

HOW CAN LEGISLATION HELP ROMANIAN SMEs GO GREEN?

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ABSTRACT: *Green economy has become over the last decades, in a relatively short period, an issue of major importance worldwide militating for continuous improvement of the quality of life taking into consideration the rational and efficient use of the resources. The fulfilment of the transition process toward green economy is going on in a different manner across economies worldwide. Within the UN countries, there are huge differences at socio-economic level, and at national level, there are inequalities at regional and local level. The global policies cannot be applied for the implementation of the sustainable development goals, thus strategies must be applied according to national, even regional and local particularities.*

This paper presents the Romanian experience with SMEs and green economy. Therefore, legislation issues for SMEs related to environmental management and the Governmental policy to support SMEs toward the green economy will be analysed. Moreover, the role of the SME sector in national economy and the eco-innovation capacity of Romanian SMEs will be presented.

KEYWORDS: *green economy, SME sector, Romania, eco-innovation, policy*

JEL CODE: *O44, L2, O52, O3*

1. INTRODUCTION

The report of the Club of Rome¹, published in 1972, is considered the starting point drawing the attention to the contradiction between unlimited growth and consumption in relation to the limited resources of the earth. Its impact on the concept of economic development was powerful. Therefore, in the '80, the concept of *sustainable development*, which requires in fact the redefining of the notion of economic development and asks for relocation from an ethical perspective, is born out of a stringent necessity. E. B. Barbier (Barbier, 1987) wrote, in 1987, that sustainable development meant “simultaneous maximization” of *the objectives of the biological system* (genetic diversity, biological productivity, flexibility), *the objectives of the economic system* (satisfying basic needs, equity increase, growth in goods and services) and *the objectives of the social system*

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¹ <http://www.clubofrome.org/eng/about/4/>

(cultural diversity, institutional durability, social equity). The evolution of the concept of sustainable development is presented by Szabo (Szabo, 2011).

The term “*green economy*” was used for the first time in 1989 by Pearce, Markandya and Barbier, *Blueprint for Green Economy* (Pearce, Markandya, & Barbier, 1989), but here is no internationally agreed definition. The guide for green economy (Cameron & Stuart, 2012) presents eight definitions formulated by: UNEP (2009 and 2011); UNCTAD (2011); Green Economy Coalition (2011); International Chamber of Commerce (2011); UNCSD (2011); Government of South Africa (2011); Danish 92 Group (2012). The guidebook published by the UN division for sustainable development presents an overview of the literature on green economy and on the related concepts of *green growth* and *low-carbon development*. (Cameron & Stuart, 2012; pp 63)

Green economy has become over the last decades, in a relatively short period, an issue of major importance worldwide militating for continuous improvement in the quality of life taking into consideration the rational and efficient use of resources. Nowadays one cannot talk about economic development if it is not sustainable. (See: Figure 1) “With governments...green economy (in its various forms) has been proposed as a means for catalysing renewed national policy development and international cooperation and support for sustainable development.” (Cameron & Stuart, 2012, pp 5)

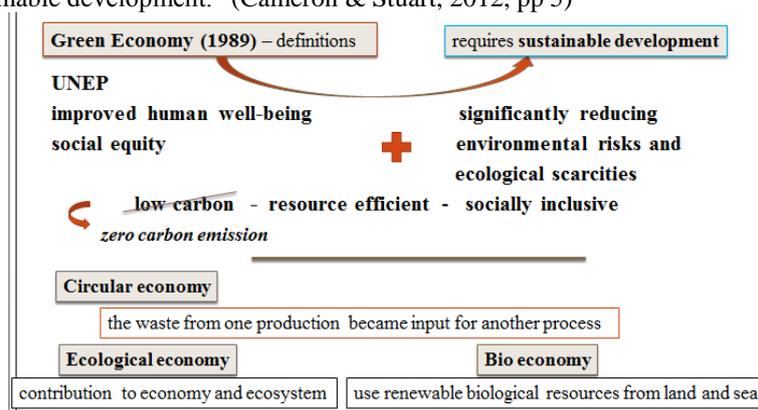


Figure 1: Green economy and its various forms – definitions

The green economy concept is considered very important internationally. In October 2008, the Green Economy Initiatives were launched by UNEP “to provide analysis and policy support for investment in green sectors and for greening resource- and/or pollution-intensive sectors.” (Cameron & Stuart, 2012, pp 8) Green economy presents one of the two themes for the UN Sustainable Conference (Rio+20) as well.

This paper presents the Romanian experience with SMEs and green economy.

2. THE SME SECTOR IN ROMANIA

A general overview on Romanian SME sector for the period 1990-2014 was published in February 2015²; by KeysFin³ team (see:

²<http://www.keysfin.com/UC/MediaLibrary/Handlers/ViewDocument.ashx?imageDB=true&tbNail=0&imageType=image&imageID=9803&imageName=&cultureId=3>

<http://www.keysfin.com/EN/#!/Pages/AboutUs>). KeysFin is an officially registered company, which elaborates studies based on publicly official databases on the Romanian SME sector.

Based on SBA Fact Sheet⁴ and on data from National Institute of Statistics in Romania 99.6 % of enterprises are SMEs. The SMEs employ 67 % of workforce and create 60.47 % of total turnover.

The evolution of the number of Romanian SMEs didn't present significant changes in the last period. From 2005 the number of active SMEs varies around 400 thousand. On EU28 level, as publicly available official data shows, the role of Romanian SME sector in national economy is not significant: the number of SMEs/1000 inhabitants is 22.6 (Romania is on the last place in EU28); the share of SMEs in GDP ranks Romania on the 17th place and the share of employment ranks the country on the 8th place. (Barta, Modreanu, Piti, & colaboratori, 2015) Based on KeysFin studies, 98% of SMEs are located in apartments; the main field of activities is commerce; 71% of the SMEs activates in 5 fields of activities by NACE (34% wholesale and retail trade, 11% professional activities, 10% construction, 9% industry, 7% transport-storage). Only 1% of total SMEs have as the main field of activity waste management. 31,2% of medium size enterprises activates in industry. The SME sector has not recovered after the crisis, the sector has structural problems. Generally, the business environment which is confronted with weaknesses in infrastructure, with unpredictable legislative and fiscal environment needs improvement (see Figure 2).

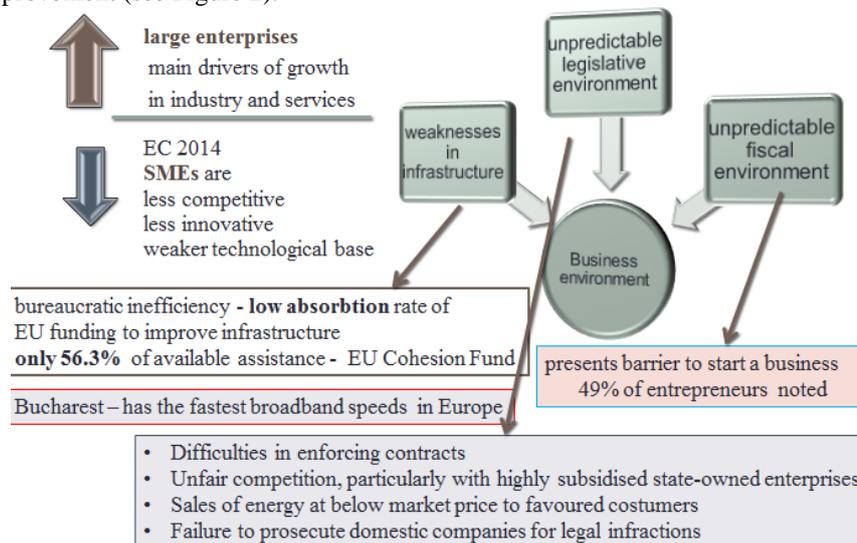


Figure 2: A general overview on Romanian SME sector

Source: The Economist Intelligence Unit; Barometrul antreprenoriatului Romanesc, 2015

³ <http://www.keysfin.com/EN/#!/Pages/News/NewsDetails&title=studiu-imm-uri-din-romania>

⁴ http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm#sba-fact-sheets

Next, radiography of the Romanian SME sector will be presented based on publicly available data.

Evolution of Romanian SMEs

In Romania, in the period 1990-2013, a total of 2,600,000 businesses were registered. At the same time, it must be highlighted that comparatively with the EU average the number of active SMEs in Romania decreased dramatically and the situation has not improved over the last period (see Figure 3a). Nevertheless, the share of employment is increasing and tends towards the EU average. This fact is due to the increasing number of self-employed people, as there are a very high number of micro enterprises with one employee. This only has a social effect, assuring livelihood for the person, but without impact on economic development measured in GDP (see Figure 3b).

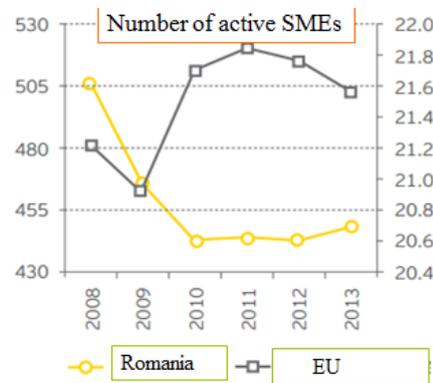


Figure 3a

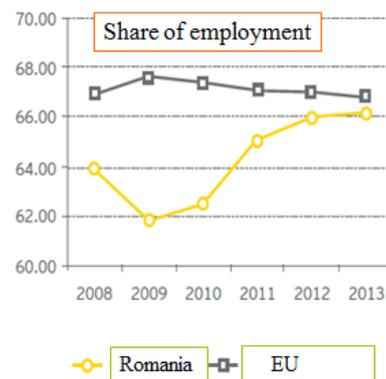


Figure 3b

Source: Ministerul de Finanțe, Registrul Comerțului, Comisia Europeană, Consiliul Fiscal

A dynamic development can be observed in the first years of the transition period. The majority of the registered SMEs had a very short lifetime due to different aspects (see: Romanian Statistical Yearbook, Romania in Cifre, 2008; Romanian Statistical Yearbook, Romania in Cifre, 2010)

The number of active SMEs does not present significant changes. The number of SMEs/1000 inhabitants is below the EU average. Approximately 30% of Romanian SMEs were registered from 2000 to 2009.

At the beginning, in the period 1990-1994, small (31 %) and medium sized (34 %) businesses were mainly started, but in time the number of registered micro enterprises increased significantly.

At present, 98% of micro enterprises have 2 employees and a turnover less than 100 mil Ron/year. In the period 2010-2014, the percentage of small and medium sized enterprises which were registered decreased to 9%.

Table 1 and Table 2 present the evolution of enterprises in the last period. The share of total SMEs of micro, small and medium sized enterprises from the total number of enterprises for 2012-2015 can be seen as well.

Table 1: The evolution of enterprises

Enterprises	2012	2013	2014	2015
SMEs	529.015	437.126	426.295	449.044
Large	1.527	1.513	1.455	1.637
SMEs/1000 inhabitants	26,37	21,83	21,37	22,60

Source: SBA Fact Sheet 2012-2015

In Romania, in 2015, the SMEs accounts for 99,6% of enterprises, but the main drivers of growth in industry and services are the large enterprises.

Table 2: The evolution of enterprises

Share from total SMEs	2012	2013	2014	2015
Micro	89,6 %	88,7 %	87,4 %	87,1 %
Small	8,5 %	9,1 %	10,4 %	10,7 %
Medium	1,6 %	1,8 %	1,8 %	1,9 %
Large	0,3 %	0,3 %	0,3 %	0,4 %

Source: SBA Fact Sheet 2012-2015

The EC stated in 2014 that the Romanian SMEs are less competitive and less innovative in Europe. The barriers of the development were considered the unfavourable business environment (see Figure 2).

Number of total employment and percentage of the total workforce by grouping

Since 1990, the share of the employees in active SMEs has had an increasing tendency. In Romania, the level of self-employment is very high, fact which is of importance at a societal level in national economy, but without a significant contribution to economic development measured in GDP. (Szabo & Herman, 2014) The structure and distribution of employees is presented in Romania in cifre, NIS, 2016; Forța de muncă în România ocupare și șomaj (AMIGO), trimestrul II 2014. The total employees in SMEs vary between 2000-3000 thousand persons, as we can see in Table 3. The shares of employment in micro, small and medium sized enterprises show that there is a decreasing tendency in the case of medium sized enterprises.

Table 3: Share of employment in SMEs

	2001	2005	2008	2009	2012	2013	2014	2015
Micro (%)	34	34	33	34	37	35	35	33
Small (%)	29	30	33	33	31	32	34	35
Medium (%)	37	36	34	33	32	33	31	32
Total employment in SMEs	2.122.617	2.575.520	2.969.489	2.626.216	2.676.948	2.522.128	2.708.806	2.680.259

Source: National Institute of Statistic, Romania in cifre

Share of the SME sector in total economy. The realised SME revenue

In spite of that, in the period 2012-2015, only 0.3 %, 0.4% respectively, was the weight of large enterprises in total number of Romanian enterprises (see Table 2); but the contribution of the SME sector to added value is slightly larger than of large enterprises.

In 2014, the weight of turnover achieved by SMEs was 60.47%. The micro enterprises represent more than 87 % of SMEs, but their contribution was only 19.54%. At the same time, the share of the medium sized enterprises was only 1.9%, however it had the highest contribution to the achieved turnover with 21.59%.

This fact shows that the performance of the SME sector is below the EU average, SMEs are less competitive and less innovative. The improvement in the business environment, the implementation of adequate sustainable policies, presents a great challenge and must be a priority for the government.

Based on SBA Fact Sheet, the SMEs' added value presents an increasing tendency (27b Euro in 2015), but comparatively with the German SMEs' added value (775b Euro in 2015) is more below (see: Contribuția IMM-urilor la creșterea economică – prezent și perspectivă⁵)

3. SMES AND GREEN ECONOMIC GROWTH

The evolution of the Romanian SMEs sector was presented above. The used data shows that all the flagship initiatives of Europe 2020 strategy: innovation, education, information society, climate, competitiveness, and labour market present challenges for Romania.

In Romania, the entrepreneurial activity is mainly necessity driven and for this reason it has no impact on economic development, measured in GDP. In *Global Entrepreneurship Monitor Report* (2012), it is shown that entrepreneurs may be pushed into starting businesses out of necessity because they have no other work options and need a source of income and/or because they recognize opportunities and choose to pursue them (“improvement-driven opportunity”).

Entrepreneurship exists in every country, but the outcomes from entrepreneurial activities are very different across societies. The literature distinguishes between formal/informal, legal/illegal, necessity/opportunity entrepreneurship respectively (Sameeksha Desai, 2009).

Innovation is considered the engine of growth being an important element of development achievements (Fagerberg et al., 2011).

Therefore, *innovative entrepreneurship* started to be considered a key factor of modern economic development (UN, 2012). Moreover, as the level of economic development increases, innovativeness of entrepreneurs increases as well (GEM, 2012).

⁵ <http://www.cnp.ro/inovatie/docs/seminar-studii-25-06-2012/Rezumat%20studiu%20IMM.pdf>

Nowadays it is acknowledged worldwide that economic development can be accepted only if it is sustainable. Thus, “*green economy*” has become a major concept internationally and it has inevitably drawn attention to the new theme of “eco-innovation”.

Finally, it can be noticed that a healthy entrepreneurial culture is needed in order to have a productive SME sector with a better attitude toward environment. In this respect, next, the eco-innovation performance of Romanian SMEs will be presented, the characteristics of SMEs to meet environmental related requirements will be surveyed and government policies to support SMEs toward the green economy will be studied as well.

4. SMEs and environmental issues

The transition to green economy in Romania is a research topic of high interest. It is a hot topic for professionals and policymakers. The level of development in this direction is monitored, thus national and European reports present the evaluation of the level of implementation. “Romania is among the countries that have rapidly adopted the concept of green economy; it has natural resources for its development, but has not yet recorded notable performances compared to other European countries.” (Ciocoiu & Cicea, 2015)

Romania, without any doubt, is a country of considerable potential (natural resources, human resources and opportunities) and has a strong base for sustainable development. In this respect, it is sufficient to present the:

- wealth of **natural resources**,
- rich agricultural lands,
- important renewable energy sources (wind, biomass, hydro, geothermal),
- substantial industrial base,
- educated work force / well educated **human resources**,
- **opportunities** for expanded development in tourism on the Black Sea and in the Carpathian Mountains. (Eco-innovation scoreboard, 2015)

Making an overview of the existing literature, official reports on SME activities show that the environmental issues are generally familiar to the SMEs, the energy efficiency measures are popular and the most of SMEs implemented some green measures. A survey carried out at the level of SMEs shows that the enterprises took concrete measures to green economy. The SMEs know the energy efficiency measures (reduction of waste products and production materials; separate waste collection; reduction of the use of paper in offices; take advantage of a natural lighting; new energy efficient windows; use of biodegradable materials). A high percentage of SMEs use renewable energy source (RES) and generally has a better attitude to the environment. (Table4)

Table 4: The share of RES in total electricity

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
RO (%)	28.6	29.9	23.9	29.8	34.5	30.2	26.8	26.8	27.6	34.3	27.1

Source: National Institute of Statistics (2013)

The evolution of green certificates in Romania is presented in Table 5. The green certificate certified 1 MWh energy obtained from RES.

Table 5: Evolution of green certificates

Transactions	2006	2007	2008	2009	2010	2011
Number	7.841	37.703	95.593	141.607	248.694	410.628

Source: OPCOM⁶

The government sustain the efforts of transition to green economy (see Figure 4). Thus, in Romania, efforts are made to allow and keep foreign investors in the RES sectors. Therefore, the highest subsidies in Europe were recorded in in Romania in 2013.

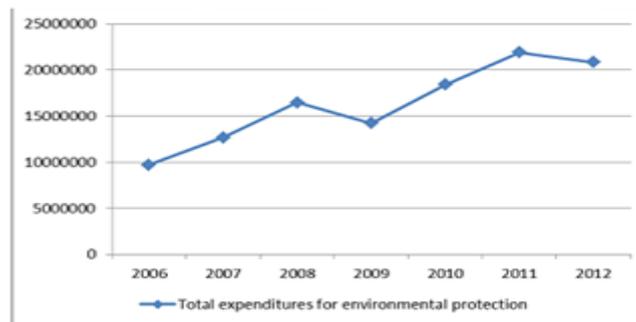


Figure 4: Evolution of environmental expenditures
Source: National Institute of Statistics

The trainings are considered important in this sphere by entrepreneurs. The SMEs are interested in acquiring certificates issued by management systems standards because having an eco-friendly label on their products is commercially good for businesses.

4. ECO-INNOVATION OF ROMANIAN SMES

The innovation performance (IUS) of Romanian SMEs is presented by Szabo (Szabo, Soltés, & Herman, 2013). Based on Innovation Scoreboard⁷ 2015, Romania is a modest innovator and lags behind other EU Member States.

Since 2010, an assesement of eco-innovation (Eco-IS) has been made also in order to facilitate the member states in the transition proccess to green economy. The eco-innovation scoreboard is a useful tool to measure and to compare the eco-innovation performance of EU Member States. The score is calculated based on indicators obtained in five areas: eco-innovaton input, eco-innovation activities, eco-innovation output, resource efficiency outcomes and socio-economic out-comes.

Romania (see Figure 5) is situated below the EU average, but on the other hand the eco-innovation performance of the country is better than the innovation performance. The innovation scoreboard (IUS) in 2015 ranked Romania on the last place. On eco-innovation (Eco-IS) performance Romania was ranked on 21th position in 2013. (see Tabel 6)

Thus, the Romanian SMEs are familiar with the importance of environmental issues, generally all the SMEs applied measures to protect the environment, but the SMEs do not have financial capability to invest in innovation.

⁶http://www.opcom.ro/tranzactii_rezultate/tranzactii_rezultate.php?lang=en&language.x=9&language.y=6&language=en#url

⁷ http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/index_en.htm

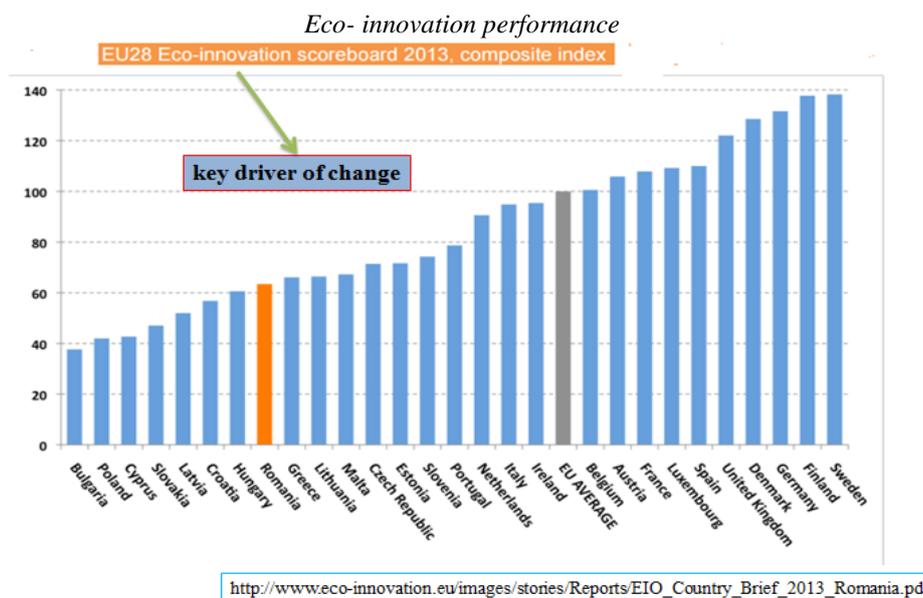


Figure 5: Eco-innovation performance of EU Member States, 2013

Based on longitudinal data, the position of Romania presents an improving tendency (see Tabel 8).

Tabel 6: Evolution of eco-innovation performance of Romania

Year	2010	2011	2012	2013
Rank (EU 27/EU28)	25	22	19	21

Source: Eco-innovation scoreboard⁸

How can the improvement in ranking be explained? In this respect, we analyzed the components of eco-innovation index. It can be observed that in eco-innovation activities the indicator is over the EU average (see Figure 6). In eco-innovation activities, one of the indicators is ISO 14001 registered organizations, and this fact is advantageous for Romania. There is a high number of ISO 14001 registered organizations in the country and this process is facilitated by law.

On the other hand, in order to improve the situation and bring the position in the rank forward, all components (the eco-innovation inputs, socio-economic outcomes and resource efficiency outcomes) need improvement. In this respect, all 16 indicators of the composite index must be analysed and adequate policies must be formulated and implemented.

⁸<http://database.ecoinnovation.eu/#view:scoreboard/indicators:269/countries:249,15,22,34,57,58,59,68,73,74,81,84,99,105,108,121,127,128,136,155,176,177,181,200,201,206,212,232/rScales:/chartType:BarGraph/year:2010/indicatorTabs:269,270,271,272,273,274/order:269>

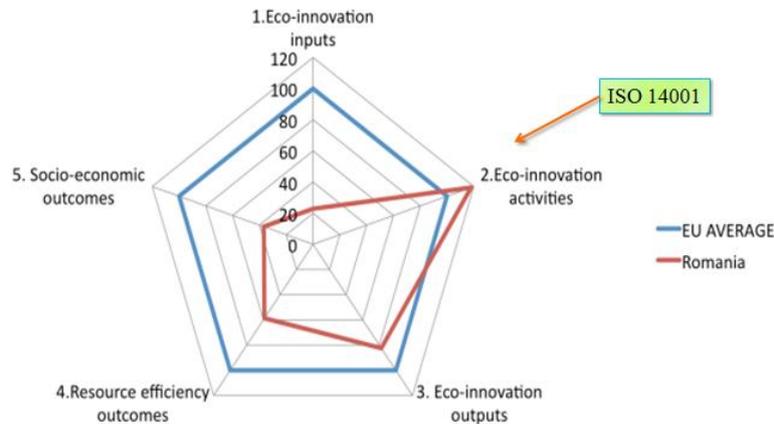


Figure 6: Components of the eco-innovation composite index for Romania
 Source: http://www.ecoinnovation.eu/images/stories/Reports/EIO_Country_Brief_2013_Romania.pdf

5. LEGISLATION ISSUES FOR SMES RELATING ENVIRONMENTAL MANAGEMENT

The Romanian government recognizes the importance of the environmental issues and sustains the transition to green economy. The principles of the of EU environmental legislation were adopted in the national legal system. Since 1989, new elements have been introduced in Romanian legislation. The main elements of the EU environmental topics were included in the Environmental strategy of the government (Ionescu, 2009). The main environmental regulations are presented briefly in a paper published in 2012 (Ioniță & Mișu, 2012).

Next, we will present some of the most important environmental issues regulated by legal acts:

- *Law 211/ 2011- waste management*; republished in 2014- -establishes the measures necessary to protect the environment and human health by preventing or reducing the adverse effects of waste and its management and by reducing overall impacts of the use of resources and to increase the efficiency of their use- this regulation presents a major step;
 - *GO 856 / 2002* –the list of waste and define the dangerous waste;
 - *GO 349 / 2005* – legal act regarding waste storage;
 - *GO 621/ 2005* – on the management of packaging and packaging waste;
 - *GO 1872 / 2006*_modifies and completes the GO nr. 621/2005;
 - *GO 247 / 2011*_modifies and completes the GO nr. 621/2005;
 - *GO 2742/3190/205 / 2011* - the procedure, criteria for approval, renewal, review, approval annual issuance and cancellation of operating license, the minimum percentage recovery of packaging waste collected from the population, the economic operators - obligations regarding the achievement of annual targets for recovery and recycling of packaging and for approving the composition and powers of authorization;
 - *GO 235 / 2007* - on the management of waste oils;

- *GO 1037 /2010* - waste from electrical and electronic equipment;
- *GO 1132 / 2008* - on batteries and accumulators and waste batteries and accumulators;
- *Law 249 /2015* - on the management of packaging and packaging waste
- *GO 1079 /2011* - modifies and completes GO no. 1.132/2008.

It is worth mentioning that 98% of Romania's waste was landfilled in 2013 and the target for 2020 is to recycled or reuse 50% of waste, fact which presents a great challenge for the country.

In January 2014, a new tax⁹, collected by the Romanian Fund for the Environment, was introduced to penalise the waste disposal through landfilling.

6. CHARACTERISTICS AND BEHAVIOUR OF SMES TO MEET ENVIRONMENTAL RELATED REQUIREMENTS

In Romania, some special activities that encourage and sustain the implementation of environmental issues can be observed. Next, some special measures will be presented in the case of Romania and some characteristics of SMEs regarding environmental issues.

- Companies in the fields of industry, agriculture, trade and services which have impact on environment must employ an *Environmental Officer*;
- Environmental legislation asks only some of the SMEs to have *environment authorization*, depending on their NACE codes activities;
- Corporate Social Responsibility investments focused on the environment - 16% of the total areas of investments (more focused on education, health and social issues);
- SMEs devote only 1% of their turnover to environmental issues, and most of these expenditures go for compliance with regulations, audits and environmental certifications;
- Romanian SMEs are less likely to adopt measures to improve their resource efficiency in comparison to the EU average;
- only 17% of Romanian SMEs, compared to 26% of EU SMEs have been capitalising on the rising demand for ecological services;
- the Romanian business sector can be characterised by a short time thinking perspective on profit making;
- *In 2010, the Green Business Index*¹⁰ (GBI) assessment was introduced in order to benchmark the environmental performance of Romanian companies.

Romania adjusted its *public procurement legislation* in 2006 as a response to the 2004/17/EC and 2004/18/EC Directives on public procurement contracts for public works, goods and services, and in the field of water, energy, transport and post services respectively.

⁹ <http://www.raportaremediu.ro/legislatie>

¹⁰ <https://www.gbindex.ro/en/>

7. SHARE OF SMES IN APPLYING ISO 9001, ISO 14001 AND ISO 50001 QUALITY MANAGEMENT SYSTEMS

Legally, public procurement can incorporate environmental criteria in Romania. In spite of the existing intention of a Green Public Procurement Action Plan 2009-2013, the document remained at the level of public consultation, and it has not become a commitment of the government. Public procurements ask for ISO 14001 and ISO 9001.

Thus, in this case, the law became an engine for sustainable development, for environment protection. The legal act had a positive impact on the eco-innovation of the country. In Romania, the share of SMEs applying quality management system is high compared with other BSEC countries.

An ISO survey presents the number of valid certificates to ISO management standards worldwide. The evolution of the ISO certificates in each country can be followed from 1993, the year when the ISO management standards were firstly registered. Fluctuations can be observed in data due to the activities of certification bodies.

Next, using ISO Survey¹¹ data, the evolution of ISO 9001 certificates issued (Figure 7), of ISO 14001 certificates issued (Figure 8) and the evolution of ISO 50001 certificates issued in Romania since 1993 (Figure 9) can be observed. The share of Romanian SMEs in applying Quality Management Systems is presented.

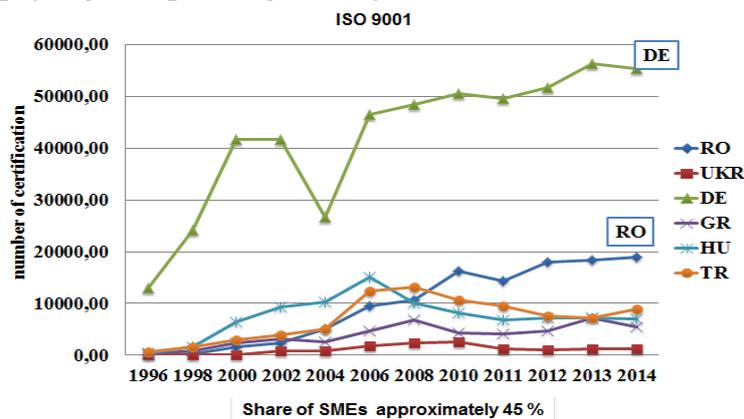


Figure 7: Share of SMEs in applying ISO 9001 Quality Management Systems
Own construction, Source: ISO Survey 2015

¹¹<http://www.iso.org/iso/home/standards/certification/isosurvey.htm?certificate=ISO%209001&countrycode=DE#countrypick>

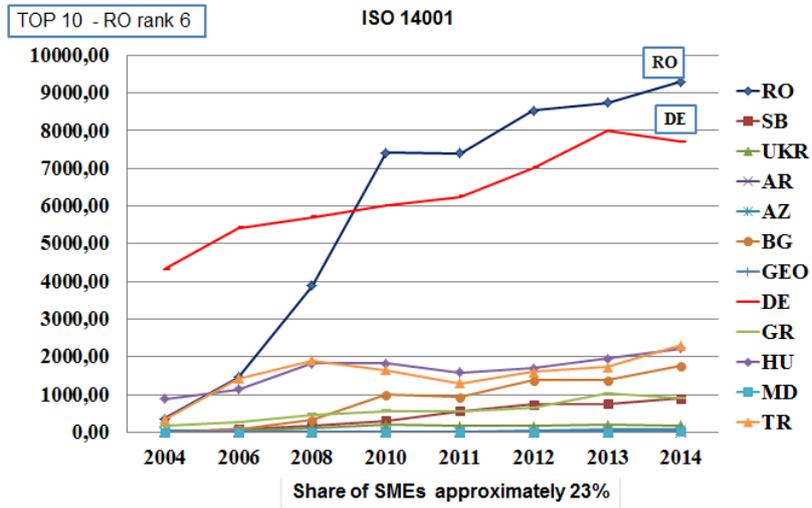


Figure 8: Share of SMEs in applying ISO 14001 Quality Management Systems Own construction, Source: ISO Survey 2015

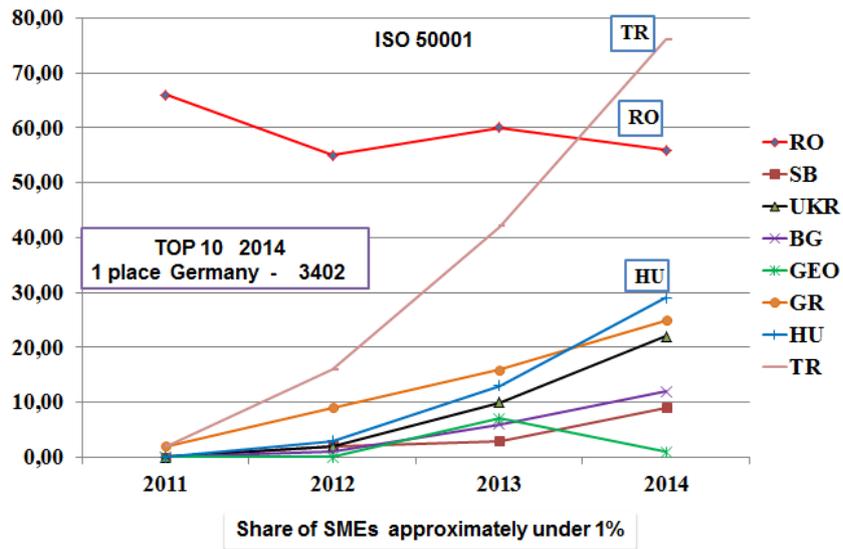


Figure 9: Share of SMEs in applying ISO 50001 Quality Management Systems Own construction, Source: ISO Survey 2015

8. OBSTACLES FACED BY SMES RELATED TO ENVIRONMENTAL ISSUE AND HOW TO OVERCOME THEM

Romania faces various environmental *challenges*. As the Eco-Innovation country Report mentions, the economy is still based on fossil fuels (40%) and the emission reduction remains a challenge (efforts have been made to reduce CO2 emissions since 1990).

The waste and water management need to receive more attention (UNECE 2013 Environmental Performance Review on Romania); the access to clean water, waste management and wastewater treatment are the main environmental challenges.

At the moment, it must be noticed that less than 3% of Romania's municipal solid waste is recycled. Another aspect which represents an obstacle is that, on average, 57% of Romania's population and an extremely low rate of 4% of the rural population have access to wastewater collection.

Barriers toward development can be considered:

- lack of investment;
- a lack of specialist knowledge;
- lack of efficient management of the available resources that poses problems to sustainable development;
 - many missed opportunities - failure to recycle its own waste - the private sector imports waste for their production activities;
- difficulties in accessing finance;
- excessive regulatory burdens.

Positive trends -eco-innovation initiatives - in the eco-industry:

- growing employment and turnover;
- in the last decade, the country has widely promoted measures on improving energy efficiency in the residential housing and public transport, advancing renewable energy exploitation (biomass, wind, geothermal, hydro);
 - using joint funding the country has set initiatives on supporting eco-innovations in local companies, building collaboration platforms;
 - promoting green public procurement;
 - policy strategies and programmes address eco-innovations with the main focus on infrastructure development and improving entrepreneurial environment;
 - driven by EU-level regulation were adopted policies to further sustainable development solutions;
 - The fields of energy efficiency and renewable energy have seen the highest boost in fiscal incentives and available funding in 2013;
 - Renewable energy investments have been supported by a generous feed-in tariff scheme by the Romanian government.
 - The high potential for renewable energy started to be exploited more in 2012-13, as several investments started to be made in the wind, biomass and hydro sectors.
 - There are some private sector (SMEs) initiatives in recycling and material re-use that have been strengthened during recent years.

9. GOVERNMENTAL POLICY TO SUPPORT SMES TOWARD THE GREEN ECONOMY

Transition toward green economy means adequate policies and investments. Rio+20 in 2012 launched the green economy concept globally. Green economy is considered a priority theme internationally and governments are deeply interested in the elaboration of a meaningful policy framework which assures economic growth ensuring the protection of environment.

The Green Action Plan (GAP), proposed by the EC in 2014, is aimed at helping SMEs turn environmental challenges into opportunities, focusing on resource efficiency, green entrepreneurship and green skills, eco-innovation, greener value chains, and facilitating market access for SMEs; provides tools for the internationalisation of European SMEs, taking advantage of Europe's leadership in green technologies. (EC - green growth opportunities for SMEs¹² - 20 April 2015)

EU initiatives toward green economy are:

- the Green Employment Initiative,
- a Roadmap to a Resource Efficient Europe,
- Circular Economy and European Industrial Renaissance, and is intended to create synergies between them, using the financing under existing programmes.

It is extremely important to acknowledge the fact that global policies cannot be applied for the implementation of the sustainable development goals, strategies must be applied according to national, even regional and local particularities. Within the UN countries there are huge differences at socio-economic level, and at national level there are inequalities at regional and local level. Therefore, in order to reach the goals set, strategies need to be applied from a lower level, from local, regional, national and international level.

Romania's policy orientation must be improved - a strategic long-term view and an integrated approach are needed across the board for mainstreaming sustainable development thinking and eco-innovation across the government's policies.

10. HOW COULD SMES BECOME SUSTAINABLE AND GREEN?

Romanian SMEs have to make environmental improvements in their operations to reduce costs and comply with regulatory requirements. The SMEs are interested in introducing measures to improve the attitude towards the environment (eco resources; ecologically clean production process; bio-degradable materials and products).

Generally the SMEs finance green investments from own sources, as the EU programs are not popular among them and, in this respect, education and trainings are needed.

One of the main problems is that, for SMEs, it is more difficult to fulfil the environmental requirements stated by law than for large enterprises. A different treatment among SMEs can have a positive impact.

Improving the wastewater collection infrastructure is a key priority for the Romanian government, thus suitable measures are needed in this respect.

¹² [http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI\(2015\)564360](http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2015)564360)

It is acknowledged that low awareness by both SMEs and large enterprises of their impact on the environment and the economic opportunities arises from resource efficiency. In order to improve the situation, popularization and trainings are needed.

The greenest businesses based on GEI -Romania

The Green Revolution Association promotes the Green Economy Index (GEI), a barometer of corporate environmental responsibility in Romania. Since 2012, it has started to evaluate and analyse the environmental performance of Romanian businesses. Yearly, the Top 5 best practices, the greenest businesses are presented.

Best practice on Eco-innovation activities in Romania

Government's *National Thermal Rehabilitation Programme*, implemented by the Ministry of Regional Development and Housing is widely recognized and appreciated.

11. CONCLUSIONS

Romania has a strong base for green growth. It is a country with considerable potential (natural resources, human resources and opportunities). The transition toward green economy presents a priority theme for the government and legislation can be considered an engine for sustainable development. In this respect, we mentioned the legislation on public procurement. Based on that, the public procurements can ask for ISO 14001 and ISO 9001. Due to this fact, the share of SMEs with Quality Management Systems certification is very high, fact which has economic impact on the enterprises, as their products have eco-label.

Analysing on EU level, the official data shows that Romania is positioned on the last places among the Member States on different indicators such as innovation and competitiveness. We analysed the innovativeness of EU Member States and European post-communist countries. The obtained results underline that the development is determined by the mentality. Figure 10 shows that Romania's ranking on the last places among the EU Member States is due to 40 years of centralized economy. However, if we analyse the all European post-communist countries, than Romania has a leader position, which indicates that the transition, the development is going on in its normality.

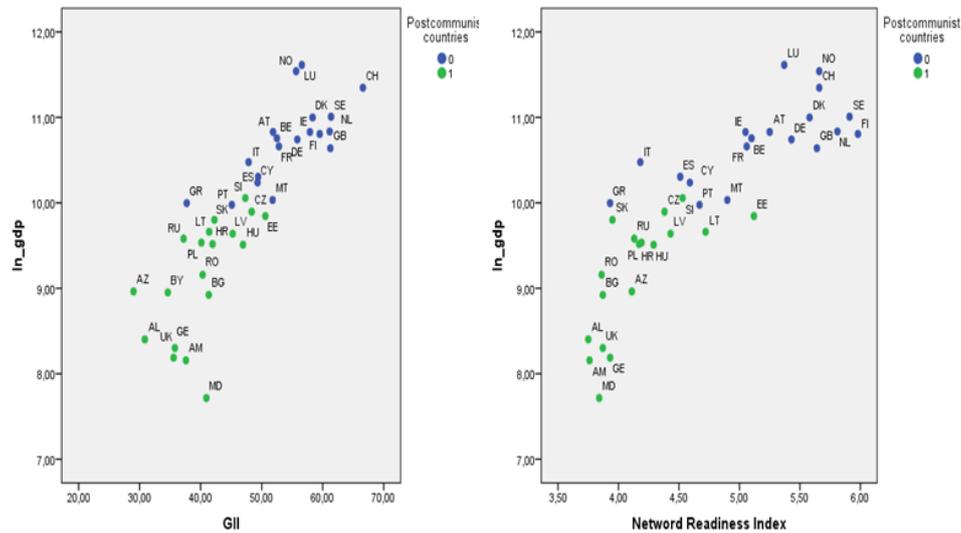


Figure 10: Comparative analysis across Europe - the GII and NRI in Europe
Own calculations based on data

REFERENCES

- Barta, P., Modreanu, I., Piti, M., & colaboratori. (2015). *IMM-urile Romanesti in UE*. Fundatia Post Privatizare.
- Cameron, A., & Stuart, C. (2012). *A guidebook to the Green Economy*. Division for Sustainable Development, UNDESA.
- Ciocoiu, C. N., & Cicea, C. (2015). Development of the Green Economy in Romania: Dimensions, Strengths and Weaknesses. In J.-V. Andrei, R. A. Ion, R. A. Turek, & A. I. Global (Ed.), *Green Economic Structures in Modern Business and Society* (pp. 161-179). A volume in the Advances in Finance, Accounting, and Economics (AFAE) Book Series.
- (trimestrul II 2014). *FORȚA DE MUNCĂ ÎN ROMÂNIA OCUPARE ȘI ȘOMAJ (AMIGO)*.
- Ionescu, R. (2009). *An Overview on Environment Law in Romania*. PLC Cross-border Environment Handbook, 2008-2009.
- Ioniță, B., & Mișu, N. (2012). Romania: Environment 2013 - Romania. *Getting the Deal Through -Environment*.
- Fagerberg, J., & Sappasert, K. (2011). National innovation systems: The emergence of a new approach. *Science and Public Policy*, 38(9), November, 669-679.
- Pearce, D. W., Markandya, A., & Barbier, E. (1989). *Blueprint for a Green Economy*. London: Earthscan Publications Limited.
- Szabo, Z. K. (2011). Analysis of research on sustainable development, the goals of sustainable development, practical and theoretical framework in EU and Romania. *Curentul Juridic*, 253-262.

- Szabo, Z. K., & Herman, E. (Vol. 11, No. 6, 2014). Productive Entrepreneurship in the EU and Its Barriers in Transition Economies: A Cluster Analysis. *Acta Polytechnica Hungarica*, 73-94.
- Szabo, Z. K., Soltés, M., & Herman, E. (2013). INNOVATIVE CAPACITY & PERFORMANCE OF TRANSITION ECONOMIES: COMPARATIVE STUDY AT THE LEVEL OF ENTERPRISES. *E+M Ekonomie a Management*, 52-68.
- Topics.Green Economy.SUSTAINABLE DEVELOPMENTKNOWLEDGE PLATFORM.* (n.d.). Retrieved March 2016, from SUSTAINABLE DEVELOPMENTKNOWLEDGE PLATFORM: <https://sustainabledevelopment.un.org/index.php?menu=1446>
- Tudorel, A., & coordonator. (2016). *Romania in cifre 2015*. Bucharest: National Institute of Statistic.
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