPORT

### Introduction

This workshop was aimed at officials of the European Commission and was stimulated by presentations from two EEO thematic experts (James Medhurst, GHK Consulting and Kenneth Walsh, Training and Employment Research Network, TERN). The aim of the workshop was to discuss employment impacts of green policies and employment policies to support green jobs and current research on this issue, from both an overall EU perspective and also from the point of view of one Member State (the UK).

### Background

The process of 'greening' the economy is currently seen as a way of stimulating economic development in the context of the economic downturn, as well as for the long-term future. At national level, many of the stimulus packages agreed by European governments to help overcome the crisis included measures to provide an impetus for the green economy and green jobs agenda. At European level, the new Europe 2020 Strategy includes 'Sustainable Growth' – i.e. promoting a more efficient, greener and more competitive economy - as one of its three top-level priorities.

There is currently no common definition of the term 'green jobs'. Some commentators view these as being only those jobs in 'green sectors' (e.g. renewable energy), others take a wider approach and consider how all jobs can be made greener. What is clear is that employment policies to support the green jobs agenda, by identifying skills shortages and stimulating eco-innovation, are essential to support the transition to a more resource efficient, sustainable economy.

### Workshop presentations

The workshop presentations can be found at: <http://www.eu-employment-observatory.net/en/documents/Meetings-Workshops.aspx?year=2010>

#### 1) James Medhurst – Policy options likely to generate green jobs

There are a range of policy options which can promote the transition to a greener economy, including regulations and related standards, market-based instruments, information-based instruments, eco-innovation and adjustment policies. These policy tools aim above all to encourage a change in behaviour and to stimulate an increase in resource productivity.

In the pursuit of resource-efficient production and processes, it is critical to distinguish between objectives to support an absolute reduction in the use of resources and objectives to support a relative reduction (i.e. reductions in resource use per unit output). Some instruments, such as eco-labelling, are intended to support the transition to the green economy by helping to change consumer behaviour. However, to achieve a major change in economic activity towards substantial improvements in resource productivity delivering absolute reductions in resource use, requires the extensive use of market based instruments (mainly cap and trade schemes or environmental taxes). Policies to support eco-innovation are also central to supporting the substantial economic restructuring which is now needed.

The transition requires substantial change right across the economy, but especially in those sectors that are intensive users of natural resources, not just in the short-term but also in the medium and long-term.



As a result, whilst the transition can result in both resource savings and additional economic benefits, the transition will generate some potentially large changes in sectoral employment, with both 'winners' (e.g. renewable energy and construction related activities in support of energy efficiency) and 'losers' (e.g. energy intensive industries such as the steel industry). In terms of the overall economic / employment impact of 'greening' policy instruments, a recent literature review has reinforced previous conclusions that these will result in positive outcomes for the economy with a small net positive impact on GDP / employment. Nevertheless, it is important to note that the majority of the literature is based on a number of key assumptions. For example, most assume that effective market-based instruments will be the instruments of choice, whereas this may not necessarily be the case, given political difficulties in accepting these types of instruments. Studies also tend to assume that producers and consumers act rationally and choose the lowest cost option first, again this is not always the case. Finally, there tends to be an assumption that the timing of the intervention is optimal – i.e. possibly higher costs associated with forcing or delaying interventions are not always taken into account. Studies are not always robust in testing these dimensions.

In the context of the economic crisis, green stimulus packages have been introduced with a specific focus on climate change rather than the full range of environmental issues. This has led to increased public awareness of the need and acceptability of measures to address climate change. In the US and China, there has also been significant investment in green technologies. Nevertheless, continuing financial deficits are likely to lead to public spending cuts and may mean that less funding is available for low carbon measures. While there may be an increased use of 'green taxes', these revenues are more likely to be used to reduce deficits than to support further environmental measures.

Employment policies are needed to support the transition to a green economy in a number of ways, such as addressing skills needs and supporting the 'greening' of existing jobs. In the short-term, bottom-up initiatives will provide particularly important responses to the need for adjustments such as filling skills gaps. Social dialogue is likely to be a key element in the development of these initiatives. Employment policies are required that can support eco-innovation, anticipate skills needs and provide training for trainers, and improve labour / occupational mobility.

A recent study conducted by Cedefop has reviewed the skills needs and shortages in Green Jobs in six Member States. The study found that most of the skills required for the transition to the low carbon economy are not new, but that some emerging occupations have a different blend of competencies (for example in relation to certain renewable energy technologies). The skills needs identified are both generic and technical, the latter in particular related to the STEM subjects (science, technology, engineering and mathematics), where there are already skills shortages. Again, skills needs must be tackled in both the short- and long-term, through joined-up approaches.

Labour market research has been conducted in this area in relation to questions such as the estimated growth in green jobs, skills needs and shortages, and to identify skills responses. The monitoring of green jobs by Eurostat and other existing EU research on baselines and trends should continue into the future and further work is required to monitor and assess skills needs and policy responses. There is also a need for a broader debate around the need to base future economic development on resource productivity rather than the current driver of labour productivity. Another possible area for future research is the potential for new (and old) business models that seek to provide alternatives to those based on profit maximisation.

## *2) Kenneth Walsh – UK experiences in creating green jobs*

The recent change in government in the UK means that it is currently difficult to predict how the green jobs agenda will develop in the years to come. The change from a Labour to a coalition (Conservative



and Liberal Democrat) government could result in positive changes, as both parties have indicated their commitment to 'decarbonising' the economy to stimulate jobs (the Conservatives) and to environmental issues in general (the Liberal Democrats). In addition, the election of the first Member of Parliament (MP) from the Green Party may signal changing attitudes among the public towards the green agenda.

Nevertheless, the main focus of the new government is on addressing the financial deficit, as evidenced by the recent announcement of cuts in funding to 'quangos' (quasi non-governmental organisations) in the education and training sector. The overarching priority to cut the deficit may also have an impact on environmental policy and measures.

'Green jobs' or Low Carbon Environmental Goods and Services (LCEGS) jobs in the UK currently represent around 3 % of the total workforce (881 300 jobs in total). It is estimated that there will be an increase in these jobs which are directly associated with the green agenda of around 80 000 per year in the period to 2015. This figure however does not include the 'greening' of other, existing occupations. For example in the motor manufacturing industry, both Ford and Nissan have committed to producing 'greener' cars (Nissan) and engines (Ford) in the UK, which will create low-skilled jobs and employment for the highly skilled (e.g. in Research and Development). Government subsidies and grants from the European Investment Bank have contributed to this investment in UK jobs by the two multi-national companies.

The previous government produced a number of key policy statements relating to the green agenda. Most recently, a consultation was carried out on 'Meeting the low carbon skills challenge'. These statements however were generally more about encouraging stakeholders to take collaborative action and were not backed up by financial commitments.

A number of key success factors are needed to support the green jobs agenda. These include a significant cultural change among employers, a collaborative approach with leadership from the government and its agencies, and the identification and dissemination of "next practice" – i.e. innovative actions to 'keep ahead of the game'.

An example of a policy for green jobs in action in the UK is the Welsh Green Jobs Strategy. This Strategy has three main priorities: supporting business to adapt to a low carbon economy, fostering innovation and technology, and investing in a more sustainable economy. The first of these priorities addresses future skills needs through actions such as a national curriculum for schools which brings environmental issues to the fore – to inform young people's choices in terms of subjects and careers; work with Sector Skills Councils to identify skills needs; and focusing upskilling activities on areas of high unemployment – to give the unemployed the necessary skills to be able to take on green jobs.

Other regional examples of initiatives include the Low Carbon Economic Areas in the South West and North East of England, the Nuclear Skills Passport to encourage mobility and transferability across the sectors involved in nuclear provision and the Wind and Marine Energy Skills Accord, which brings together key players from the supply and demand sides to collaborate on a common strategy.

There are a number of critical issues affecting the green jobs agenda in the UK. Firstly, there is latent demand for green skills and there is not enough visibility of where the green jobs will be found in the future and on what scale. Poor quality signals for employers mean that learning providers on the supply side are unable to respond appropriately and there is currently a focus on low-level skills as a result. There is also a need to develop the manufacturing infrastructure in order to take advantage of the growth in demand for alternative (especially wind) energy. Finally, there is a lack of understanding of the net effects of the transition to the green economy – since there will be job losses as well as the creation of new jobs.



The UK presents a number of lessons learned, or with potential transferability, in terms of the policy measures which have so far been implemented. The need for government agencies and departments to work together has been demonstrated and it appears that the regional focus has so far been successful. It is clear that better indicators of future skills demand are essential for supply to respond and it also seems that cross-sector working provides a good basis for success in the move towards “green collar jobs”.

### **Workshop discussions**

This section provides a brief summary of the discussion which followed the keynote presentations.

#### *Increased resource efficiency and the ‘rebound effect’*

The ‘rebound effect’ is the increase in demand for a resource as a result of improving resource efficiency. For example, improvements in vehicle fuel efficiency may encourage drivers to make greater use of vehicles nullifying the initial resource saving and potentially increasing absolute levels of resources. It is important to ensure that price signals and regulatory responses are designed with rebound effects in mind. In particular carbon-energy pricing will need to increase over time to accommodate the rebound effect.

#### *Anticipating skills needs / the role of public employment services*

Consultations with companies have found that they do not identify green jobs as an issue and their focus is instead on developing new ways of working and new products. Research among employment services in the private and social sectors has also shown that they do not receive any demand for green skills / jobs. It is clear that companies do not attach the same degree of importance to the ‘green skills’ debate as policy makers. This raises the question of what the role of the public employment services should be in relation to the training and activation of the unemployed for green jobs. Where there is no clear demand for ‘green skills’, it is should be the role of the public sector / policy to encourage employers to take on board this issue.

#### *The need for education and awareness-raising - ‘Shades of green’*

In trying to anticipate ‘green skills’ needs the focus is likely to be on how existing jobs will change, rather than the emergence of new ‘green’ jobs. For example, if a worker in the car manufacturing sector stays in the same job with training and produces hybrid vehicles rather than diesel vehicles, does his/ her job become ‘green’?

In order to support existing jobs to become ‘greener’, further measures to educate the workforce in resource efficiency are required. This might be simple messages such as the importance of conserving resources or energy in the office. It is also important to educate ‘future cohorts’ in order to stimulate demand from the bottom-up. Employers and learning providers also need support in identifying the skills that need to be taught, given the current lack of clear signals of skills needs. There are some incentives in the UK for learners to take up STEM subjects at HE level but these incentives are also needed in vocational strands delivered in schools.

#### *Energy Efficiency*

The public also needs to be made aware of the importance of energy efficiency, for example through measures such as eco-labelling. This is an area where there is huge potential and which is very cost effective but to date has not been well understood and has not been a priority for consumers, as energy only forms a small proportion of the household budget. There is scope for ‘micro-managing’ energy efficiency in order to change consumer behaviours and the UK is currently conducting



research in this area. DG RTD has also recently launched a social platform on social lifestyles, which should help to research ways of securing a change in attitudes towards this issue.

*The EU's relationship with China and other emerging economies*

Around 15-20 years ago, the EU15, together with the US and Japan, was one of the first blocks of countries to introduce and enforce strong environmental policies. This led to the emergence of a related environmental goods and services sector which has subsequently matured to provide net export earnings for these countries, as other countries including the EU12 have taken up similar environmental policies.

It is not clear if this relationship will remain the same in the future, especially now that countries such as China and Brazil are themselves investing in newer environmental technologies including renewable energy.

*Green jobs in the private sector: large, medium and small firms*

Multinational companies especially in energy intensive industries will seek low cost locations. The unilateral introduction of strong EU carbon reduction policies has the risk that the higher costs will force some relocation of industrial activity to areas without such policies. However, the availability of the latest resource efficient technologies both within and outside the EU means that the competitive advantage from weak carbon policies may not be so great. This risk of 'carbon leakage' can be managed through policies such as border tax adjustments: import fees levied by carbon-taxing countries on goods manufactured in non-carbon-taxing countries. Small companies can also support the development of new technologies and the process of innovation. It is therefore important to have policies in place which support access to finance and technology transfer and to provide more support to small and medium-sized firms. In fact, a recent OECD report confirmed that ambitious environmental legislation is important for innovation.

**Further reading**

European Employment Observatory Review 'The employment dimension of economy greening' (2009). Internet: <http://www.eu-employment-observatory.net/en/documents/EEORReviews.aspx>

OECD, Green Growth Strategy Interim Report (2010). Internet: [http://www.oecd.org/document/3/0,3343,en\\_2649\\_37465\\_45196035\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/3/0,3343,en_2649_37465_45196035_1_1_1_1,00.html)