Skills in a Low Carbon Economy

At ECOTEC we understand that every project requires a custom approach in order to optimise the effectiveness of outcomes. We understand the complexities surrounding the low carbon and climate change debates and bring a unique blend of skills and experience helping our clients to unlock the value and opportunities embedded within these challenges.

One of the elements that is often overlooked is the network of skills and supply chains that are required if ambitious targets and aspirations are to be delivered. We believe that a key challenge still to be effectively addressed is the delivery of grass roots actions on a wide scale. Clearly this will place strains on existing supply chains and skilled workforces.

If these elements can be successfully defined steps can be taken to identify and predict the gaps and develop interventions designed to address and enhance the skills and supply chains. At a local, regional, national or international level this can be used to estimate the value of the opportunity and, in turn, be linked to a cost-benefit / socio-economic assessment of delivering low carbon economies.

Sound analysis, inspiring ideas, effective delivery

A selection of our experience

Skills Needs for a Low Carbon Northwest (North West Development Agency) Assessed the trends, opportunities, challenges and low carbon skills needs. Mapped skills provision within the region against each identified need and provided a gap analysis making recommendations for priority areas for action.

Identifying the environmental/climate change skills relevant to London construction and built environment businesses (Newham College of Further Education) Evaluated skills needs in the construction and built environment sector in London, with a particular focus on retrofit. Assessed existing sector skills gaps and shortages, mapped the low carbon skills requirements of the sector by competencies, level and qualifications, modelled the scale of these needs and identified focus areas. Benchmarked the London situation against other UK regions and identified best practice approaches to low carbon construction skills across Europe.

Ex-ante evaluation of building skills in Intelligent Energy Europe (DG TREN) Evaluated policy options under Intelligent Energy Europe for overcoming skills issues around energy efficiency and renewable energy in the building workforce. Quantified the size and skills capabilities of the sector, modelled the projected future needs by occupation and evaluated the strategic fit and efficiency, effectiveness and economy of various proposed policy interventions.

Environmental Technology Sector Mapping (Yorkshire Forward) Mapped companies active in the environmental technologies sector and reviewed market drivers and barriers at all levels developing a regional SWOT analysis. We identified organisations involved in innovation and their position in the supply chain to assist in the targeting of support and inward investment.

Occupational and Functional Mapping of the Renewable Energy Sector (EU Skills) Developed an occupational and functional map of the energy and utility skills sector identifying gaps, barriers and priority areas for development.

Environment and labour force skills (EC DG Environment) Evaluated the labour market and employment in the eco-industries in the European Union. Analysed the skills profiles, direction of structural employment and future skills demands in the sector. Examined and analysed data on skills to evaluate potential environmental benefits from a more highly skilled workforce and the extent to which skills training is supported across member states.

Study on the Competitiveness of EU Eco-Industry (EC DG Enterprise and Industry) Comprehensive sector study that updated and enhanced previous work completed in 2006 providing a quantitative analysis of sector size, employment, growth, exports and trends. Reviewed policy drivers, labour market conditions, analysed differences between member states, provided a SWOT analysis and a competitiveness comparison with the rest of the world.

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Impact of Market Pull Instruments on Eco Innovation (EC DG Environment) Evaluated the way (and extent) to which companies pursue eco-innovation as a result of market pull mechanisms (e.g. energy labelling). Assessed the impact of current policies and identified alternative policy options.

Environment and labour force skills: overview of the links between the skills profile and climate change adaptation and mitigation (EC DG Environment) Analysed the state of knowledge development regarding the skills requirements of the labour force linked to environmental drivers. Coverage included both the eco-industries and indirectly related environmental employment such as tourism, agriculture etc. Examined how the skills profiles of the labour force in Europe will need to be adapted and identified potential policy options to enhance environmental improvements.

The employment impact of opening of electricity and gas markets, and other Directives in the field of energy (EC DG Employment, Social Affairs and Equal Opportunities) In-depth evaluation of the employment impact of electricity and gas markets opening covering the enlarged EU-27 and Turkey.

Assessment of non-cost barriers to renewable energy growth in EU Member States (EC DG TREN) Comparative analysis of options, identifying best practices, in order to remove social, political and institutional non-cost barriers hampering renewable energy development.

Skills in a Low Carbon Economy

ECOTEC provide a wide range of environmental, social and economic capability. In particular we can help you to:

- Understand the depth and distribution of skills and / or the supply chain
- Identify current gaps and predict future gaps based on forecasting scenarios
- Assess the impacts and opportunity costs of gaps
- Establish the full socio-economic cost-benefit of addressing gaps
- Identify risks and opportunities posed by wider policy and market developments
- Prioritise focus areas for an area, region or country
- Develop and evaluate policy and strategy options
- Design and develop intervention implementation plans
- Monitor and evaluate impacts and performance of plans/ strategies and programmes
- Assess strategic and / or gross value added of interventions and support
- Deliver skills enhancement training and engagement
- Communicate activities and results

Responding to the challenges presented directly and indirectly by climate change is an opportunity that, in our view, should be embraced. The key is to ensure that this is achieved in an effective and efficient way that demonstrates good value for money. ECOTEC can help you deliver this.

For more information or to request an informal meeting with one of our specialists contact:

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