

ECORYS

Research and Consulting



Environment and labour force skills

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Introduction

- ECORYS Group (E&CC unit)
- Framework contract with DG ENV on the economic analysis of environmental policies and of sustainable development
- Partners: COWI and Cambridge Econometrics
- Example of recent work: EU Sustainable Development Strategy Progress; Environmental Policy Gathering 2007, 2008
- Current study on links between labour force skills profile and environmental factors

Proposed research goals

- establishing a basis of exactly how the interlinkages between environmental quality and employment skills work - for further examination and refinement;
- identifying a policy framework for influencing the possible mutual goals of increasing environmental and employment quality;
- providing guidelines as to how further analysis and refinement of these issues can best be approached by other means and techniques.

Approach

- Literature survey and review
- Identification of policy levers
- Identification of further possibilities for analysis of this topic

Literature survey and review

- Existing European Commission studies and reports;
- Eurostat data (employment and training of employees);
- OECD website (www.oecd.org, employment en educational outlook);
- ILO, ITUC, CSI, etc
- Key international institutions concerned with sector competitiveness and industry development issues e.g. OECD, UNCTAD, etc.);
- Cedefop, for forecasts & identifying trends in policies and participations in vocational education and training and lifelong learning;
- UNEP study on “green” jobs;
- GHK, Ernst and Young etc.
- Scan of academic literature: Robert Pollin et al. etc.

Preliminary results: employment

- *Source: GHK (2007), Links between the environment, economy and jobs*
- The study shows that there are strong links between the economy and the environment. These go far beyond the narrow definition of eco-industries traditionally measured;
- A good quality environment supports many sectors in the economy: at its broadest, the environment is linked to around 21 million jobs and over a trillion Euros of economic activity in Europe;
- The EU eco-industry has grown to become one of Europe's biggest industrial sectors. Pollution management and resource management are the industry's two most important sectors.

Preliminary results: education (1)

- Eco-consulting: firms employ relatively high levels of university graduates compared to the average qualifications in most national labour forces;
- Austrian Institut für Wirtschaft und Umwelt: the eco industry does not necessarily require skills beyond the general qualification requirements of the sector of employment – a simplification?
- There are skills gaps in the qualifications obtained within certain eco-industry professions, e.g. UK graduate ecologists recruitment;
- Educational qualifications are not relevant for most of the jobs offered in waste management;

Preliminary results: education (2)

- Many people are not aware of the close links between work activities and the environment. There is thus a need to increase people's sensitivity to, and involvement in, finding solutions for environment and development problems;
- Basic education for all can provide the environmental awareness, values and attitudes, skills and behaviour needed for sustainable development.

Preliminary results: training

- The UK trains 70,000 construction workers on energy efficiency: ensures that knowledge not confined to those who have just completed initial vocational training courses;
- Spain: the Structural Funds Environmental Network has implemented environmental awareness raising modules in all training courses financed through the ESF. About 2 million workers have benefited so far;
- Specific environmental training also financed through the ESF in Finland and Greece;
- Germany: ESF programmes provide training and support on the spot initiatives (e.g. in difficult urban areas) which promote environmental dimension of sustainable development.

Preliminary results: skills levels

- The eco-industry is polarised into high-skill and low-skill areas (OECD 2004);
- Majority of environment-related jobs are manual and clerical positions. The largest proportion are in water-related sectors (33% in 1996). In waste recovery and waste management, over 80% of jobs were manual and clerical in 1996 (OECD);
- Waste management & recycling often provide rather low-skill and low-pay jobs (not a “decent” job);
- On a general level, technological progress has reduced demand for low-skill workers and increased opportunities and rewards for higher-skill workers. (International Bank for Reconstruction and Development / The World Bank (2008))

Preliminary results: skills gaps

- **British CBI states sectors going “green” are experiencing a skills gap affecting the supply of technical specialists, designers, engineers, and electricians;**
- **Even skills gap in sales staff in the retail sector, and project managers specialising in delivering a range of mitigation and adaptation solutions.**
- **Often, more than technical skills needed required for the renewable energy sector, i.e. consulting skills, communication skills, enthusiasm;**

How to “mind” the gap?

- Broad approach to green knowledge development, i.e. individual learning, teaching and researching simultaneously;
- Better co-ordination required between skills providers and employers;
- Maintain employability through life-long learning;
- More & better quality internships (not just a source of cheap labour);
- “Flexisecurity” (flexible vocational training)
- Apply the principle “spread the pain” – training & up-skilling;
- National awareness campaigns;
- Anticipation of medium-term skills requirements through social dialogue/partnerships, institutionalizing, EU co-ordination

Mainstreaming environmental skills

- Philosophical and cultural shift needed;
- Teaching, learning, researching;
- More than just technical qualifications necessary;
- Consulting and advisory skills lacking?
- Up to date knowledge on policy and subsidies?
- Entrepreneurial skills;
- Teaching sustainability early on.

Ideas for further analysis on how to understand the linkages between environment and skills

- Your ideas and thoughts?

Thank you!

- Please leave your business cards so that I can send you the study results;
- Have a good journey home.