

The implications of the transition to green economy in the training activities

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Abstract. The main objective of this paper is related to the analysis of the education and training in Romania, which are in a complex organizational and redesigning process, conditioned and determined by the tasks assumed by Romania as a EU member state in education and training, but also by the challenges and needs identified by the labor market for a "transition to a green economy".

Key Words: Europe 2020 Strategy, green economy, sustainable growth, green jobs, vocational training.

Introduction. Europe 2020 Strategy points out the central role of the transition to a green economy, efficient in terms of low resource and carbon use. Public policies and strategies in many areas aim to develop innovative and cleaner economy. Inefficient use of resources, unsustainable pressure on the environment, climate changes and social inequalities generate difficulties for the economic growth in the long term (The Bruges Communiqué).

Europe 2020 Strategy aims to create favorable conditions for smart, sustainable and inclusive growth.

Smart growth involves developing an economy based on knowledge, improving performance in education (encouraging learning and upgrading skills), research and innovation (creating new products and services that generate growth and jobs and help manage social challenges), and a digital society (use of information and communication technologies).

Sustainable growth aims to develop a low carbon economy, environment protection and reduced greenhouse gas emissions, to stop biodiversity loss, development of new technologies and environmentally friendly production methods.

Inclusive growth intends to encourage an economy with high labor employment, capable of ensuring social and territorial cohesion, with better and more jobs, especially for women, young people and workers over 55, increasing the capacity to anticipate and manage changes by investing in training and skills upgrading, updating labor markets and social protection systems access to all the benefits of economic growth.

Skills availability for green jobs play a key role in triggering changes and facilitate timely and effective transitions. Preparing for these changes consist in adapting existing training programs and qualifications, and creating new ones where necessary, in accordance with green jobs that could be created by 2020.

Concerns in Romania for "the transition to a green economy". The transition to a green economy is ensured by the ministries responsible for education, training, employment and social issues, including health. Human resource, in its essential aspects, such as: level of education and professional competences, flexibility and adaptability to the labor market, activation of social groups at risk of social exclusion, increasing health, is actually the main component of this transition to green economy (National Strategy for Sustainable Development of Romania Horizons 2013-2020-2030).

Activities that define green jobs are:

- activities that aim at correcting, reducing or eliminating the harmful effects of human activity on the natural environment, and the prevention and eradication of the disastrous effects;
- activities which produce goods or services in a manner that protects the environment;
- control and prevention activities for stopping the environmental degradation;

- supporting activities in traditional sectors, technical and technological production processes of the green economy

The green economy has complex and contradictory effects on the labor market and employment (National Strategy for Employment 2014-2020):

- creating new jobs for new activities that require special skills, often not acquired in the initial training;
- creating additional jobs in sectors producing equipment, products and services for the green economy;
- jobs in traditional sectors will require new skills to make compatible the exchange of products and activities with the green economy;
- replacement of the products made by consumption of non-renewable resources with products of the green economy will make some jobs from classical sectors, with their knowledge and skills to decrease or disappear.

Considering interferences of green economy with traditional sectors of the economy, green jobs cover a wide range of qualifications, areas containing educational and occupational profiles in different proportions, with original and specific skills. These jobs are found both in the production of goods and services, research and development sector, private sector, public sector, academic and scientific community, professional associations and civil society organizations.

It is considered that the development sectors of green jobs are:

- construction and energy efficiency;
- control and prevention of air pollution;
- education, training and information;
- integrated water management;
- management, treatment and recycling of waste;
- rural management;
- nanotechnology;
- agriculture and organic food;
- renewable energy.

In the transition to a green economy jobs are canceled, especially in traditional sectors, and it seems that their number is bigger than those that are created. Green occupations require new skills. The main need is to review and update the existing skills of the workers. These new skills relate to new technologies and to new management requirements, due to changes in production methods and adopting new business models.

The green economy has become a reality in Romania, new jobs and training programs quickly occur, the old professions change to adapt to the practices of a sustainable economy. Green products and services are increasingly popular, career development specialists agreeing that these changes will have a high impact on the evolution of jobs at each level.

Government Programme for the period 2013-2016 provides five areas to be developed in the green economy and green jobs, i.e. education, research, environment, labor and energy. In education the direction is: "Development of intermediate structures to support partnerships between universities and companies - "green economy" based on knowledge and technology transfer" (National Strategy for Sustainable Development of Romania Horizons 2013-2020-2030).

Romania's concerns regarding the transition to a green economy are materialized in the objectives of sustainable development and climate change adaptation, set right in a number of policies and strategic documents, such as:

- the Government Programme 2013-2016;
- National Strategy for Sustainable Development of Romania - Horizons 2013-2020-2030;
- National Strategy on Climate Change (2013-2020);
- energy policy;
- Danube strategy.



Figure 1. Objectives of the transition to "green economy" in accordance with "Europe 2020 Strategy".

Examples of good practice in training for the green economy in the European Union. While the policies needed for the transition to a green and sustainable economy were developed and implemented, some green policies for the labor market, which aim to increase employment and improve working conditions, were created.

Examples of such employment measures implemented in EU Member States:

- updating the education and training system for the new requirements of the transition to a green economy (Ireland, Denmark, Spain, etc.);

- introducing environmental protection and energy efficiency courses into curriculum at all levels, including apprenticeship (Denmark, Ireland, etc.);
- apprenticeship courses for green jobs (Austria, Ireland);
- redirecting the training courses for the unskilled or low-skilled (Ireland - especially for the unemployed);
- creating new training centers for specific areas of the green economy (Ireland-wind turbines);
- in Navarra region, a leader in renewable energy, the regional government has identified major necessity of specific skills in the regional labor market, by implementing the "Strategic Talent in the Renewable Energy Sector" program.
- France adopted its own definition of green jobs. The corresponding database, accessible online on the French SPO portal reunites several important functions: brokering job vacancies, information on green labor market, mediation and counseling, including online media guidance.

Conclusions. As a member of the international community, in a globalized economy, Romania is connected to the great problems of humanity: reducing emissions of greenhouse gases and other substances that damage the ozone layer, preserving air quality, managing water resources and saving non-renewable resources, etc.

The inventory of these problems gives an insight into the activities that could configure the green economy in Romania.

The variety and complexity of the field shows the need to involve the authorities, businesses, civil society organizations and, not least, citizens as beneficiaries of these activities.

The involvement of state authorities and institutions at all levels is essential. Without it the coordination and financial support programs for building, consolidating and developing the green economy can not be ensured.

Involvement can be:

- direct, by initiating, designing, and implementing programs in the field work;
- indirect, by implementing measures to support private initiative and awareness on the issues of green economy.

The state plays an important role in organizing and supporting the human resources training for green jobs. This role can be fulfilled by the national education system and the Public Employment Service.

It is very important for activity of the public employment services to:

- identify, analyze and promote green jobs;
- anticipate the need of qualifications, skills and competences, due to the transition to a green economy - which involves identifying qualifications, skills and competencies needed in the employment of green jobs and developing programs, retraining or training people looking for a job or employees to face new challenges on the labor market.

National education system should ensure initial education and adult training programs in specific domains needed by the new jobs that occur in the economy, promoting a lifelong learning policy.

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