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Assessment of life-cycle skills and training needs in the renewable and energy efficiency sectors: the cases of the wind energy and electric mobility and smart grids.

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Short Summary

This paper will analyse the results of a project developed with the support of the European Commission, Directorate General for Employment Social Affairs and Inclusion, which comprises a short study detailing the assessment of the skills, qualifications and training needs within the wind energy and electric mobility sectors. The final results expected include exchange of good practices and the strategic recommendations for policy makers for training developments as anticipation of relevant factors in the future. The project officially started in February 2013 and is foreseen to be closed one year after. First results are to be available by November 2013.

1. Introduction and Objectives

The aim of the project is to assess specific lack of skills, qualifications, training or re-training opportunities in the wind and e-mobility sectors and barriers to their development. The strategic impact evaluation of these industries, namely through policies and practices and the type of skills available in Europe, with a cross gender approach will be done. Attention will be paid to vocational training centres and their role on anticipation. Low skilled, old workers and the gender aspect will be of specific analysis given the role of companies in the restructuring processes caused by transformation to a green economy.

Wind energy is mature and Europe assumes leadership in installed capacity and in manufacturing capacity, therefore in employment, skills and qualifications. A strong construction phase of wind farms is undergoing and it is foreseen that in a ten-year time there will be strong concerns on operation and maintenance as well as decommissioning/renovation. Specific skills are needed and others will be significantly less demanded or exported.

Electric mobility is less mature but great expectations exist on its development. Europe is trying leadership in this area through Member States initiatives.

2. Forum Theme and Added Value and Innovativeness

This project expects to provide contributions to the Theme 1 of this event: *How can low carbon activities be key to competitive and competitive growth*. Added value and innovativeness will be reached through the contribution to reporting on the implementation of EU relevant legislation and policies and to promoting policy transfer and mutual learning through best practices in the framework of the Open Method of Coordination among Member States. The final purpose of this research is to contribute to a general green skills framework at European and national level: defining technical and generic green skills required to work in green sectors.

The question of how to address polarization of skills profiles and the less favourable effects on low-skilled workers coming from the "greening" of economic activities: shedding light on how enterprises and education and training providers can both avoid high social and economic costs. Distinct skills needs and training strategies will be considered for three main qualifications levels (low, medium and high skilled workers) within a life-cycle approach (by workforce age groups), improving employment opportunities.

Education and training strategies for green occupations and skills within a lifelong learning framework will be addressed: including formal education taking place in the education system and non-formal learning happening in highly innovative and changing work contexts. Prospects for informal learning of green skills will also be assessed.

Finally, it will provide sound information on how education and training can respond to the greening of occupations: considering in particular the existence of skills needs anticipation practices, fine tuning programs and curriculum design, teacher and trainers' training, and collaboration arrangements involving green sector associations and enterprises.

3. Overview of Methodology and Data Analysis

This project requires a European focus because it is focusing on three different regions in two different sectors. Other national and international research activities on relevant themes will be closely monitored via regular surveying of scientific publications, attendance at national and international events, sustaining close links and cooperation with contacts and colleagues, and through the development of the missions and focus groups. Public and private actors and practitioners are meant to share and discuss information and experiences. The countries that will be involved are Portugal, Spain and Belgium.

5. Conclusions and Expected Results

The expected main results will be the following: (i) draw conclusions on how the greening of the occupations occur in two strategic economic sectors; (ii) identify examples of good practices on how education and training is responding to the greening of occupations; (iii) discuss policies and practices implications to the education and training system to fit the "greening" change; (iv) discuss the enterprise role in employment and training for green occupations and skills, in handling with low-skilled workers and older workers in the context of restructuring processes caused by environmental standards or green technologies adoption; and (v) discuss the education and training system role dealing with the green change that affects training provision (early identification of appropriate skills needs, programs and curriculum design, teacher's training and openness to green business sector).

Authors

Ana Cláudia Valente has a degree in Sociology by the Universidade Nova de Lisboa, a post graduation in Economics and Public Policy and a Masters in Policy and Human Resource Management by ISCTE. She is currently doing a PhD in Economics, also in ISCTE - Lisbon University Institute. From 1996 to 2004 she was Coordinator of Prospective Sectoral Studies at INOFOR. She is a researcher in Dinâmia-CET (ISCTE) and CEPCEP (UCP). Since June 2010, is also a member of the Board of CEPCEP. Her research areas are education and training policies, skills anticipation, human capital, innovation and economic growth.

Cândida Soares is acting as consultant in the Human Resources area (planning, employment, training) for Portuguese Catholic University/CEPCEP(research centre) and for some private companies since 2010. She has 25 years of experience among the leadership staff in the Portuguese Labour Ministry, namely focusing on employment and training policies. She guaranteed the representation of the Portuguese Government in several international organisations such as the European Commission, OECD, ILO, ETF. She is also author and co-author of several publications, being the most recent ones (2011/2012) "Portugal 2020: Skill needs anticipation" and "New jobs and competencies in the fields of health and social services in the context of aging and Social Economy as a social inclusion factor".

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