

European Employment Observatory

EEO Review: The Employment Dimension of Economy Greening

Bulgaria

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1. Introduction

Debates about protecting the environment are actively held in Bulgaria. There is an active response towards pollution as well as towards the lack of transparency of actions concerning the condition of the environment. Relevant initiatives by the state administration and by the non-profit sector are increasing. However, there is no intensified research interest yet, in developing green employment and a green economy. That is why the opportunities for green jobs¹, shown below, have a conditional character and have no pretence to be exhaustive. At present, the interest is mainly on the national preconditions for a green economy and employment, the direction of their expansion and the possibilities to intensify their impacts.

2. Some features of ‘green’ employment in Bulgaria

Bulgaria has good natural and climatic characteristics as well as accumulated potential for the development of ‘green’ agriculture, forestry, fishing, unique biodiversity, tourism, services. For the time being, though, these sectors have low efficiency (with some exceptions). Some sectors are in their initial stages of their ‘greening’ and others are being studied to be developed in this direction.

Those engaged in agriculture, forestry, hunting and fish-farming are the only group of employed people which is decreasing in number as well as their relative share in the structure of employment². The share of these activities in the gross surplus value produced is the lowest compared to industry and services and it has been decreasing in recent years.

The forecasts for global warming will have a different impact on agriculture and forestry in Bulgaria³. They will force the restructuring of agriculture and forestry and their intensification. This will require changes in the organization of labour, in seasonal employment as well as in professional and qualification structures. Agriculture and forestry may cause an increase of unemployment by releasing low-qualified labour in the older age groups. At the same time, the medium and long-term prospects for highly qualified labour for these activities will grow. In general, those employed in agriculture and forestry will need to improve their skills to participate in flexible employment.

Again, the natural conditions and climate in Bulgaria make it suitable for the development of winter and summer tourism. At the same time, tourism has created large-scale ecological problems in the country. For instance, resorts and other recreational areas were heavily overbuilt, the requirements for water supply and waste-water treatment plants and for transport infrastructure have not been observed. Ecotourism in protected areas and employment for maintaining the biodiversity therein are not very popular, despite the fact that they can present opportunities for employment in small towns and villages.

¹ Green jobs are viewed as work in agriculture, industry, services and administration that contribute to preserving or restoring the quality of the environment, Source: UNEP/ILO/ITUC (2008), Green Jobs: Towards decent work in a sustainable, low-carbon world.

² In 2008 the employed in the agriculture according to LFS are 7%, whereas in 2003 – 10 %, and in 2001 – 10.6 %. They decrease their number 1.2 times. Source: National Statistical Institute (NSI).

³ The main part of the forests (61 % according to data of the Ministry of Agriculture and Forestry) are located at the altitude of 800 meters above sea level and around it and they will be vulnerable under global warming. The output of the main agricultural products may grow as a result of the fertilizing effect of the increased concentrations of carbon dioxide, but only if additional irrigation is applied.

Climate change will influence tourism similarly to agriculture and forestry. Restructuring of activities and decrease of the importance of winter and beach tourism is expected. The demand for alternatives to the traditional package holidays will grow and the local 'producers' should be ready for this. It can be foreseen that the quality and flexibility of employment in this branch will have to be improved.

The companies that pollute the air (energy generation, production of metals, cement, lime, ceramics, cellulose, paper etc.) employ about 24 % of those working in industry⁴. Their number was reduced by nearly a quarter in the period 1997 – 2008. For example, the ferrous metallurgy sector is under reconstruction and, in particular, the giant Kremikovtsi metallurgical works. On the one hand, CO₂ emissions were reduced but on the other, the largest mass release of workers in the period of the present crisis was made. Re-training those redundant workers presents a significant recent challenge for labour market policies and in the years to come.

Water supply, sewerage and waste management is the economic grouping that will bring about high labour demand in the near future. Due to the delay in solving the problems in these fields and their large scale, it will be necessary to invest substantially in these areas. According to Bulgaria's EU commitments, the national problem of waste collection, disposal and recovery has to be solved by 2012.

The number of those employed in recycling waste increased 20 times between 1997 and 2008, while the number of those employed in collecting, treating and distributing water remained nearly unchanged. The low quality of the jobs in the field of waste recycling is one of the typical examples until now. Considering the necessary construction of new infrastructure, the employment of construction workers⁵ in that field will continue as well as of specialists maintaining water treatment plants, and control and monitoring experts. Furthermore, additional labour will be employed for the production of the necessary technology and equipment for the water treatment plants and for the specialized transport of waste and in waste-treatment companies.

Special attention should be paid to the re-structuring of energy generation in Bulgaria. This is a major problem for Bulgaria, in terms of using alternative sources of energy. This refers to the construction of water power plants for them to generate up to 16 % of the total energy consumption by 2020, as per commitments undertaken.

In 2009, high interest was registered in the country for photovoltaic power plants. Bulgaria already has installations amounting to 450 MW. In 2008, wind power in Bulgaria represented about 4.2 % of the electricity produced by Renewable Energy Sources (RES)⁶. A detailed study was conducted to expand the use of wind power⁷. The expansion of the above-mentioned alternative energy sources can have a positive contribution to employment, since demand for engineers and technicians will grow.

⁴ According to additional data of NSI as well as own calculations.

⁵ A part of those released from the 'construction' branch can be re-directed to these activities.

⁶ Source: Ministry of Economy Energy and Tourism (MEET).

⁷ Scoping Report (2009)

The economy going green in Bulgaria will cause contradictory trends of increasing demand for labour and structural unemployment. The general trend being outlined is increasing demand for flexible high-quality labour.

3. Labour market and educational policy developments

3.1. Labour market programmes and measures

Stimulating green jobs employment was included as a measure in the active labour market policies as they were listed in the national flexicurity pathway. There is, however, a concern of postponing its effective implementation, because of the recent need for ad-hoc reactions to increasing unemployment.

Through the period 2008 – 2009, the Ministry of Labour and Social Policy (MLSP) organised a national programme for rehabilitating and protecting forests and improving environmental conditions in the country. The programme was not combined with training the employed and that was its weak point. It ended in 2009 and no other similar initiatives have been provided for in the 2010 plan. The only relation in the plan to the green economy is the requirement for the elaboration of a normative basis for the creation of green working places. However, support for the green jobs was included in the Bulgarian Flexicurity Path (2009) as one of the strategic directions of active policies development.

There are other programmes for temporary employment in community work which is important for protecting the environment, for improving the social infrastructure in populated areas, for renovating buildings to improve their energy efficiency, for the transportation and treatment of household waste and others. More of them are initiated because of their social significance for providing a transition for low-skilled workers to employment.

Special attention should be given to *vocational training* in the green economy. As an element of flexicurity, it can serve (and aid) the transition to a new quality of employment. The preliminary outlining of a list of skills in this respect will be of vital importance. The existence of green innovations in the curriculum could be used as a criterion for selecting training organisations in tender procedures.

3.2. Improvement of the quality of education

There are already optional subjects in the high-school curriculum in compliance with the initiative ‘education for sustainable development’. It is necessary for innovations in this field to continue following the lines of, firstly, changing the general content of the curriculum which should secure the appropriate preparation of those finishing schools for protecting the environment. Secondly, introducing training both in high-school vocational training and in universities on subjects necessary to fill green employment positions. The latter requirement makes it necessary to organize a specialized interdisciplinary preparation. These two changes should be integrated within the process of improving the quality of education.

The changes in educational content have to be interrelated with the respective changes of the current “Nomenclature of Professions in Bulgaria” (2007). There is not a single position in it, providing for knowledge and skills related to conservation of the environment. A topical task is also the elaboration of new models of managerial competences for the green economy, as well as a general updating of the requirements towards human resources development.

4. General preconditions for the economy and for employment to become greener

4.1. Administrative and legislative control functions

The specialised administration of environment and water issues is concentrated in the respective ministry and it is structured by functional spheres (water, air, waste etc.) and by fields of administrative intervention, such as prevention and control, management and organization. More important among the latter are: issuance of complex permits for the construction of new and the exploitation of existing industrial installations, carrying out ecological assessments, disseminating the advantages of ‘green’ public procurement, management of “Nature 2000” sites, etc.

The Ministry of Environment and Water (MEW) initiated a detailed analysis of environmental problems, on the basis of which, a Strategy for environmental preservation (2009 – 2018) was drafted. In the Strategy, employment is examined only in connection with the re-elaborated EU Sixth Framework Programme (in 2007) for actions in the field of the environment, and restructuring of the economy in the rural regions of Bulgaria. Employment is not included in the indices developed for the implementation of the Strategy.

In the Strategy for Employment (2008 – 2015), developed by the Ministry of Labour and Social Policy (MLSP), no comments can be found in connection with economy greening.

The Ministry of Health is elaborating a National Programme on ‘Health and Environment 2008-2013’. There, the need to improve the health of the labour force and labour conditions are stressed.

Being a full member of the European Union, Bulgaria harmonizes its legislation with the directives of the EU on environment and on employment. The basic legislative act in the field of environment is the Law for environmental protection⁸. Polluting companies, as per their definition in this law, should receive permits by the Executive Agency on Environment with the MEW. The existence of this strict permit regime means that the number of the employed in these industries is dependent on firms’ compliance with the specific requirements in relation to the technology being used. This is one of the reasons behind considering employment implications only in the context of permit regimes; rather than taking a broader approach considering employment implications of protecting and rehabilitating the environment. This narrow approach has to be changed.

Clean air and climate change are well-known problems in Bulgaria among the experts⁹. At the end of 2009, the MEW organized the elaboration of a plan for carbon dioxide emissions. Due to political reasons, the government has postponed distributing the corrections to the initial plan, among local companies, by two years. This has resulted in missed revenue and missed opportunities in terms of the construction of alternative energy sources on the basis of such revenue.

The tax reform to include the eco-taxes is under discussion. The need of it is advocated by the experts not only as a part of the EU eco-tax harmonisation, but as a piece of a common eco-fiscal policy and ‘eco-Schengen’ rules that is expected to be introduced. However, there is no

⁸ Published in the State Gazette No.91/25.09.2002 г.

⁹ Bulgaria, being a country of the Framework Convention of the United Nations on climate change is obliged to make an annual inventory of the emissions of greenhouse gases (GHG) per sources and consumers, applying a methodology, approved by the Convention. The inventories span over the emissions of direct GHG. The preparation of the national inventories dates from the year 1988 which was adopted as base year for Bulgaria.

clear official statement for engagement of the central and local tax authorities in the process. A good example is the postponed increase of taxes on vehicles that has been discussed for the last 15 years. The current practices involve a range of corporate taxes, productive taxes, and fines that are based on the principle “the polluter pays”. The intended design of such taxation is far from preventive, and is not combined with the cuts in labour taxes in favour of clean production and green employment.

4.2. Expenditure and investments

Through the period 2003-2007 the expenditure on protecting and restoring the environment in Bulgaria grew twice. Its share of GDP changed from 1.7 to 2.1 % during this period. The achieved levels of investment, though, as per the main indices for EU-27 and other member countries have not yet brought significant results¹⁰.

The largest shares of the expenditure on protection and restoration of the environment for the period 2000 – 2007, were for waste, water and air, followed by ‘protection and reclamation of soil, ground and surface water’, ‘monitoring and control equipment’ and ‘forests’. These shares outline the main problems and priorities in the field.

The State Budget can finance municipal investment for ecological projects, such as urban waste-water treatment plants and collectors, sewerage and water-supply networks and municipal waste pits etc.¹¹. During the current economic crisis, the significance of cohesion and other EU funds has increased significantly.

In March 2009, a decision was made that the European Commission would award Bulgaria EUR 3 billion for the development of a ‘greener’ economy by 2013¹². The utilisation of the money from these funds is a serious challenge for this country and it should be reflected in the respective programme and strategic documents. The World Bank (WB) provided a credit (November, 2009) for the realisation of the project “Development of Municipal Infrastructure”. This will support local authorities in the process of investment planning in the water sector and improving the reliability and the quality of the water supply.

The utilization of the EU structural and other funds encounters some general problems, such as: lack of sufficient experience, corruption, limited possibilities for co-financing. Additional problems may arise with EU funds for economy greening, in terms of coordinating activities

¹⁰ In 2006 the ratio of turnover from products new to the enterprise and new to the market as a percentage of the total turnover was 10.3% for Bulgaria, whereas for EU-27 it was 13.4, for Romania – 18.5%, Malta – 28.6 and Greece – 25.7%. On the other hand (and again due to the low initial level) – the effects of innovation on material and energy efficiency defined as the share of enterprises whose innovations have high effects on reducing materials and energy per unit output as a percentage of innovative enterprises is at relatively good level. In 2006 it was 13.3%. This is a value close to the median value of the registered levels in the other EU countries.

Source: Eurostat.

¹¹ The enterprise for controlling the environment protection activities (established by virtue of the Environment Protection Law) presents funds in the form of: free aid; no-interest or low-interest loans; subsidies for covering of part or the full value of due interest on bank credits, given for the realization of ecological projects¹¹. Free aid and no-interest loans are given for non-investment projects related to ecological tourism. Projects related to ecological agriculture and livestock breeding can be funded by no-interest credits only if the project is realized in a settlement in a semi-mountainous or mountainous area.

¹² Ten priorities have been envisaged for the utilization of these funds which include, water sector, railways, waste management, energy efficiency and cogeneration and energy management; integrated projects for rehabilitating urban and rural regions; clean public transport; direct protection of nature and increase of biodiversity; development of energy generation from renewable sources; ecological innovations in small and medium-sized enterprises.

and of their monitoring and control. However the importance of these investments for employment promotion does not need additional advocating.

4.3. Incentives for companies

The general conditions for doing business in Bulgaria have improved significantly. This is expressed as low taxes for employers and heavily reduced social security payments. The government took decisive measures for encouraging business activity, by facilitating start-up and closure of businesses, accelerated reimbursement of VAT, changes in the organisation of public tenders and concession activities; introduction of a transparent and unambiguous rules for license, permit and registration regimes. Measures have been undertaken to limit corruption. These changes are expected to attract foreign investors, including green economy initiatives.

A standard for company management in compliance with the ecological requirements of ISO 14001:2004 is applied in the country. There have been cases of tenders for public procurement where the participating companies were required to be certified in compliance with the requirements of this environmental management system. This is an important stimulus for companies as well as a guarantor for changing their management model.

In addition to general provisions, specific provisions are necessary for the producers of eco-friendly products and alternative energy. Specifically in the Bulgarian context, the consumption of alternative energy depends mainly on the strategic decision in respect of the construction of the second nuclear power plant.

5. Conclusions

Economy greening will require radical improvements in labour force quality on the basis of a new model for vocational training and in accordance with the requirements of flexicurity and of the 'knowledge economy'.

In the short-term, the economy going green in Bulgaria will broaden the possibilities for employing low and middle-skilled workers (released from construction, metallurgy and other branches), in building physical infrastructure in the fields of water supply and waste treatment. In general and in long-term, in particular, the demand for engineers and other highly specialized workers will grow. A deficit can be forecasted in certain fields as well as the necessity to import persons having specific professions and skills. The re-structuring of the economy considering eco-friendly requirements (and those for decreasing carbon dioxide emissions, in particular) is expected to cause structural unemployment in the near future.

The complexity of the problems in each sphere of environment-related activity makes it necessary to improve the coordination of the work of the state administration. It should expand its potential for solving inter-sector problems, including the establishment of a network of focal points with ministries as well as of independent organs on the basis of the principle of shared responsibilities and inter-sector cooperation. It is also necessary to improve the coordination of the state administration with the non-governmental sector.

The strategies, programmes, plans and legislation adopted so far, having their significance for the protection of the environment and for sustainable development, need to be renewed. The updating of the strategies for environmental protection and for employment is extremely

topical. There should be a separate emphasis on the necessity of elaborating a plan for using alternative sources of electricity. The plan should respond to the needs of Bulgaria in the context of international schemes for trading carbon dioxide emissions.

Bulgaria intends to spend a substantial volume of funds for protecting and rehabilitating the environment. Under the economic crisis conditions, however, importance is placed on accessing and utilising EU funds and those of other donor organizations.

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