European Employment Observatory

EEO Review: The Employment Dimension of Economy Greening

Italy

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1. Introduction

The debate on the green economy and on green jobs in particular, is not widely developed in Italy. This can be attributed to two reasons: on the one hand, the insufficient clarity of social partners' positions on this specific issue, and on the other hand, the lack of studies and available data.

A precise strategy on green jobs has not yet been developed. Public interventions in favour of green jobs mainly focused on two aspects: incentives for the utilisation of alternative energy sources and support for economic activities linked to them. However, according to a study presented by Deutsche Bank (2007), Italy ranks as one of the less suited and more risky countries for investing capital on alternative energy sources, and, more generally, on climate-change related activities. It should be recalled that, while the international debate is mainly focused on renewable energy, in Italy a discussion is still open on whether to return to nuclear energy (which was abolished by a public referendum in 1987).

In relation to the lack of data, it should be noted that studies allowing to fully appreciate the strengths and weaknesses of the Italian system are still missing. Available data and relevant studies only concern specific sectors. The energy revolution linked to the climate challenge, which appears to be central in the agenda of many European countries, in Italy does not go beyond a sectoral dimension.

If the transition towards a green economy is expected to transform the whole Italian productive system, with inevitable repercussions on the labour market, policies and analyses related to green jobs should involve a wider context than the employment potential of specific sectors (such as renewable energy, for instance).

2. Labour market outcomes

The current business crisis can lead to new opportunities in terms of technological development, competitiveness and innovation, but it seems important that the regulatory framework supports and addresses productive choices in this sense. Some bottlenecks are however evident. In particular, the Italian energy market presents several weaknesses that act as a disincentive for significant investments in the field of renewable energy sources and energy efficiency. First of all, an effort to set up clearer regulations is needed; as for renewable energy, it seems crucial to simplify the rules for the installation of new power plants and to assure the stability of the incentive framework.

Currently, a "mixed" incentive system prevails in the electricity sector: "fixed price" incentives (the so-called *conto energia*) – according to which the government defines the price paid to the producers of renewable energy – co-exist with a "fixed quota" system, according to which the government defines the quantity of renewable energy that the producers are required to supply, but the market decides on its price (the so-called *green certificates*). The European Union demonstrated that this system is not effective, and that Italy should increase the effectiveness of subsidy schemes with the aim of financing a higher production of electricity from renewable sources (see the following section for more detail). Lack of effectiveness could also be attributed to governance problems: in fact, the structure of the legislation on energy issues is quite complex in Italy, foreseeing a mix of national and regional

competences. Another relevant issue concerns the structure of the electricity market and the difficult management of energy flows, due to congestion problems and rigidities in the transportation networks. Moreover, it seems important to abolish policies in support of fossil energy sources and other non-sustainable technologies, in particular the so-called "assimilated" energy sources (including the production of energy from waste) which in recent years absorbed a large share of the incentives for the production of renewable energy. Eliminating these barriers is a necessary condition for the achievement of the commitments taken by Italy in the European context.

Several studies examined the impact on employment that could arise from a green reconversion of the Italian productive system. A leitmotiv of these documents is the belief that the transformation of the energy mix could lead to job creation. The most significant studies in this field have been produced by Greenpeace (2009), GSE-IEFE (2009), UIL-ANEV (2008) and CNEL (2009).

Greenpeace (2009) is based on scenario hypotheses and projections produced by the European Renewable Energy Council (EREC) and Greenpeace International, which show the growth potential of renewable energy sources in the sectors of electrical generation, heat production and transportation. The estimated employment impact in Italy in 2030 is about 74 000 jobs in the renewable electricity sector (against 39 500 in the baseline scenario) and 22 400 jobs in the energy efficiency sector².

According to GSE-IEFE (2009), the employment potential in the electricity sector could swing between 100 000 and 175 000 new jobs in 2020 in Italy, according to different scenarios.

In the study presented by UIL-ANEV (2008), focused on the production of wind energy, the transposition in employment terms of the wind energy potential, estimated in 2020 (at 16 200 MW), leads to a forecast of about 66 000 new jobs. One third of this figure can be ascribed to direct job creation and two thirds to indirect job creation³.

CNEL (2009) carried out an analysis focused on the production of wind and photovoltaic energy. The analysis is based on production forecasts presented in the official Position Paper issued by the Italian Government in 2007. Employment and value added estimates are here achieved through the utilisation of input-output matrices. This study aims at presenting a first overall assessment of the net employment impact in the wind and solar sectors, by taking into account the missed investments in the traditional thermo-electrical power supply. This study, though partial (being limited only to the solar and wind energy sectors), forecasts the net creation, by

¹ GSE (*Gestore Servizi Energetici*) is the Italian institution responsible for managing the production of energy from renewable sources and to the provision of financial incentives; IEFE is the Centre for Research on Energy and Environmental Economics and Policy of Bocconi University, Milan; UIL (*Unione Italiana del Lavoro*) is one of the main Italian trade unions; ANEV (*Associazione Nazionale Energia del Vento*) is the Italian association of wind energy producers; CNEL (*Consiglio Nazionale dell'Economia e del Lavoro*) is the National Council for the Economy and Labour.

² These estimates are based on a system of employment multipliers and do not include indirect job creation

³ The methodology is not clearly stated in this case, but the utilisation of sectoral interdependence tables can be assumed.

2020, of 6 700 permanent jobs (mainly in operational and management activities) and of a yearly average of 69 000 workers temporarily involved in the construction of power plants.

Renewable energy sources usually present a lower labour productivity than traditional energy sources, showing a lower capital intensity as well. In strictly economic terms, this means that traditional energy sources are typically more efficient than renewable energy sources (this is true, in particular, for the recent high-efficiency combined cycle power plants). However, looking at this issue in more depth, several factors in favour of green investments and green jobs emerge, as they entail three kinds of advantages. First, they could help to overcome the employment crisis which is currently occurring in the traditional sectors in Italy, especially in manufacturing; second, they incorporate an intrinsic value in terms of environmental conservation, whose economic relevance has not been yet precisely calculated; third, they allow for a redistribution of resources in favour of future generations.

In what concerns the labour supply, it is important to highlight the difficulty in defining proper skills for green workers, as environmental competencies fall within a heterogeneous range of activities. The main problem is to achieve an exact definition of green jobs, according to which the necessary skills could be precisely identified. In this regard, it should be noted that some instruments for the anticipation of skills needs in the short-to-medium run are already operational in Italy. In particular, a permanent observatory on employment needs has been set up by ISFOL (the national institute for vocational training), and a survey for early anticipation of employment needs (Excelsior survey) is run annually by Unioncamere (the Association of Chambers of Commerce) on a representative sample of more than 100 000 firms. However, these instruments do not yet allow to forecast the incidence of green jobs in the economy (and therefore the mismatch between the demand and supply of these professions), as they do not include specific sections deputed to investigate this issue. Their integration would be particularly welcome and the effort required to introduce the necessary changes does not appear overwhelming.

3. Review of labour market policy developments

To our knowledge, no labour market policies explicitly aimed at promoting green jobs have been implemented at the national level recently. However, it should be noted that several policies aimed at promoting "green" sectors have been put forward, with the effect of indirectly supporting job creation. Moreover, some regional initiatives in the field of guidance and training (which are of exclusive regional competence in Italy) have been set out. In this paragraph we describe this framework.

According to the 2009 Italian National Reform Programme (NRP) Implementation Report, the government understands the opportunities offered by the current business downturn for the development of environmental policies, aimed not only at addressing environmental damage, but also at increasing competitiveness and creating new employment. The main pillars of this strategy have been identified as

the reduction of the carbon footprint and the promotion of energy efficiency. According to this commitment, the main initiatives taken at the national level in the aftermath of the business crisis have been the following:

- 1. fiscal incentives for green housing (building restorations aimed at improving energy efficiency) and for the purchase of high-efficiency household appliances (refrigerators, washing machines, dishwashers, television sets, etc.);
- 2. car scrapping schemes and incentives for the purchase of low carbon emission motor-vehicles;
- 3. a one-off financing (worth EUR 11 million) aimed at installing diesel particulate filters on local public transportation vehicles.

Nonetheless, some measures in the field of renewable energy and energy efficiency were already approved before the business crisis. A rotation fund (worth EUR 600 million) aimed at easing credit for the financing of Kyoto-related measures (microgeneration, renewable energy, substitution of industrial electric engines, R&D, forest management, etc.) was set up in 2007. Two more funds have been instituted for sustainable mobility and for sustainable development. Through the first fund, a co-financing programme addressed to local governments (worth EUR 239 million annually) has been set up, alongside with the concession of incentives for the purchase of bicycles and low-emission motorcycles. The second fund is mainly aimed at promoting participation in international R&D and technology transfer programmes related to climate change.

Another important initiative, launched in 2005, concerns incentives for the production of electricity through the installation of photovoltaic facilities permanently connected to the electric system. The so-called *conto energia* (energy account) allows households, companies and other producers of solar energy to sell electricity to the network at facilitated rates for 20 years.

Some other interventions have been promoted directly by the Ministry of the Environment, which published specific calls for the production of renewable energy in small and medium enterprises, in public administration, schools, small islands, etc. Similar calls addressed to both households and companies have been issued in several regions.

Even though these measures have obviously had an impact on the labour market, it is difficult to quantify the size of such impact. Most of these interventions are addressed to traditional industries (such as the automotive and the household appliance ones) with the aim of innovating existing products and processes in an environmentally-friendly fashion, rather than of creating new professions. However, an impulse for the development of green jobs was probably given in the field of renewable energy, as documented in the (few) studies presented above.

In what concerns generally oriented labour market policies, we can confidently state that a real integration between training policies and environmental policies is needed in order to foster the creation of green jobs. Recent anti-crisis measures aimed at providing a better link between passive and active labour market policies could facilitate the transition toward a green economy. The role of ESF funding in this field is prominent, when considering that out of the EUR 8 billion earmarked for unemployment benefits in the 2009-2010 period, EUR 2.65 billion come from regional ESF funding, with the aim of integrating job-seekers allowances with the provision of training activities. However, since in Italy, the management of ALMPs and training policies is decentralized at the regional level, it should be expected for a certain degree of heterogeneity to be observed across regions. In any case, sufficient data to evaluate the effects of this initiative and to understand how much training is being devoted to green activities is not yet available.

In December 2009, the Italian Ministry of the Environment, together with the University of Tuscia, supported the organisation of a Master's course on green jobs. The course has the objective of providing specialised training in the fields of the green economy to civil servants, professionals, business representatives and graduates in order to combine economic growth, environmental protection and the efficient use of natural resources. The programme is aimed at developing technical, scientific, legal and economic skills, and consequently at exploiting the economic significance of the environment in terms of jobs. Particular attention is placed on the functioning of the carbon credit market, the environmental sustainability of the food and agriculture sectors, renewable energy, the role of funding schemes and the Structural Funds, in particular, in the promotion of green employment.

The IFTS (Istruzione e Formazione Tecnica Superiore) system provides technical training to young people willing to enter the labour market and to workers who need to update their skills and competences. This is within the framework of the School National Operational Programme (*PON Scuola*), co-funded by the European Social Fund (ESF) and the European Regional Development Fund (ERDF). Great emphasis is placed on practical training activities, with the aim of giving training participants the opportunity to apply their studies in practice. The IFTS courses last two to four semesters and at least 30 % of the total hours of courses are devoted to company internships. The IFTS centres involving universities, companies, local institutions, secondary schools and research centres have launched several green economy-inspired courses in the fields of recycling, natural resource and water management, and energy efficiency, with the objective of creating new green jobs (and making existing ones greener) and matching company needs in terms of professional profiles.

The role of the green economy as a relevant leverage for economic development and employment creation is widely recognised by trade unions. A 2009 report by the CGIL (*Confederazione Generale Italiana del Lavoro*) and Legambiente identified the key drivers for boosting the green economy and its potential in terms of jobs and professional advancement in innovation and quality. According to this opinion, more efforts should be made by the Government and other institutions to strengthen specific initiatives in the field of waste management, use of alternative and renewable energy sources, low-emission heating sources and investment in energy-saving measures in construction projects and new buildings.

Within the framework of the UIL-ANEV (2008) study reported in section 2, the UIL signed a Memorandum of Understanding with ANEV to organise training sessions

for workers willing to enter production in the wind energy sector, where the job creation potential is particularly high.

4. Conclusions

In Italy, no specific employment strategies related to green jobs have been designed so far. An insufficient general interest on green economy issues, the Italian productive structure characterized by small and medium enterprises and the consequent low attention devoted to environmental job qualifications and skills partly explain the country's delay in addressing the climate change challenges and the transition to a greener economy.

Some studies have sharply emphasized the overall future employment opportunities due to the growth of green sectors and in particular in terms of renewable energy sources. No sound analysis has been however carried out on the competences and skills required and the likely mismatches that this may generate in the labour market. Although some obstacles may prevent an effective exploitation of the green employment potential in the future, a feasible short-term measure could be the updating of traditional qualifications and skills applied to environment related sectors by allocating more resources to training.

The IFTS courses try to fill this gap by providing technical training to young people willing to enter the labour market and to workers who need to update their skills and competences.

In any case, the transition from high carbon to low carbon employment is obviously not without difficulties. In order to overcome the traditional approach to the environment as a limit to growth, a comprehensive strategy is necessary, but still missing in Italy.

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