

LABOUR MARKET TRENDS IN ROMANIA IN THE CONTEXT OF GREEN ECONOMY

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Abstract

In the first part of the paper the concept of "green job". The paper continues with the presentation of the main trends manifested in different sectors of the economy, following the fact that it takes ecological characteristics. These features are also transposed at the level of jobs and require new skills and abilities. In our work we tried to capture these aspects. Romania should take into account these changes and formulate appropriate policies and strategies for employment.

Key words: Green Economy, Green Job, Eco-Industries.

JEL Classification: J24, J29

1. Green Job Concept

In recent years, the field of "green economy" began to be increasingly more intense approached in our country. Linked to this, the issue of "green jobs" is a recent concern.

The Green Jobs Initiative was launched in 2007 by the United Nations Environment Programme (UNEP), the International Labor Organization (ILO), and the International Trade Union Confederation (ITUC).

In the United Nations Environment Program a *Green Job, also called a Green-Collar Job*, is defined as being a "work in agricultural, manufacturing, research and development (R&D), administrative, and service activities that contribute(s) substantially to preserving or restoring environmental quality. Specifically, but not exclusively, this includes jobs that help to protect ecosystems and biodiversity; reduce energy, materials, and water consumption through high efficiency strategies; de-carbonize the economy; and minimize or altogether avoid generation of all forms of waste and pollution."¹[17]

The concept of "green job" is relatively new, so we can say that studies are necessary concerning the impact caused by the need for new skills, knowledge, abilities on employment at both quantitative and qualitative, etc. Consequently, public employment services must cope with changes in the labor market. Thus, they have to adapt to new requirements and to develop tools to enable efficient action in the employment field of this new category of jobs.

"Green jobs are central to sustainable development and respond to the global challenges of environmental protection, economic development and social inclusion. By engaging governments, workers and employers as active agents of change, the ILO promotes the greening of enterprises, workplace practices and the labour market as a whole. These efforts create decent employment opportunities, enhance resource efficiency and build low-carbon sustainable societies."² [19]

"Green jobs" is a relative and highly dynamic concept — in other words there will be "shades of green" in employment." The United Nations Environment Programme (UNEP) has identified four ways affecting employment as economy becomes greener, as follows: 1. Creation of new jobs – new professions, new occupations requested by the new technologies or the emergent industries (renewable energy, biofuels, green buildings, eco-designing, pollution control, organic farms);

2. Substitution of some jobs - transition from the fossil combustil engine, to the electric engine, transition from the truck manufacturing to railway;

3. Elimination of some jobs – banning the production of some materials, discouraging the sale of certain products (aparate electrocasnice mari consumatoare de energie, becuri cu incandescență

¹ Green Jobs: Towards decent work in a sustainable, low-carbon world (September 2008), United Nations Environmental Programme, retrieved from http://www.unep.org/PDF/UNEPGreenjobs_report08.pdf

² <http://www.ilo.org/global/topics/green-jobs/lang--en/index.htm>

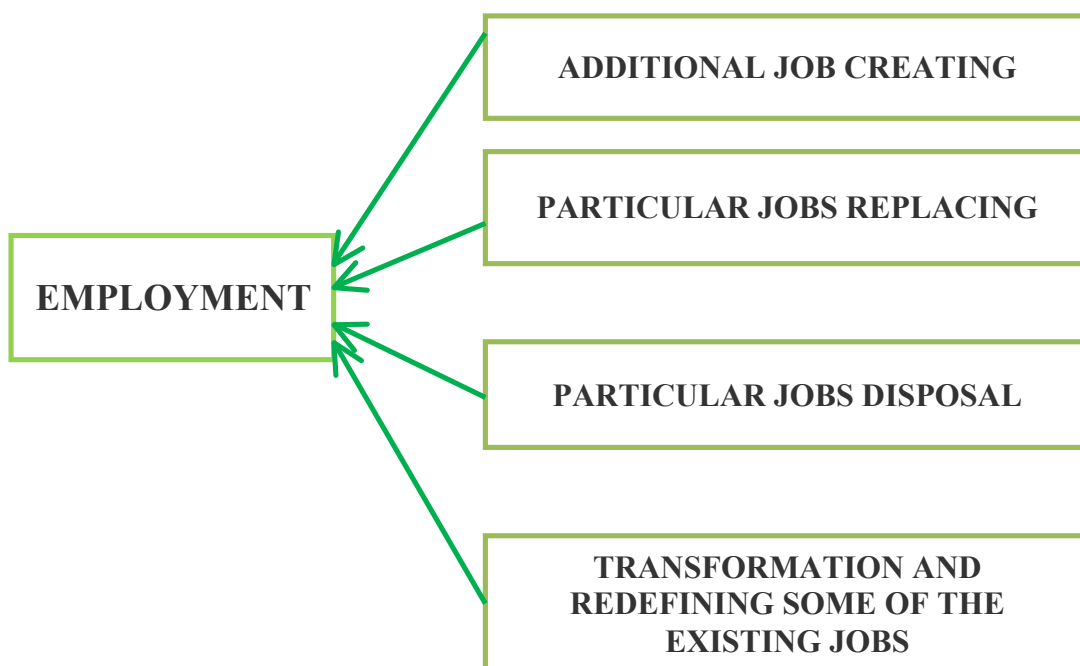


Fig. 1 – Effects on employment of the orientation towards sustainable economic

In 2010, the US Bureau of Labor Statistics (BLS) started research in order to map “(1) the number of and trend over time in green jobs, (2) the industrial, occupational, and geographic distribution of the jobs, and (3) the wages of the workers in these jobs.”³ [20] Thus, the BLS defined green jobs as being:

- “Jobs in businesses that produce goods or provide services that benefit the environment or conserve natural resources.
- Jobs in which workers' duties involve making their establishment's production processes more environmentally friendly or use fewer natural resources.”⁴ [20]

2. Green Trends in Economy

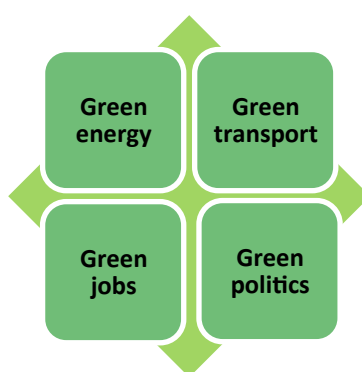


Fig. 2 – Current Green Trends on the agenda of the European Parliament

The green economy is an economy which increases social welfare and human capital, significantly reducing environmental risks and ecological issues in order to achieve sustainable development and poverty eradication. Green economy, according to the United Nations experts, actually means an economic environment with less harmful effects on the environment and substantial benefits on society and each individual.

Green economy and economic crisis

³ <http://www.bls.gov/green/home.htm>

⁴ Ibid.

The economic crisis has provided a new opportunity: to the environment turning and providing jobs in this respect. National strategies have been designed to ensure the improving economy and creating jobs, which provided an opportunity for initiatives for green jobs.

Currently in Europe there is a growing demand for jobs in the green economy: green jobs, which represent all that can leads to creating products/services which improve the environment.

Green growth generates on the labor market changes as a result of industrial restructuring. Thus, along with non-green industries and green industries are currently developing. Due to the expansion of green industries, new jobs in green sectors were created, and major changes in non-green industries have occurred in existing occupations in terms of tasks, skills and knowledge; and where occupations are redundant, they were simply replaced (fig.3).

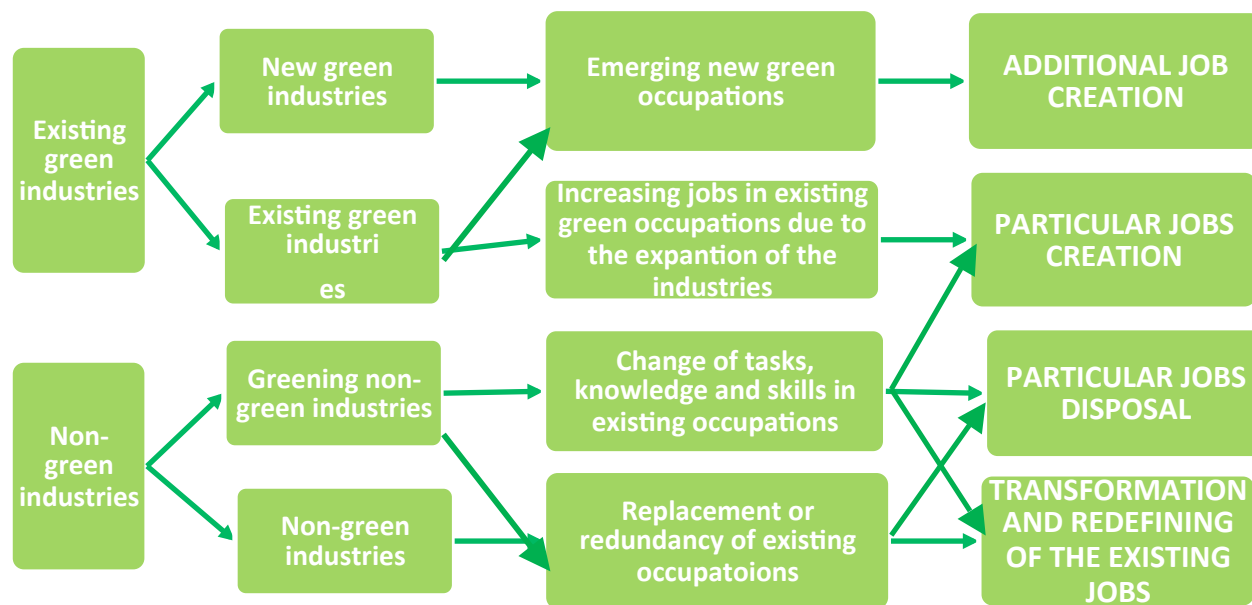


Fig.3 - Labour market shifts due to restructuring of industries in response to green growth

Source: Adapted after Olga Strietska-Ilina, Christine Hofmann, Mercedes Durán Haro, Shinyoung Jeon, Skills for green jobs: a global view, Geneva: ILO, 2011, p. 368

3. The impact of greening jobs in various sectors

The awareness of the negative effects of the industrialization on the environment and the involvement increasingly obvious of the national authorities but especially of the regional ones, resulted in a "greening" increasingly stronger economy. Thus, even in recent years, marked by economic decline, the green sector has continued to grow. This increase may represent an opportunity for economic relaunch and naturally, for creating new jobs. Thus „European eco-industries have an estimated annual turnover of € 319 billion (2.5% of EU's GDP) and currently employ 3.4 million people. Around 600 000 additional jobs in this field were created between 2004 and 2008. The annual growth rate in employment in all subsectors between 2000 and 2008 was roughly 7%. The EU is a strong player within the eco-innovation process with 30% of global turnover and 50% of the global share of water and waste management. Over the last years, about a million new green jobs have been created, and in many countries GreenTech (also known as 'Clean Tech') is already one of the largest employers in the European economy. Until 2020, the global turnover in the GreenTech sector is expected to double to €3100 billion. In Germany this sector already contributes 8% to the GDP, which is expected to rise to 14% by 2020.”⁵ [18]

4. New skills required by the greening of the economy

Regarding the process of "greening" jobs, at least for now, we can affirm the following:

- For already existing occupations, it is not about a change in qualifications and skills themselves, but a continuation of a long-term development.

⁵ <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A7-2013-0333+0+DOC+XML+V0//EN>

- The creation of entirely new occupations is required. These occupations are not yet covered by the system of education and training.
- Developing of "hybrid" skills (imposed by "clean" industries) is required.

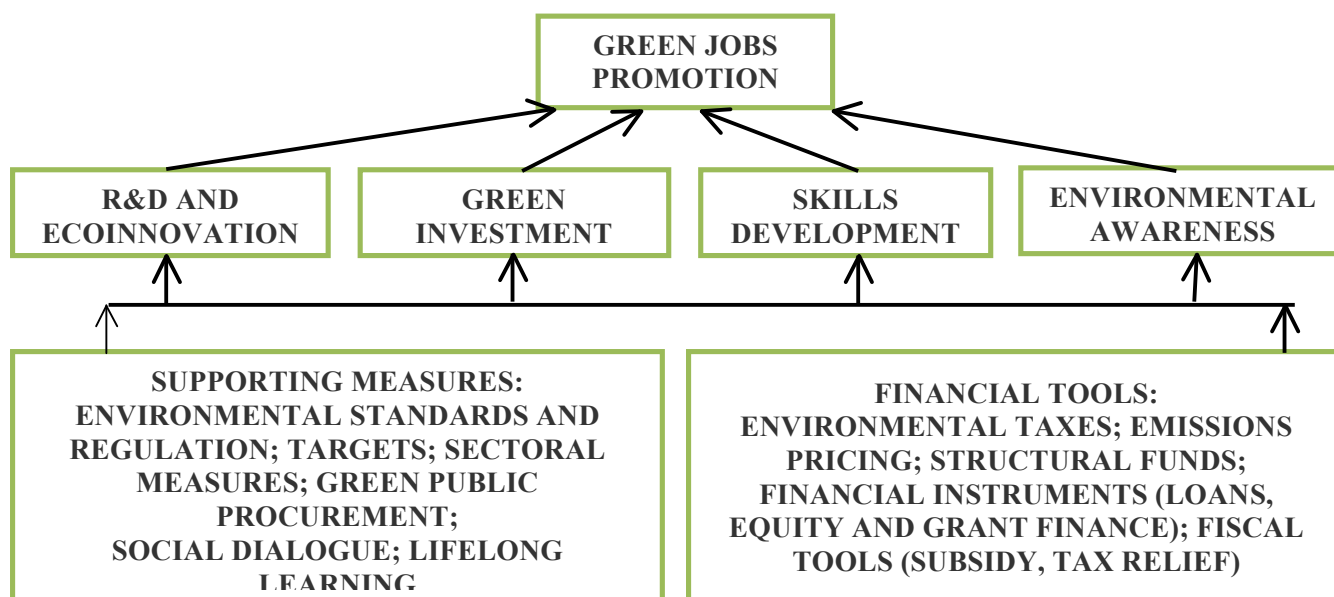


Fig. 4 – Eu Green Jobs Policy Matrix

Source: Adapted after ICF GHK.

Table nr.1 Occupations with potential to benefit from the low-carbon transition, by sector

Sectors	R&D	Manufacture & Installation	Operation & maintenance	Management	Administration	Sales
Renewable energy	✓	✓	✓	✓	✓	✓
Conventional power generation			✓	✓	✓	
Cement		✓				
Carbon capture & storage	✓	✓	✓			✓
Iron & steel	✓		✓	✓		
Machinery & electrical equipment	✓	✓		✓		
Construction	✓	✓		✓	✓	✓
Transportation			✓	✓	✓	

Source: Cambridge Econometrics, GHK, IER (2011).

- Internal changes of the companies are necessary. These changes are performed by the diversification of activities in which the basic technological skills are used to create new services or business.

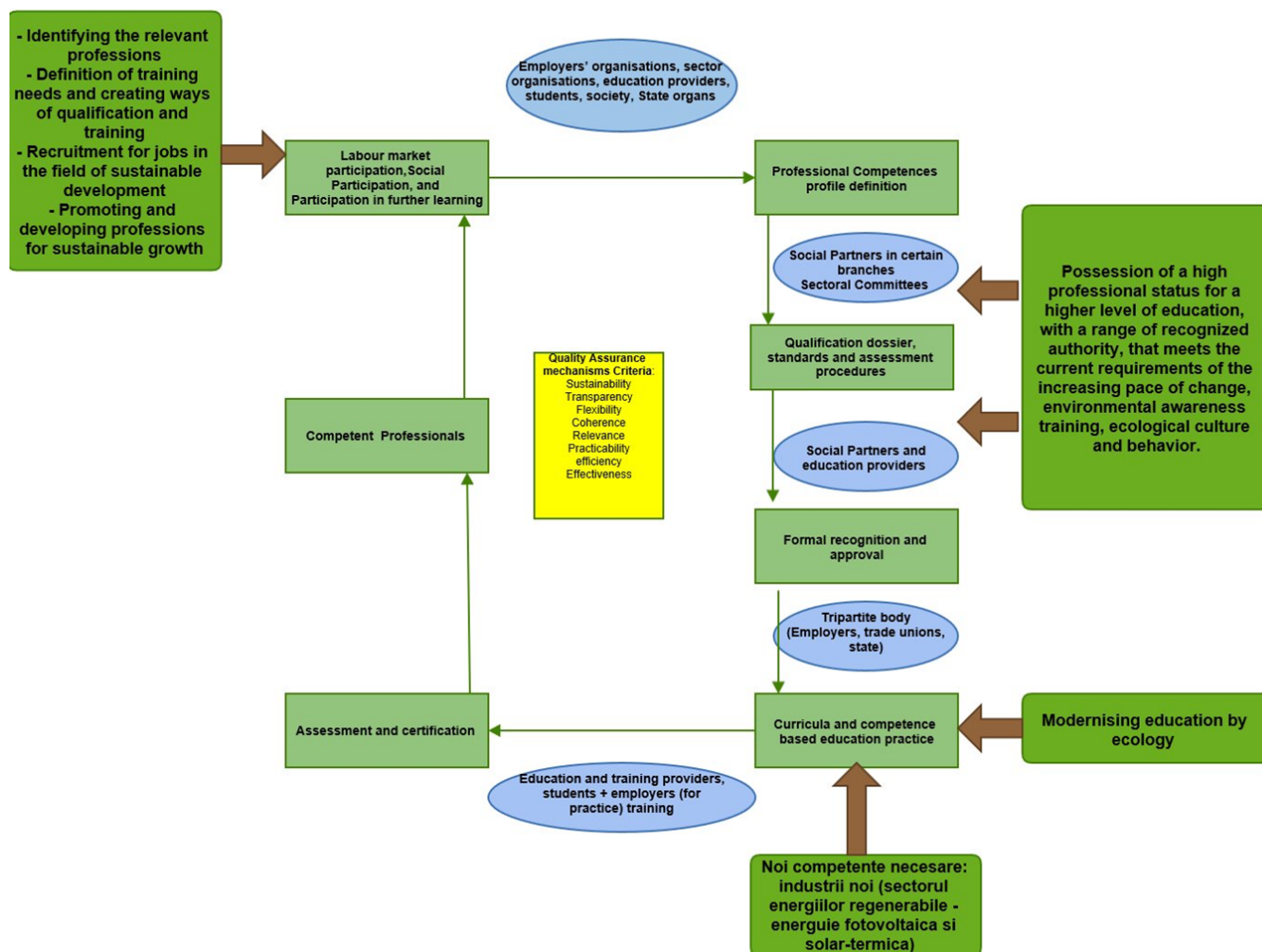


Fig. 5 – The process of "greening" jobs

Source: Adapted by the Green Jobs Country Report Romania, The National Centre for Technical and Vocational Education, “New skills for green jobs. A case for a more gender inclusive labour market” project, p.16

The following green skills needs were identified for increasing the green economy:

- Raise awareness in promoting eco- activities, eco-design , eco-citizenship on the labour market;
- Developing new skills related to new standards and rules regarding production processes (eco-production), new processes (greenconstruction, renewable energies);
- "Green" specific skills in specialised domains, for some "green" occupations;
- For a minority of professions, new skills are required as green occupations were already integrated in sustainable development requirements (waste, recycling and so on).

Both in Romania and in the EU it is necessary to create a system for the identification and registration of green jobs, where it does not exist and to develop one, where it exists.

Also, it is necessary to identify specific tools to stimulate the setting up of such jobs, to enhance the capacity of the employment public services. (Thus, labour market changes are managed in accordance with the requirements of the European Commission addressed in the Communication "Europe 2020 - A strategy for smart, sustainable and inclusive growth".)

Characteristics of green skills

- The mobilization of a set of resources: knowledge, experience, schemes, automatism etc.
- The mobilization of the resources to be consciously used and to gain functionality;
- The relationship to a set of circumstances, the mobilization of knowledge, practical activities in the situations for solving environmental problems;
- Interdisciplinary character - links between content and technologies that belong to different disciplines which contribute to performing sustainable green skills;
- The possibility of assessment - measuring the degree of competence forming;
- Relative character - although it is an objective of education, ecological competence not get any final form,

developing continuously throughout the people life in relation to changes in the external environment;

- Complex character as they integrate strategic knowledge, abilities, attitudes in a complex process manifestations in certain activities;
- Transferable character – they are applicable to new situations (only the means, methods of expression can be changed);
- They are acknowledged and associated to the needs, intentions, so they include the ideas of purpose and can be managed by those who hold them.

Stages of green skills formation

- Acquisition of fundamental knowledge (I KNOW);
- Transforming fundamental knowledge in functional knowledge (I KNOW HOW TO DO);
- Interiorization of knowledge, forming attitudes (I KNOW TO BE);
- Externalization (I KNOW TO BECOME).

5. The Romanian situation

Worldwide millions of green jobs could occur if a higher stake should be put on the green economy.

In Europe, there are over 20 million jobs that are related to the green sector.

In our country - by accelerated extending of investments, increasing the number of jobs "green" can be determined in the following fields:

- Renewable Energies
- Ecological Agriculture
- Food Industry
- Transport.

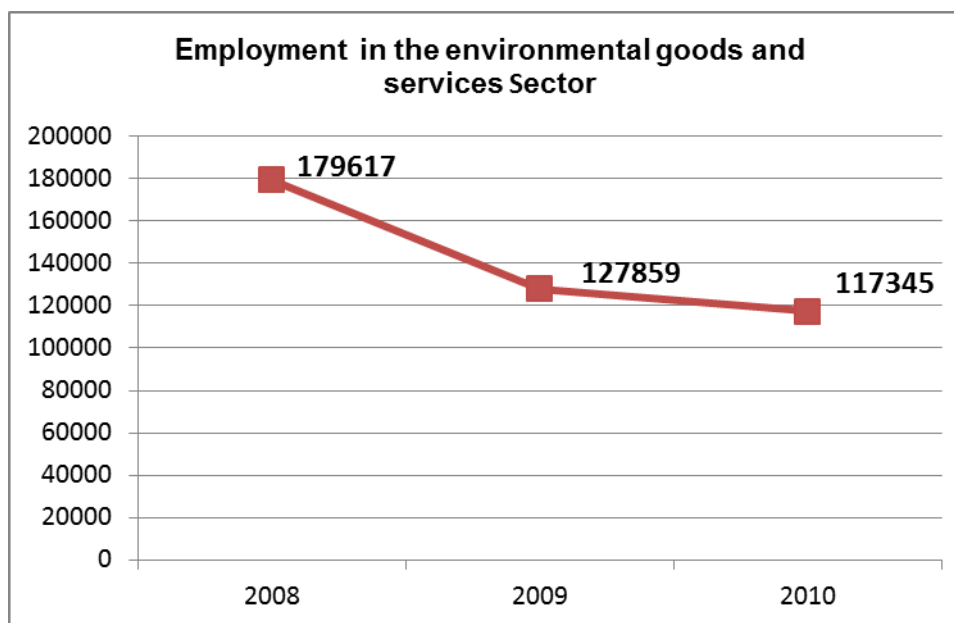


Fig. 6 - **Employment in the environmental goods and services Sector**

Source: The National Institute of Statistics

HR professionals talk about a revolution in the labor market - jobs "green" are considered a real lifeline in this jobs crisis; thus, they are convinced that the future belongs to professionals who choose to be prepared in a domain which respects the environment or areas opening minds to restore its quality.

Our country is part of the the regions that have growth potential, particularly in renewable energy Energy is one of the areas that has generated perhaps the greatest flow of green jobs-it's wind and photovoltaic energy and jobs as: consultant environment, environmental responsibility, energy purchasers, operators techniques, responsible for the maintenance and servicing of wind turbines and solar panels.

In 2014 nationally there in our country over 2000 companies in the recycling and waste management sector and our country has the capacity to recycle waste generated coverings. Fair to say that packaged goods industry realizes its recycling obligations through transfer companies responsibility has led to mobilization of significant amounts of waste by recycling and not to landfill.

In these circumstances, an analysis of employment in sectors "green" can be regarded as estimated. The only

source of data harmonization is the Eurostat / National Institute of Statistics, in reporting on the environmental in goods and services, which includes, according to the methodology, the sectors that have the main purpose environmental protection and resource management. According to data published by the National Institute of Statistics, "employment in the environmental in goods and services", was 117 345 people in 2010, representing approximately 1.3% of total employment and about 2.9% of registered employees at the end of that year (fig.6).

6. Conclusions

Green jobs can be a way to support the economy

EU 2020 Strategy underlines that sustainable growth requires strengthening new efficient, robust and competitive economy, exploiting Europe's leading position in developing new processes and technologies, including green technologies. Among the five goals of the strategy (on employment, innovation, education, social inclusion and environment/energy) the objective regarding climate change and sustainable energy use can be noted: the „20-20-20” targets:

- „A 20% reduction in EU greenhouse gas emissions from 1990 levels;
- Raising the share of EU energy consumption produced from renewable resources to 20%;
- A 20% improvement in the EU's energy efficiency”⁶ [21].

Green sector show clear upward trend, and one of the effects is the emergence of new jobs and training programs or changing old profession to adapt to the practices of a sustainable economy. Green products and services are highly demanded, and career development specialists agree that this move will have a huge effect on jobs at every level. These changes will affect the economy. Some specialists, by analogy with "white collar" or "blue collar" talk about "green collar".

In this context, green jobs can be a way to support the economy. They can contribute to economic growth. This growth has three features being:

- *Intelligent*, ie it is based on strengthening knowledge and innovation as the engine of future growth;
- *Sustainable*, ie more efficient use of limited resources and a greener and more competitive economy
- *Inclusive*, ie creating an economy with a high level of employment, ensuring social and territorial cohesion.

Opportunities that created green jobs for employment are noteworthy:

- Discounted training opportunities - the aim is to include the socially disadvantaged as a starting point for change:
 - o supporting governmental package
 - o consumers' increasing demand
- The ecological preparing seen from the the business point of view - changing university curricula in order to train students to be able to incorporate sustainability into all levels of the organization:
 - o The future accountants can be trained in order to be able to compute the carbon footprint of a company.
 - o Marketing students learn about green marketing.
 - o The future managers learn about how to include sustainability in the companies strategies – sustainable management.
 - o Training intended for CEOs and entrepreneurs in the energy sector - the new "clean" technologies are characterized by a high degree of regulation that need to be understand before by the business leaders.

In conclusion, we can say that the green sector is on the rise, and those who start right now on this path will be in advantage.

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