

How many ‘green jobs’? Nobody knows

by Francesca Fazio

The first Ministerial Conference on ‘green jobs’ within the framework of the European Union, held by the Belgian Presidency on 28 and 29 September, brought together ministers and experts from OECD, ILO and other international organizations, as well as representatives from various economic sectors involved in green processes and social partners to address the major challenge of ‘green jobs’ creation within a green growth process. As mentioned by Stephen White, economist at the European Commission, we are now more than 6 billion and we will be more than 9 billion in 2050, meaning that consumption needs will increase by 15 times, with evident growth of CO₂ emissions and severe consequences on climate change, water and biodiversity.

Despite the great consensus among all the actors on the urgency of a sustainable transition towards a low carbon and green economy and the strategic importance of promoting green employment as an indispensable driver during that transition, experts at the Ministerial Conference found it fairly difficult to agree on a shared quantitative evaluation of the occupational impact of the green revolution. Firstly, the lack of a specific ‘green jobs’ definition, which is actually a relative and dynamic concept, impedes proper measurements of ‘green jobs’. Secondly, economists often denounce data paucity on these topics, which makes it difficult to elaborate longitudinal comparisons. Thirdly, unlike other kind of jobs, ‘green jobs’ are not coded in statistics databases and there might happen that some enterprises of a certain sector, operating for example in the detergents market, produce green detergents and some others not. So this does not allow to state that detergents industry as a whole sector is green, but neither allow to count the green producers within it. At the Belgian conference, Smets, Vice-chairman of the High Council for Employment, reported that the worldwide direct ‘green jobs’ are 26 million (UNEP, 2008), while the direct and indirect ‘green jobs’ in the EU would be 5 million (WWF, 2009); in contrast to the ILO’s report (2009) which indicated a total number of 14.3 million, 2.6 million of which in the OECD countries.

However, since the economic crisis has hardly impacted on European employment, with around 4 million jobs lost in 2009 (European Commission – DG Economic and Financial Affairs, *Labour Market and wage developments in 2009*, European Economy 5/2010) all the participants at the conference agreed on the need to look closely at all possible opportunities for job creation to foster the deteriorated European labour markets, and found in the so called ‘green jobs’ a perfect stimulus for new employment creation. As an example, indeed, between 1991 and 2005, employment in the renewable energy sector (RES) has risen by more than 40%, and employment in the green sectors has increased by 7% per year since 2000. In 2005 the RES production met 15% of EU total electricity demand and it is suppose to satisfy the 34% of that in 2020. In particular, as reported by the European Wind Energy Association (EWEA), the wind-energy production in EU-27 meets 4.5% of total EU demand, providing power equivalent to the needs of 41 million average EU households and avoiding 106 Mt of CO₂, equivalent to taking more than 53 million cars off the road. The perspectives for the wind-energy sector are positive since it is expected to meet between 14% and 17% of total EU electricity demand in 2020 (131 million EU average households). As regards the occupational achievements, EWEA indicates that in 2005 in EU the RES employed 1.4 million people, 180,000 of whom in the wind sector; in 2020 RES could employ 2.3 million people. Wind energy employment in the EU will more than double, from 182,000 in 2010 to almost 446,000 by

2020 and to 479,224 by 2030 (European Wind Energy Association, *Wind at Work: Wind Energy and Job Creation in the EU*, January 2009).

The European Commission aims to create 3 million 'green jobs' by 2020, as set as a priority objective on the agenda by the President J.M. Barroso. The Commissioner for Employment, Social Affairs and Inclusion in the EU, Laszlo Andor, gave the same figures during the conference last week in Brussels. The EU is the world's leader in the eco-technology sector, which is growing by 6%-7% per year and the EU 2020 Strategy estimates that attaining the 20% renewable energy objective would make it possible to create 600,000 jobs by 2020, and in the event that the 20% energy efficiency goal were to be attained, 1 million jobs could be created within the next ten years in Europe.

These estimates, although remarkable, are not sufficiently high to say that green economic transition in itself is the key to forget the employment crisis of today, since, as reported in the new ILO's report (International Institute for Labour Studies, *World of Work Report 2010. From one crisis to the next?*, ILO, 2010, in *Boll. Adapt*, 2010, n. 34), in the high-income countries at the beginning of 2010 14 million jobs were still needed to restore employment to pre-crisis level, but at least show the high potential of the green economy for tomorrow. In this regard it is surprising to notice that in the latest ILO's report a part specifically dedicated to 'green jobs' is missing, in contrast to the previous outlook which included a specific part on it (*Green policies and jobs: A double dividend?*, in International Institute for Labour Studies, *World of Work Report 2009. The Global Jobs Crisis and Beyond*, ILO, 2009, in *Boll. Adapt*, 2010, n. 1).

John Martin, Director for Employment, Labour and Social Affairs of OECD, repeated during its introductory speech, that new jobs will be created, others will disappear and others again will change, connected to the evolution towards a green economy: a concept already expressed in a report of 2008 (UNEP, ILO, IOE, ITUC, *Green Jobs: Towards Decent Work in a Sustainable, Low-Carbon World*, September 2008). However, no evidence emerged in its words of a quantitative analysis of this process of creation/destruction/evolution of employment. The OECD economist quantified the phenomenon through adjectives rather than numbers, arguing that the impact on total employment will be small and specifying that it could be significantly bigger through appropriate fiscal policies.

Both Martin from OECD and Torres from ILO indicated the positive effect of fiscal instruments directed to cut labour costs in the green sectors, using money coming from carbon taxes. In this sense they both referred to the so-called 'double dividend', that is to say the combination of lower GHG emissions and higher employment. In particular, green policies could raise employment by between 0.5 per cent and 1.1 per cent in a period of five years, with the best result occurring when revenues from taxing the high carbon intensive sector (or from selling pollution rights) are used to support (low-wage) employment.

Moving from the institutional perspectives into the national experiences, several remarkable practices emerged among European countries, starting from the Belgian labour market, in which following Smets, in 2007 75,000 persons were employed in the environmental industry (they were 55,000 in 1990). Likewise, the Swedish Vattenfall, the Europe's fifth largest generator of electricity and the largest producer of heat, which employs 40,000 persons, out of which 25%-30% have 'green jobs'. Similarly, the Danish LORC (Lindoe Offshore Renewables Center) employs 5,000 persons (9,000 if suppliers are included) and produces wind energy thanks to the constant interaction of universities and the government, outstanding research and competencies and high technology investments. Germany has a decade of experience in 'green jobs' and a law for the promotion of the renewable energies. Elisabeth Schroedter, Member of the EU Parliament, underlined the good performance of the German green sectors in creating employment until 2008 but pointed out, both for Germany and the EU, alarming forecasts concerning the European photovoltaic industry, that after a great soar is expected to decline from 2011, reducing the European share in the production of solar energy. Conversely, the French success story was told by Geocycle France-Benelux, specialized in the recovery of waste materials, which in 2009 achieved a

50% reduction in the emission of CO₂ in comparison to 2007 and a 5% saving in electricity consumption without any monetary investment, only by asking to the staff to change their behaviour, paying attention to energy consumption inside the firm and outside during their travels arrangements. In 2008 in France there were around 400,000 jobs in the green fields. Coming to the Italian experience, reported by Filippo Brandolini, Vice-President of CEEP and President of Herambiente, Hera is reducing the quantity of waste deposits in dumps, one of the main responsible for CO₂ emissions, by producing fertilizers. The enterprise is investing to reduce the quantity of CO₂ by 210,000 tonnes in the next years. Brandolini underlined the good performance experienced by recycling industry in Europe (as well as in Italy) in comparison to other economic sectors: from 2001 to 2007 the European manufacturing industry has grown by 13% (-3.8% in Italy) while in the same period the recycling industry has increased by 50% (+17% in Italy); the employment in the latter sector has increased by 142% in Europe in the same period. However the average dimension of the firms operating in this sector is small (6 employees in Italy, 9 in the EU, 16 in Germany) and in contrast to the large companies' experiences they don't fully understand the importance of a strategic plan concerning the greening of production processes and outputs in the long-run. As a matter of fact 99% of the companies in the EU are SMEs, providing around 65 million jobs, and they still are not paying sufficient attention to the environment; for example only 6 per cent have a management tool for that, as noticed by the Belgian Deputy Prime Minister for Employment and Equality, Joelle Milquet. The environmental challenge is all too often seen as an extra cost instead of an opportunity, both from individual and collective actors. As argued by Torres, from a comparative point of view it will be crucial for the EU to adjust the level of investments in the green economy to that of strategic global players such as China and South Korea, which are now investing in green technologies and research much more than the western world, pushing ahead their green transition and their competitiveness.

Francesca Fazio
Adapt Researcher