

European Employment Observatory

EEO Review: The Employment Dimension of Economy Greening

Portugal

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1. Introduction

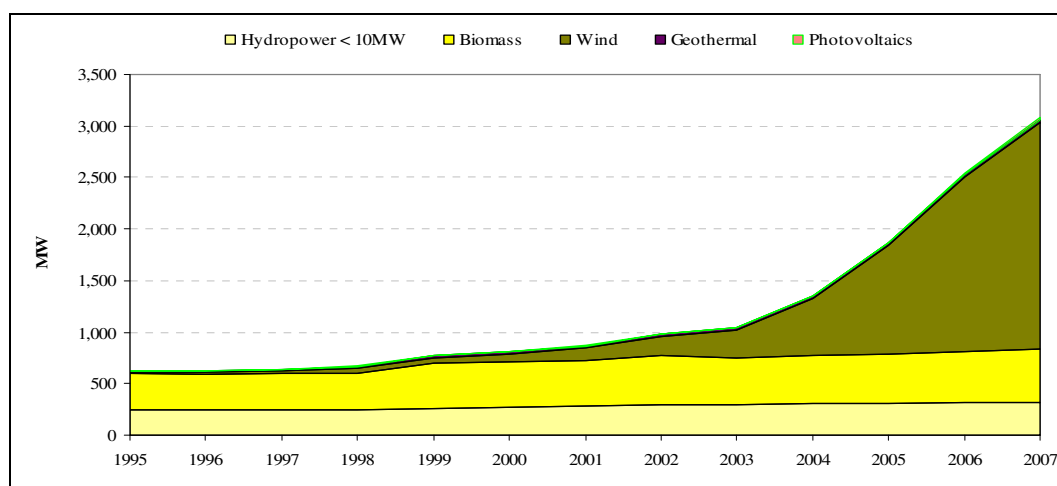
During the second half of the 1990s green issues gained significant importance for the government and in the public debate in Portugal. Since then political, legal and administrative instruments for economy greening have been developed. The recession in 2001-2003 and the subsequent crisis in the public finances however put the question of economic growth and austerity at the top of the policy agenda, increasing the risk of green issues being pushed to the background. Nevertheless, the government elected in 2005 presented the combating of climate change and drive towards renewable energies and energy efficiency as one of its priorities. Despite the recent crisis, investment in these areas continued to receive attention. External political factors (such as the attention paid to this issue at the EU level) have played an important role in preventing an anti-environmental backlash.

Considerable differences can be identified between social partner organisations in relation to the intensity of the debate on green issues and their positions. None of them considers economy greening a priority and none of them has a coherent position on the issue. Trade unions formulate positive and general statements on green issues in their programme documents and seem to have a stronger and growing interest in the issue. Employers, on the other hand, are more sceptical because they are worried about possible extra costs that may affect their competitiveness. The Industrialists' Confederation (CIP) takes a critical position towards the government's efforts to promote renewable energy and energy efficiency. CIP argues that the cheapest sources of energy are coal and nuclear power, and that other options have to be evaluated in light of their costs.

The general public are increasingly aware of green issues. Awareness-raising has been one of the strategies in the areas of the environment, energy, and transport.

The employment dimension of climate change and energy policy has been given little attention. Instead, the focus has been on the need to overcome the lack of basic infrastructures. The installed capacity of every source of renewable energy increased between 1995 and 2007 (see Figure 1). The studies carried out by DPP (2007) and, more recently, by the Ministry of Labour (MTSS) concluded that economy greening can have a positive impact on employment.

Figure 1: Installed Capacity of Renewable Energies (1995-2007)*



* This figure does not include the hydroelectric infrastructures with an installed capacity equal to or higher than 10 MW

Source: General Directorate of Energy and Geology.

The measures taken by the government are mainly mitigation measures. Given the starting point, environmental and energy policies have been driven by targets arising from commitments at the international level. Adaptation measures are expected to become more important when these targets start to be met.

2. Labour market outcomes

2.1 Main challenges for the labour market in the transposition of EU Directives implementing 20-20-20 targets

The National Reform Programmes (NRPs) show that environmental concerns have been receiving increased attention from the government. Green issues are generally coordinated by the Ministry of Environment, Land Use Planning and Regional Development (MAOTDR). The Ministry of Economy (MEID) is responsible for energy issues. Measures taken so far focus mainly on expanding the installed capacity of renewable energies, complying with the international accords on combating climate change, and fostering energy efficiency. Two problems arise in the strategy that is being followed. First, decisions on climate policies are rarely assessed from the standpoint of employment. A national strategy on green jobs is missing. This strategy would be a key aspect to linking employment policies to energy and environment policies, to overcoming shortages of green professionals, and addressing the issues of labour supply for industries in decline. Secondly, insufficient attention has been given to economic activities in which job losses are expected to occur.

Recent steps have been taken to address these problems. The MTSS has commissioned a consultancy firm to draw up a report on green jobs. In this study, shortages of green professionals were identified and policy recommendations were formulated. On the other hand, the NRP 2008-2010 raises concerns about economic

activities that will lose relevance through the process of the greening of the economy.

2.2 Impact of economy greening on employment

Green growth requires a diversified set of skills and qualification levels. The available figures for Portugal show that at the national level jobs requiring less than basic education predominate, followed by those requiring higher education. The average qualification level in the green sector is above the national average and therefore its increase will contribute to overcoming the gap between the qualification levels in Portugal and other Member States. In addition, this contribution is expected to increase in the future. Three factors contribute to this increasing demand for more skilled workers:

- Technological innovation frequently occurs in this sector;
- Traditional low-skilled occupations increasingly use ICTs;
- Many firms try to be competitive through the quality of their services and seek certification.

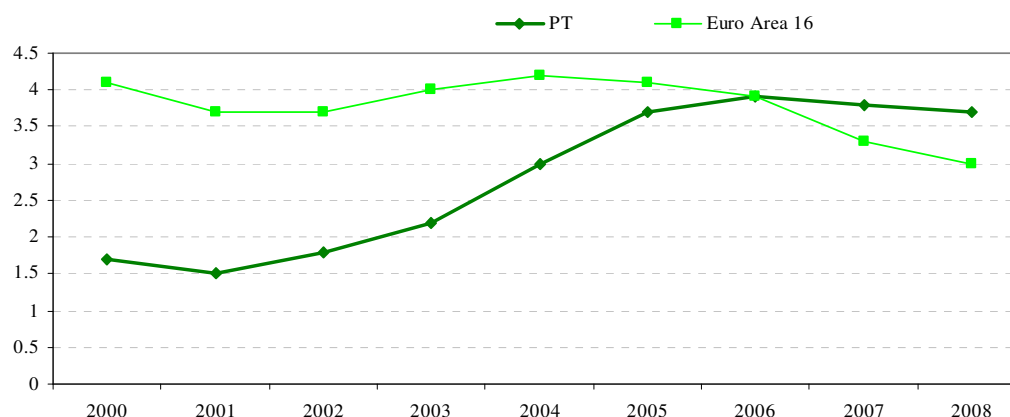
All available studies recognise that in Portugal, green sectors still have growth potential to explore and are optimistic about the ensuing effects on employment. Nevertheless, the quality of green jobs has not yet been considered in existing research.

2.3 Sectors most affected by climate change and energy policy

The sectors that will gain from the greening of the economy are mainly those related to renewable energies and eco-services. Their growth depends heavily on the regulations of pollution and energy efficiency, which are expected to become stricter. On the other hand, the economic activities that are most likely to be negatively affected are extractive and energy intensive industries (e.g. refineries, thermoelectric plants, and manufacturers of glass, steel, paper, cement, chemicals, rubber products, and plastics). The size of the restructuring process will depend on the ability of energy intensive industries to comply with environmental and energy regulations and remain competitive, and also on the instruments developed by the government to intervene in this process.

2.4 Characteristics of the Portuguese labour market and the impact of restructuring processes

The relatively high long-term unemployment (LTU) rate shows that the national labour market is not very flexible in responding to structural changes (see Figure 2). The developments between 2000 and 2008 show a limited capacity to reduce the LTU after the economic crisis of 2001-2003.

Figure 2 - LTU Rate (1998-2008)

Source: Eurostat.

Several characteristics of the Portuguese labour market raise concerns about an increase in structural unemployment. First, regional labour mobility is limited. This is a problem if the new industries are in different locations from those where jobs are lost. Secondly, the low education levels of the active labour force constrains occupational mobility (in 2008, 70 % of the Portuguese active labour force had primary education or a lower education level). Thirdly, the labour market is not very flexible. Blanchard and Portugal (2001) found that flows of workers into and out of unemployment are three times lower in Portugal than in the US.

In the past few years, the instruments to support restructuring processes have been improved. Currently, the MTSS is developing a framework to react more quickly to these situations. Nevertheless, these instruments are designed to respond to individual events. It would be more beneficial to set up programmes for economic activities in decline, which would offer effective training solutions, guidance and career orientation to respond to economy greening.

2.5 Labour supply of green professionals

The study conducted for the MTSS ‘Green Jobs in Portugal: the Renewable Energy Sector’¹ involved a survey of firms in the environmental sector in order to identify shortages of green professionals. The survey concluded that labour demand was higher than supply for graduates in study fields related to energy and engineering (e.g. mechanical engineers, electronics engineers, and information engineers) and for technicians related with renewable energies. The survey also concluded that only 9 % of the employees in these firms had specific education/training in renewable energies. This increases the burden on firms for on-the-job training.

Despite the lack of an integrated strategy for green employment, some developments were registered concerning labour supply of green professionals. First, the number of graduate students in fields of study related to energy and the environment has been increasing (0.3 % of all graduates had finished their degree in these areas in

¹ This study has been publicly presented in a seminar organised by the Ministry of Labour and will soon be published.

1993; this proportion reached 2 % in 2004). Second, as part of a large-scale investment in wind energy, a vocational training centre was created to train human resources in required skills. Third, the National Action Plan for Energy Efficiency included training for energy managers. Fourth, the Institute for Quality in Vocational Training (IQF, 2006) presented a systematic overview of qualification measures and a set of qualification profiles in green jobs. Following this, some courses were introduced in the context of the “New Opportunities” Initiative (e.g. courses for “technicians in environmental management” and for “technicians in health, safety, and environment in the work place”). Despite this progress, vocational training in the field of the environment still has little importance. This should be strengthened along with investment in retraining and updating courses for industries in decline (DPP, 2007).

Some projects present an assessment of direct and indirect impact on employment. Nevertheless, the methodology used to that end is not specified. The simplest method to apply in Portugal would probably be the input-output methodology and, when possible, the results should be compared to other methods. As stated above, studies that evaluate the impact of environment and energy policies on employment are scarce. In the study commissioned by the Ministry of Labour, the results of international research on the impact per MW of each renewable energy in employment (EWEA, 2009; CEEERT, 2009; Kammen, 2006; Frankhauser, 2009; FIP, 2009) are combined with planned investments in order to estimate the growth in employment expected for the coming decade.

2.6 Fostering green growth

No single type of measure will be sufficient to promote green growth, and only an integrated approach will produce results. Some of the measures that could be taken to support the economy greening include:

- Incentives for firms to invest in practices that take into account sustainable growth;
- Incentives for green employment and for vocational training in these areas;
- Development of the urban public transport network;
- Lower VAT rate for green products and a decrease in corporate income tax for firms reducing greenhouse gas emissions.

Important measures taken between 2005 and 2009 to foster green growth are summarised in Table 1 below.

Table 1 - Measures to foster green growth (2005-2009)

| Type of measure | Measures |
|-------------------------------|--|
| Legal Framework | <ul style="list-style-type: none"> - Energy efficiency certification for buildings - Regulation on thermal characteristics, energy systems, and air-conditioning of buildings |
| Fiscal incentives | <ul style="list-style-type: none"> - Taxes on inefficient lamp bulbs - Increase of tax on diesel fuel for heating - Reform of taxation on road vehicles |
| Other incentives | <ul style="list-style-type: none"> - Reduction of electricity tariffs for consumers with lower energy consumption and higher tariffs for the least efficient - Incentives for the installation of solar panels for hot water - Incentives for the renewal of electric household equipment |
| Awards | <ul style="list-style-type: none"> - Award for best practices in the area of energy efficiency |
| Credit Support | <ul style="list-style-type: none"> - Line of credit for investments in energy efficiency |
| Administrative Simplification | <ul style="list-style-type: none"> - 'Renewables on demand' |
| Campaigns | <ul style="list-style-type: none"> - Campaign for efficient lighting |
| Agreements | <ul style="list-style-type: none"> - Agreements with industry |
| Other measures | <ul style="list-style-type: none"> - Restructuring of the railway system - Management system for intensive energy consumption |

Fiscal measures will play an important role in furthering green growth. As can be seen in Table 1, the reforms launched since 2005 have raised taxes on energy consumption and on the less efficient means of transport. This is a feasible pathway to solve the externality caused by consumption patterns. Additional tax reforms that would consider taxes on labour would require a broader analysis.

2.6 Economy greening measures and the recovery programme

One of the main priorities of the Portuguese Recovery Programme (the main response from the government to the current economic downturn) foresees the promotion of renewable energy, energy efficiency, and Energy Transport Networks. This is to be achieved through various measures, including special aid for the installation of solar panels and micro generation units; improved energy efficiency of public buildings; investment in intelligent energy networks; and anticipation of the investment in the energy transport infrastructure. Other items of the Recovery Programme may also create some synergies with greening efforts (for example, the modernisation of schools may include equipment for teaching green issues; technological modernisation will probably include green innovations; incentives for

employment may have green aspects, particularly in the area of VET etc.), but this is not their explicit purpose.

3. Labour market policy developments

So far, no integrated set of labour market policies have been developed to support going green. There exist labour market instruments that can make a positive contribution to sustained greener growth. Table 2, below, presents the available labour market instruments intended to address the employment effects caused by climate change, those needing reform, and the direction of those reforms. The development of a National Classification of Occupations incorporating green jobs is crucial in order to achieve progress in most of the priorities listed below.

Table 2 - Labour market policies and the process of economy greening

| Priorities | Available instruments | Necessary progress |
|---|---|---|
| Offer adequate training in relevant areas | In 2009, 16 Local Advisory Councils for Qualification were created to promote a better adjustment of the VET system to labour market needs. | These councils can play an important role in improving the matching the demand and supply of skills. Nevertheless, they are focused on the present. It is necessary to adapt them to also consider future needs. |
| | New VET profiles in the areas of the environment and energy. | More qualification profiles are needed in this area. The modernisation of the VET system will facilitate this process. Only a limited number of training centres offer courses in fields related to the environment/energy. Besides the need to expand the network, it is also important to invest in the training of trainers. |
| | Higher education policy: The number of vacancies in higher education courses and the number of courses in fields of study related to energy and the environment have increased considerably in the past decade. The | Case studies carried out by IQF (2006) show that employers consider that the content of many courses is too theoretical and general. In addition, reference is made to the need for more specialization courses in |

| Priorities | Available instruments | Necessary progress |
|--|---|--|
| | monitoring system developed by the Ministry of Science and Higher Education to assess the employability of graduate courses is useful in order to adjust places in different fields of study taking into consideration the demand for skills. | green areas. |
| Develop suitable instruments to minimise the social costs associated to the decline of economic sectors. | The MEID set up the Integrated Intervention Office for Business Restructuring (AGIIRE) in 2005. AGIIRE aims to speed up these processes by providing support to workers in firms undergoing restructuring through: career guidance; vocational training to update or recycle skills; and complementary social protection. | A framework to react even more quickly to these situations needs to be developed. Programmes for the economic activities in which employment is expected to decrease should be prepared. ALMPs will have higher demand. In some cases, their effectiveness is questioned by available research. Hence, it will be necessary to improve their weaker features. |
| Develop a monitoring system to follow, manage and assess green employment. | None available. | The process needs to be undertaken by the Ministry of Labour. |
| Guarantee greater coordination between employment policies focusing on green jobs and environment, energy, and transport policies. | None available. | The Ministries responsible for these areas should pursue improved coordination. |

There are various obstacles limiting greener labour market policies. Firstly, the Portuguese labour market is characterised by several challenges and therefore priorities have to be ranked. In recent years, improving the qualifications of the Portuguese population has been the top priority in the employment area. Although this objective can be pursued jointly with green growth, the linkages between these two areas have not been explored. It is necessary to increase the importance given to

green employment. Secondly, until now, Portugal has shown limited capacity to focus on future skills needs. Thirdly, the sceptical position of employers on economy greening and the fact that unions have other priorities do not contribute positively. In addition, the current economic outlook is not ideal to promote this issue further, since investment in these areas tends to follow the business cycle. In a period of economic expansion, it would be easier to get more support from the stakeholders.

Labour market policies to support going green are probably more effective if defined from a national reference framework with considerable involvement from stakeholders at regional and local level and in close articulation with enterprises.

The role of ESF funding

ESF has played an important role in supporting the development of energy, water supply and sewerage infrastructures in Portugal (previously through the Community Support Framework and currently through the NRSF). All NRSF operational programmes have objectives that are, directly or indirectly, related to green growth. In the Human Potential Operational Programme there are several activities that support the process of economy greening. These include investment in initial training courses; life-long adaptability and learning; and advanced training. Although supporting green growth is not their explicit purpose, they have a positive impact on this process.

4. Conclusions

Sustained green growth requires a national strategy for green employment developed with the participation of key stakeholders (e.g. private companies, non-profit organisations, public institutions at all levels (local, regional and national). This strategy would be a key aspect for linking employment policies to energy and environment policies. Surveys show that employers from green sectors consider that more initial and continuous training courses are necessary in fields directly related to energy and the environment and that the number of graduates in these fields has increased considerably, but their skills are not adjusted to employers' needs. Adjustments in vocational training and higher education are required. These can only be effective if based on a strategy for green employment.

Measures should be developed targeting the sectors that will be negatively affected by the greening of the economy. There are two priorities in this area: minimising the social and economic effects of restructuring processes; and providing support to energy intensive sectors that will face considerable challenges, as targets for Portugal in the environment and energy areas become more demanding.

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