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**ANALYSIS AND EVALUATION OF THE IMPLEMENTATION OF
POLICIES TO PROMOTE CREATION OF GREEN JOBS IN
BULGARIA**

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***Abstract:** The green economy which contributes to sustainable development and efficient use of resources requires structural changes in employment and implementation of complex national strategies and systems to encompass the opportunities for developing green jobs. The aim of the report is to review the policy for promoting the creation of green jobs in Bulgaria and on this basis to assess its implementation for the period 2011-2014.*

***Keywords:** green occupancy, ecopolicy, sustainable development.*

Introduction

The EU strategy for sustainable growth and jobs, Europe 2020 focus on innovation and green growth at the main triggers for improving competitiveness. The green economy which contributes to sustainable development and efficient use of resources is associated with structural changes in employment - remodeling of existing jobs, closure of others and/or the emergence of new ones. This requires the EU countries to develop and implement complex national strategies and systems to encompass the opportunities for developing green jobs (Cedefop 2009, ILO 2010). The aim of the report is to review the policy for promoting the creation of green jobs in Bulgaria and on this basis to assess its implementation for the period 2011-2014.

1. Review of the policy to promote green jobs in Bulgaria

The main policy priorities to promote greening the economy and creation of new jobs in our country are aimed at enhancing the competitiveness of the Bulgarian economy,

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support to small and medium-sized businesses, stimulating investment activity, creating a favorable business environment and investment promotion in technological and innovative industries, development of public - private partnership, development of "green economy", effective development of the energy sector. In this regard, under the Operational Program "Competitiveness" in the direction "Improving the business environment with effect on employment, encouragement of investment and growth, which creates high employment quality jobs in sectors with growth potential" are implemented procedures "Technological modernization in small and medium-sized enterprises ", " Implementation of innovations in enterprises ", " Support for cluster development in Bulgaria ", " Investments in green industry "and "Energy efficiency and green economy ", aimed at encouraging investment and growth for increasing employment and quality jobs in sectors with growth potential.

In the National Strategy for Promotion of SMEs 2013-2020, the prospects for development of small and medium-sized enterprises are tied to environmental protection. One of the main priorities in the strategy includes creating opportunities for SMEs to turn environmental challenges into opportunities, which requires providing more information, expertise and financial incentives in order to fully exploit the opportunities for new "green" markets and increased energy efficiency, partly through the introduction of SME environment management systems. The strategic objective is that by 2020 Bulgaria should become a country in which SMEs invest in energy efficiency, develop and market "green" products. The state should provide financial incentives for this purpose and to inform entrepreneurs about all the possibilities on the way to "green" technologies.

Potential for job creation in environmental activities have the measures and projects implemented under different operational programs and other international and national financing. More significant are:

- scheme "Energy Efficiency and Green Economy" of the Operational Programme "Development of the Competitiveness of the Bulgarian Economy" (for investments in energy-saving production technologies and the use of renewable energy projects of micro, small and medium enterprises);
- project "Energy Renovation of Bulgarian homes" of the Operational Program "Regional Development" for energy efficiency of buildings;
- scheme "Green and Accessible Urban Environment" of the Operational Program "Regional Development";
- Works are created under the projects aimed at developing infrastructure for water and wastewater through the construction of treatment plants for waste water, etc., which are implemented within the Operational Programme "Environment";
- Projects for improvement and development of infrastructure for waste treatment, projects for installations for the disposal of municipal waste, projects for construction of regional facilities for recycling of construction waste, construction of installations for the recovery of separated gas emissions (methane) from landfills by producing electricity and others.

Applying consistent policy approach which integrates socio-economic development and environmental protection in one, with the amendments to the Law on Employment Promotion / EPA / in July 2010 was introduced an incentive measure for "green jobs", which encourage employers who create jobs in economic activities supporting environmental protection. The new measure is consistent with one of the top priorities of

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the Europe 2020 Strategy for the development of greener and more competitive economy, with more efficient use of resources. By using the subsidies for green employment are secured green jobs to the unemployed and disadvantaged groups of people in green activities related to production of goods and provision of services which support of environmental protection. Such a tool, which aims to encourage businesses towards environmentally friendly activities is introduced for the first time in Bulgaria.

According to the definition in the law, "green" are jobs that are disclosed in economic activities linked to the production of goods and provision of services supporting the environment, according to a list of economic activities approved by the Minister of Environment and Water and the Minister of Labour and Social Policy. The encouragement measure provides for each opened "green job", under which was hired an unemployed person to be provided cash for the time during which the person was employed, but for a period not exceeding 12 months (Art. 55 d).

The activities targeted by the state subsidy are two groups:

- Horizontal: the possibility for applying is offered to all employers who possess one of the three certification marks - environmental standards ISO: 14001 2004, the European Management and Audit Scheme / EMAS / and European Ecolabel Scheme.
- Several industry groups aimed at improving the environment, can apply without the need to hold these certificates. These are the sectors, mainly related to waste water treatment, waste processing, waste sorting, recycling, reuse of waste, production of waste eco materials and products from waste wood, including sawdust briquettes, production of energy efficient equipment, sustainable transport and others.

Annually are identified the main sectors that offer green jobs. Economic activities which stimulate "green jobs" are defined with a list approved by the Minister of Environment and Water and the Minister of Labour and Social Policy. Economic activities are related to six sectors ranging from sewerage to culture, sport and entertainment, ie with different potential for creating of green jobs.

The funds for the promotion of the measure "green jobs" are provided to employers when they recruit unemployed persons directed by the divisions of the Employment Agency. After approval by the Cooperation Council, the employer enters into a written agreement with the Directorate "Labour Office". For each unemployed person for the time that has been employed from the state budget are provided: a salary, amounting to 310 lev per month for a period of six months; additional fees in the minimum amounts set out in the Labour Code; compensation for paid annual leave. There are no restrictions on employers to pay higher remuneration than the granted by the state, and to retain the workers for a longer period.

2. Evaluation of the implementation of policies to stimulate green jobs in Bulgaria

Overall, for stimulating the creation of green jobs for the four-year period 2011-2014, are provided 5760644.00 lev, which can finance 3654 jobs, including 3034 jobs for new employment.

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The allocation of funds and jobs for years is shown in Table 1. The analysis of the indexes of change on chain and base basis for the three indicators - total number of funded jobs, new jobs and total resources for the promotion of the measure shows that the planning authority has focused its attention mainly on the first year of the period. For 2011 were envisaged 57.5 percent of jobs and 52.5% of the funding. During the period generally is seen a strong downward trend for the three indicators - for 2014 compared with 2011 the projected total number of jobs is only 13.3 percent, including for new jobs - 4.86 percent. Data show that during the years the greatest reduction was observed in 2012 compared to 2011 and in 2014 compared with 2013.

Table 1. Dynamics of planned green jobs and funds for their financing per years

Indicators	Years			
	2011	2012	2013	2014
1.Total number of green jobs	2100	725	549	280
Change by years (Index on base basis)	100	34.52	26.14	13.33
Change by years (Index on chain basis)	100	34.52	75.72	51.00
2.Total number of new jobs	2100	396	436	102
Change by years (Index on base basis)	100	18.86	20.76	4.86
Change by years (Index on chain basis))	100	18.86	110.10	23.39
3.Relative share of new occupancy	100	54.62	79.42	36.43
4.Total size of financial funds for the measure (leva)	3024000	1222559	1068074	445010
Change by years (Index on base basis)	100	40.43	35.32	14.72
Change by years (Index on chain basis)	100	40.43	87.36	41.66

Source: Agency for Occupancy

There is an uneven distribution of funds for total planned green jobs, including for the creation of new employment, and the incentives are priority targeting the first year of the period for which were provided 57% of the total number of jobs. Even more significant are the differences in terms of new jobs, the share of which in 2011 reaches 69%. At the same time the relevant figures for 2014 were 8% and 3%.

There are big differences across regions, reaching more than 9 times. For instance there are only 37 active green jobs in Kardzhali and 38 in Vidin, whereas their number totals 312 in Blagoevgrad and 249 in Kyustendil. Dominate areas in which are envisaged between 51 and 100 green jobs (32% of the areas) and between 101 and 150 green jobs (29%). Most green jobs (over 151) are envisaged in the regions of Blagoevgrad, Kyustendil, Targovishte, Pazardjik, Pernik, Vratsa, Gabrovo, Montana and Sofia where they range from 312 to 164 units.

Allocation of financial resources and the planned green jobs by planning regions is shown in Table 2. The data show the high share of the Southwest Planning Region,

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reaching 29.87% of the state subsidy. Four of the planning regions are ranging from 13.13 percent to 16.29 percent.

The lowest relative share of funds is allocated to the South-East Planning Region (only 10.15%).

Table 2. Structure of the planned jobs and the means of their disclosure by planning regions

Region	Total occupancy	New occupancy	Means
North-west	15,85	16,28	16,15
South-west	29,56	28,21	29,87
North central	13,19	13,84	13,13
North-east	15,60	14,24	16,29
South central	15,27	16,12	14,42
South East	10,54	11,31	10,15
Total	100	100	100

Source: Agency for Occupancy

In 2011, the measure was successfully launched, and only for the period from January to September were established 795 "green" jobs and hired 631 unemployed people from 64 employers. Total for all of 2011 were offered 902 green work places from 70 employers. Among them prevail employers in sectors related to the supply of water; sewerage, waste management and remediation activities.

Highest is the percentage of set goals implementation in the third year, when it reached 78.7% from planned, and the biggest number of green jobs were established in the first year (Table 3). At the same time the number of hired workers vary and in the second, third and fourth years their larger number in comparison with offered jobs is due to the turnover of workers, particularly in sectors linked to the delivery of water, sewerage, waste management and others. Practically in every third job for 2014 is observed workers' turnover.

Table 3. Planned and discovered green jobs 2011-2014

Indicators	Years			
	2011	2012	2013	2014
Planned working places	2100	725	549	280
Revealed working places	902	341	432	94
Relative share of revealed working places from planned	42.95	47.03	78.69	33.57
Number of people who started work	786	376	464	122
Number of started work in % to revealed working places	87.14	110.26	107.41	129.79

Source: Agency for Occupancy

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This negative trend some researchers / Harizanova, Stoyanova, 2015/ explain with the high requirements towards employers and on the other hand with the low pay for employees. Under this measure the employees are paid the minimum wage established for the country, and it is lower than the formed labor market minimum wage in some sectors. For these reasons, it has formed a low share of long-term unemployed people (23.5% for the entire period) and of unemployed young people under 29 years of age (12.7%) who start green jobs under the scheme. At the same time there is a considerable share of newly recruited on green jobs over 50 years of age (28.5%) and women (45%).

Most of these companies are in the construction sector. Their area of activity most often is associated with high, low and waterproof construction (buildings and facilities, sites of the technical infrastructure, water, sewage, hydraulic, energy, transport, etc.); construction of civil, industrial and infrastructure projects, water and sewage systems. The minimum statutory wage for these activities ranges from 360 lev/month for unskilled jobs to 825 lev/month for managerial positions

The sectoral analysis of the newly created green jobs shows that highest is their share in the sector, providing water supply, sewerage, waste management and recovery (Table 4). During the four years period of time of the measure activity, the relative share of employers in this sector from all employers ranged from 78.1% (2014) to 85.7% (2011). Among them prevail the number of employers executing collection activities of non-hazardous waste. In some years (2013) they are realised 72.1% of signed contracts under the measure in the entire sector and 60.8% from the total number of employers concluded contracts under the measure.

Table 4. Employers financed by promotion measure "Green Jobs" for 2011-2014

Indicators	Years			
	2011	2012	2013.	2014
Processing industry	2	2	3	1
Production and distribution of electricity, heat and gaseous fuels	3	2	3	1
Supply of water; sewerage; waste management and recovery	60	43	55	4
Construction	3	3	5	0
Transportation and storage	0	0	0	0
Administrative and support service activities	2	1	3	1
Culture, sports and entertainment	0	0	0	0
Total	70	51	69	94

Source: Agency for Occupancy

The second place for concluded contracts belongs to the employers of sector "Construction", followed by the almost equal presence of sectors "Production and

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distribution of electricity, heat and gaseous fuels" and "Processing Industry". Regardless the offered opportunity, the terms of the promotion measure did not provoke any interest in two of the sectors, namely "Transport and storage" and "Culture, sports and entertainment". Negative trend is observed in terms of the average number of jobs created by an employer. As can be seen from the data presented in Table 5, that number decreases. If during the first year the average number of jobs established by an employer was 12.9 (2011), at the end of the period it went down to 2.9(2014), ie registered a decrease more than 4 times.

Smallest is the number of the contracts and created jobs in the last 2014 and in 10 regions were not signed a single contract.

Table 5. Average number of jobs created by an employer

Indicators	Years			
	2011	2012	2013	2014
Employers	70	51	69	32
Revealed working places	902	341	432	94
Average number of revealed working places by one employer	12.9	6.7	6.3	2.9

Source: Agency for Occupancy

Of the remaining 18 regions – in half of them the measure has benefited only one employer. The biggest number of contracts – 5, were concluded in the territory of Targovishte, followed by Pazardzhik and Montana regions.

3. Conclusion

Based on the data for implementation of the incentive program of the Ministry of Labour and Social Welfare to create green jobs can be drawn the following conclusions:

-As a whole the promotion measure is targeted for a limited number of sectors with differing potential for green jobs. This fact, combined with the high requirements for applying for the measure towards employers are among the main reasons for the low use of the offered funds.

-The sectoral analysis of the newly created green jobs shows that highest is their share in the sector, providing water supply, sewerage, waste management and recovery. The relative share of employers in this sector from all employers ranged from 78.1% (2014) to 85.7% (2011). Among them prevail the number of employers executing collection activities of non-hazardous waste and in some years they reach 60.8% from the total number of employers concluded contracts under the measure.

-In two of the sectors - namely "Transport and storage" and "Culture, sports and entertainment" – were not created a single job place.

-Despite high unemployment in some of the regions is low the relative share of long-term unemployed who were engaged in these newly created jobs.

-The working conditions of part of the jobs in the sewerage, waste management, construction and others in combination with the offered minimum wage are among the factors for high employee turnover of these jobs. This leads to an increase in the cost of hiring, training and etc.

-With the exception of first year when the average number of created jobs by an employer was 12.9, in subsequent years it decreased - to reach 2.9 during the last year.

-The allocation of funds within the four-years period of time is uneven and is directed to the first year of the policy, when in many cases, the activity is not high;

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ANALIZA I PROCENA SPROVOĐENJA POLITIKA KOJE PROMOVIŠU STVARANJE ZELENIH RADNIH MESTA U BUGARSKOJ

Apstrakt: „Zelena“ ekonomija koja doprinosi održivom razvoju i efikasnom korišćenju resursa zahteva strukturne promene u oblasti zapošljavanja i implementaciji složenih nacionalnih strategija i sistema čime bi bila obuhvaćena mogućnosti za razvoj „zelenih“ radnih mesta. Cilj rada je da razmotri politiku za promovisanje stvaranja „zelenih“ radnih mesta u Bugarskoj i po ovom osnovu za procenu njene implementacije za period 2011-2014.

Ključne reči: „Zelena“ ekonomija, ekopolitika, održivi razvoj.