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WINTER MESSAGE OF THE SCIENTIFIC DIRECTOR



Distinguished Readers and Friends,

At the United Nations Sustainable Development Summit (25 September 2015), world leaders adopted the 2030 Agenda for Sustainable Development. This laid out a set of 17 Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change by 2030.

Portrait made in Armenia against the Mount Ararat background. Photo © by Mária Visy

The UN defines sustainable development as an action that meets the needs of the present without compromising the ability of the future generations to repond to their own needs. Esentially, all must understand that the Planet Earth is a finite system with limited material resources. However, our global civilization is in grave disaray because of insufficient attention to basic needs being taken by international high-level policy and decision makers. Mankind's exploitation has already moved beyond the Earth's ecological reproducible capability. Today humanity uses the equivalent of resources for 1.6 planets and has an urgent need to absorb the waste generated.

Technology and the modernization of society are demanding changes in global civilisation affecting all areas of life, education and culture to the industrial and social infrastructure of communities, to business and investment policy, regulatory and legal framework affecting world trade. Innovation and holistic understanding, which crosses traditional borders, is a key condition for the development of the modern state. Such innovations, which are so widespread today, call up individuals with both negative and positive reactions. It is a moment in history that not only demands a public linked to new creative solutions but also the centrality of defining a new environment in which to live and work. Here it must be emphasized that the future belongs to the young. They are consistently at the forefront of innovation alive to the many opportunities now available to pursue sustainable development irrespective of the geopolitical dangers, which must always be considered. Their commitment to international cooperation promises a better future for all.

To explore this important concept the VII International Conference "International Cooperation: Innovation," as a tool for social and economic change took place recently (22-24 November 2016, Geneva Switzerland). The event was organized by the International Investment Center (Russia) and the Centre International d'Investissement, NGO in consultative status is association with the United Nations Economic and Social Council working in collaboration with the Russian-Swiss Science Association, ERENET Network, Souzconsalt network and the research center CERN. With the end of 2016, the World is clearly faced by significant change and future challenges which will influence 2017.

First, on 13 October 2016, the United Nations General Assembly elected the former Prime Minister of Portugal, **António Guterres**, as the next United Nations Secretary-General. Guterres will succeed Ban Ki-moon when he steps down on 31 December.

Second, the United States Presidential Election took place on 8 November 2016. The US Electoral College declared the Republican **Donald Trump**, a businessman the winner although he lost the public vote to the Democrat Hillary Clinton. The world looks forward to learning what this

will mean to future USA Government policy and its orientation both at the global level and in relation to future support of the UN system.

Third, the United Kingdom holding of a referendum on membership of the European Union calls for close attention to the ongoing **BREXIT** process. Currently, it is awaiting a decision of the UK High Court. The final outcome may contribute to improving the EU system as a whole.

Fourth, in 2017 Presidential elections in both France and Germany are likely to bring changes in high-level government structure. Last but not least, Europe will be looking to find solutions to global conflict situations with the dangers to European democracy and welfare systems from refugees and migrants.

Relating to all the above-mentioned I wish **MERRY CHRISTMAS AND HAPPY NEW YEAR** to all our distinguished ERENET Readers.

Dr. Antal Szabó
Scientific Director of ERENET



Christmas Fair at the St Stephen's Basilica in Budapest

Photo © by Dr. Antal Szabó

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SME AND GREEN ECONOMY IN ALBANIA

ABSTRACT

Green economy and green growth are the necessary precondition for sustainable development. Under the requirement of moving toward the greening of SMEs, an action plan is prepared by European Commission (EC) to help small and medium-sized enterprises take advantage of the opportunities offered by the transition to a green economy. SMEs often need to improve their resource efficiency, in order to increase their competitiveness and contribute to a greener economy. Enhancing the competitiveness of SMEs and promoting renewable energy, energy efficiency and recycling industry are key thematic priorities.

According to their size, almost 99.8 % of businesses in Albania are considered SME. This fact provides additional evidence why Albanian policy-makers ought to design the necessary policies, which help businesses make smooth and effective transition towards environmentally friendly and sustainable practices. The assessment of Albanian Government Policy to SME Greening indicates that there is an evident gap in drafting and implementing of policies for protecting environment and policies for developing SMEs and there is no integrated policy for SMEs development considering environmental protection. Albania has general environmental strategies for economic development, but none of them clearly target SMEs, as well as Albania has not clearly defined environmental policies in their SME strategies to meet their environmental goals. Additionally, the lack of information and tools on environmental issues makes it harder for SMEs to adopt environmentally friendly practices. Furthermore, Albania has limited capacity to provide regulatory and financial incentives to help SMEs growing in terms of environmental development.

Keywords: SMEs; green economy; environmental; resource efficiency; renewable energy; energy efficiency; recycling industry

JEL Code: E66, L26, Q56, Q57

1. MACROECONOMIC PICTURE AND STRUCTURE OF BUSINESSES OVERVIEW OF THE ALBANIAN ECONOMY

Albania has experienced high and sustained economic growth in the last 16 years. Before the crises, 2000-2007, real GDP grew on average by 6.0%. Economic growth was driven by a boost in domestic consumption and by productivity gains, which were both supported by a surge in credit availability. The crises weighted down in the economic growth, which has slowdown to 2.4% on average for the period 2010- 2015. Deterioration of macroeconomic development in the main trading partner from the EU, high uncertainty and worsened confidence, weak credit and falling remittances put a drag on domestic demand in the post crisis years.

Albania is a small open-economy which has operated consistently under a trade deficit and as a result a relatively high current account deficit, in average close to 11% of GDP. However, the overall balance of payment is positive due to very high foreign inflows, driven mostly by FDIs. In the last years, the trade deficit has narrowed reflecting mostly the decline in imports of goods and services. It has further influenced in the decline of current account to almost 11.2% of GDP in 2015. Albania has constantly run a budget deficit,

which in the last 10 years averaged close to 4% of GDP. In this regard, the public debt has followed an increasing path, accelerating its growth in the last four years, and stands at 72.5% of GDP as of the end of 2015. The current account deficit and the fiscal position remain the main vulnerabilities for the Albanian economy.

The financial system in Albania has experienced substantial changes in the last 10 years. Financial intermediation has deepened and more innovative financial instruments have been introduced. The banking system represents the more active and developed segment of the financial system, accounting for roughly 95% of its assets. There are 16 commercial banks operating in Albania; 14 of which are foreign owned. The international banks have enhanced competitiveness and efficiency in the market. The ratio of banks' assets to GDP has increased at 91.3% as of 2015. The banking system is characterized by high ratio of liquidity and capitalization, which have helped withstand shocks to the system (Bank of Albania, 2015a).

During the transition period, Albania has been characterized by low level of inflation of consumer price index. Especially after the global financial crises, inflation remained low as the economy operated below its potential. Average annual CPI inflation rate in 2015 has been close to 2%, thus remaining lower than the 3% target of the central bank. As a result the monetary policy has been broadly in the easing cycle. The key interest rate was lowered progressively from mid-2011 to the actual level of 1.75% (Bank of Albania, 2015b). The cost of lending to the private and public sector has fallen to their historic minimum levels. Beyond driving domestic demand, the transmission of the monetary stimuli in the economy contributed positively to the financial stability. The deceleration of the increase in non-performing loans, improvement of liquidity in the system, preservation of sound balance sheets in the financial sector and stability of the exchange rate, have all contributed to the country's financial stability.

SMEs and Entrepreneurship Development

The SMEs sector contributes substantially to the economic growth and employment. SMEs contribute with more than 73% in GDP and more than 74% in employment in the non-agricultural private sector (INSTAT, 2016). The number of active enterprises by the end of year 2014 amounted to 112,537, increasing by 9.2% as compared to year 2010, and almost by 86% as compared to year 2005. Women involvement in business management counted for almost 28.5% of total businesses, (INSTAT, 2015) and it has increased by 17.4% as compared to year 2010 and by 131% as compared to year 2005. The number of new enterprises registered during year 2014 was 17,377 and the registered birth-rate was 15.4%. The number of active enterprises for 10,000 inhabitants reached 389 by the end of 2014, increasing by 7.3% as compared to year 2010. Referring to the legal status, 76% of the entities are registered as physical persons and only 24% as juridical persons. Only 4.7% of the registered entities are in corporation with foreign investors. (Demeti et al. 2016)

Referring to their business structure at the end of 2014, SMEs are clearly dominated by micro enterprises with one to nine employees, which constitute 94.6% of the total number of active enterprises (see Figure 1). In 2014, over 55% of active enterprises were operating in the Tirana and Durres regions.

Referring to their type of activity, SMEs are mostly involved in the services sector composing almost 78% of total active enterprises, such as trading industry with 40% followed by accommodation industry by 16%, and so on. In the manufacturing and extract industry are involved 9%, in transport 7%, in construction 4% and in ICT 2% (see Figure 2).

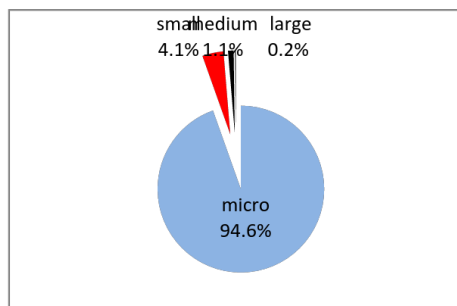


Figure 1: SME by size 2014

Source: INSTAT, 2015

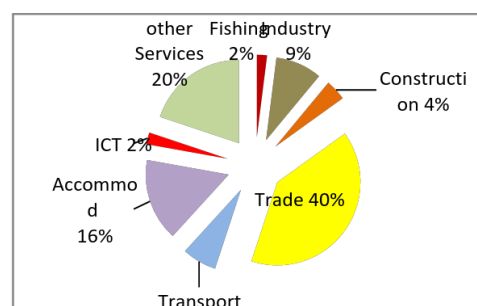


Figure 2: SME by activity 2014

Contribution of Entrepreneurship and SMEs

SMEs provide an important contribution of 74% in employment in the non-agricultural private sector (INSTAT, 2015b). In comparison to 2013 level, this contribution is reduced by 7% points. Meanwhile, they contribute by 47% in the value of exports, or 6% points higher compared to 2013. SMEs have a significant contribution in the total value added of the economy as well, counting for 63%, shrinking by 3.6% points in comparison to 2013. Going into a deeper analysis, the contribution by size of enterprises shows that micro firms contributed by 36% in employment in the non-agricultural private sector (decreasing by 7.7% points as compared to year 2013), by 8% in exports (almost in the same level as compared to year 2013), and by 22% in value added (decreasing by 2.8% points as compared to year 2013). Small firms contributed by 19% in employment (increasing by 1 percentage points as compared to year 2013), by 15% in exports (increasing by 2.7% points as compared to year 2013), and by 22% in value added ((almost in the same level as compared to year 2013). Medium firms contributed by 18% in employment (decreasing by 1.4% points as compared to year 2013), by 24% in exports (increasing by 3.3 % points as compared to year 2013), and by 19% in value added (decreasing by 0.9% points as compared to year 2013) (see figure3).

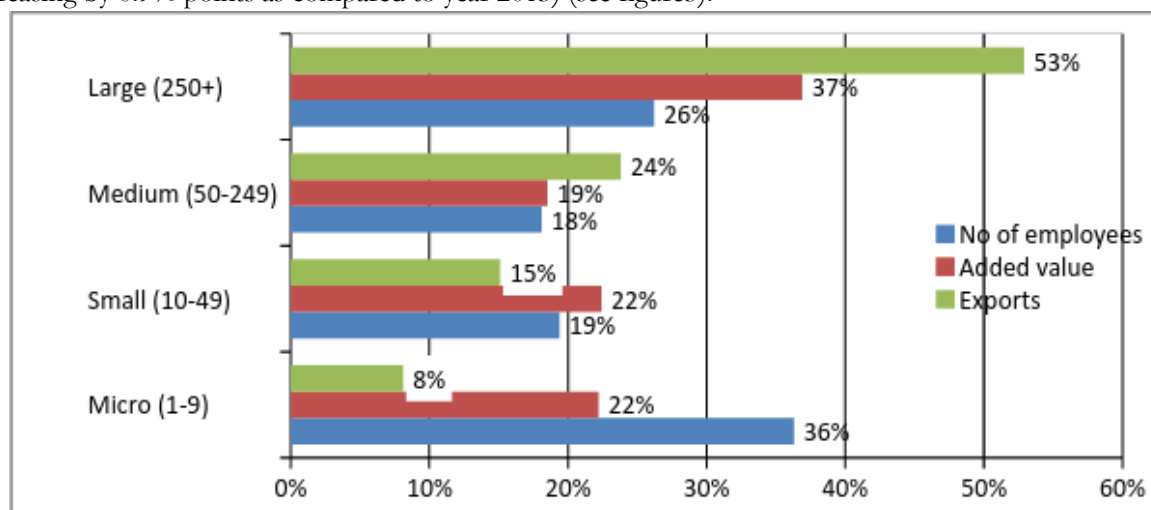


Figure 3: SMEs' Contribution in Economy 2014

Source: INSTAT, 2016

Lending to economy

In developing countries, which are highly characterized by an underdeveloped financial market, banks' credit represents the dominant source of financing. Bank lending activity in Albania has accelerated during the period 2003-2008, supported by high need for financing from the private sector (due to low usage of financial leverage) and ample supply of loans from banks due to the entrance of the experienced European banks in the country. After the global financial crises of 2008, the lending activity has decelerated considerably. The ratio of credit to GDP after picking up to 40% in 2012 has been declining since then reaching at close to 35.3% in 2015. For the last 2 years, the growth rate has signed negative and positive value showing no growth in average. Especially the contraction of credit portfolio in 2015 was driven by write off of nonperforming loan due to enforcement of the regulation by the supervisory authority. The decline in demand for loans has factorized the performance of the economy under potential and the high uncertainty perceived by business for the future. In the same time the deterioration of loan quality and the deleveraging policies of the large European banks have influenced in the strengthening of the lending standards and have contracted credit supply. In the meantime the strengthening of the lending standard has influenced further in the decline of credit demand. However, in 2015 banks have eased their lending standards to households, supporting as such the recovery of the household credit demand, which remain the main driver of credit growth.

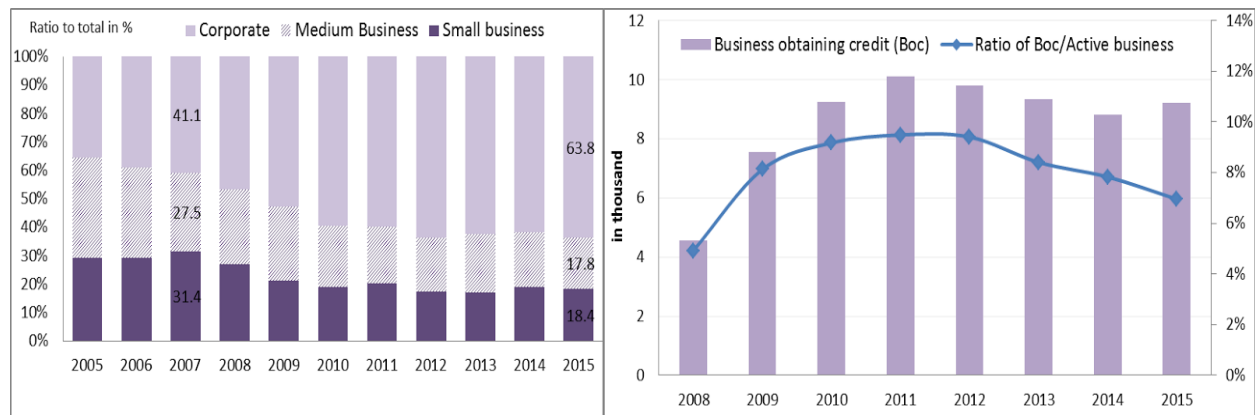


Figure 4 - Structure of business credit portfolio and the number of businesses obtaining credit

Source: Albanian Association of Banks

Before the global financial crises the structure of business lending portfolio has been balanced along the business size, with the SMEs financing prevailing by representing 60% of the business lending (see Figure 4). In the period after the crises, due to the credit supply restriction and the increase of uncertainty for the economic development, the banking financing shifted toward corporate business, which at the end of 2015 represents close to 64% of business. As a result, especially after the crises, access to finance has become an important obstacle for the SMEs in the country. According to Global Competitiveness Report 2015 (WEF, 2014) access to finance for the small and medium business was another problematic factor for doing business in Albania. Especially the banks' loans for start-ups almost do not exist. Only recently there have been introduced some schemes with the support of international institutions, such as USAID, the Italian government and EBRD, that provide credit guarantee schemes to SME businesses in special sectors of the economy. However, the amount provided is low and these types of loans are still in the early stage to evaluate the impact that they have in the economy.

One of the main characteristics of lending activity after the global financial crises has been the concentration of credit supply for a small number of business and in few banks in the system. Data of 2015, even though shows an increase of the number of businesses obtaining credit in the banking system in comparable to the previous year, it is 8.6% lower than its pick of 2011. Based on this indicator the ratio of business that has access to the banking sector financing is almost 7% of the total active businesses, showing as such that access to credit remain one of the main obstacles of business to grow.

In the last years banks have followed prudential lending policies and have strengthened the lending standards to business, mostly through non-price related terms. The lending standards have been strengthening for businesses and especially for investment purposes, in comparison to the pre-crisis period. The increase of collateral coverage, the quality of collateral, the shortness of credit maturity and the commissions are the main elements that banks have used to strengthen the lending standard (Bank of Albania, 2015c).

The Doing Business report of World Bank (2015) mentions that the loan interest rate for this segment and the collateral required is estimated to be a serious constrain on SME influencing on lower demand for bank credit. Overall, strengthen lending standard especially to SME and the low share of active businesses obtaining a loan from banks confirm the SMEs burden to obtain financing. Both these factors have gained more importance after the crises. The report concludes that access to finance remains one of the main obstacles for the SME growth.

The ratio of credit to the value added for each sector fluctuates considerably, from less than 3% for the agriculture up to 81% for the service sector. Considering the ratio of credit to the value added according to each sector, the trade sector is the most financed sector of the economy. The correlation analysis shows that the highest correlation coefficient between credit and the value added is for the construction and trade sector, and the lowest is for agriculture and industry. The allocation of credit according to the economic sector is interrelated not only with the structural features of the economic activity in each sector (such as performance/ informality/ competitiveness) but also with sectorial orientation of banks' policy and the (in)effectiveness of decision taking in banks' lending policies. However, Albania remains one of the countries

with lowest levels of credit to GDP in comparison to other countries in the region (Suljoti and Note, 2013) and the increasing of access to finance, especially for SMEs, remains one of the main challenges of the governmental institutions' economic policies.

2. FACTSHEET ON SMES AND ENVIRONMENTAL RELATED ISSUES IN ALBANIA

SMEs and Environment Issues

Almost 95% of Albanian businesses are micro enterprises and 76% of them operate in sectors such as services, trade and tourism, which have the lowest level of wastes. Nonetheless the fact that, small businesses' environmental footprint on individual perspective may be low, their aggregate impact can, in some respects, exceed that of large businesses. The biggest polluters in Albania are considered the medium & large companies operating in sectors such as fuel extraction, oil production, extraction of other minerals, leather manufacturing, cement production, which compound approx. 5% of the total number of Albanian businesses.

Alimentary and non-alimentary products industries based on their nature, technological scheme, professional skills of the employees, as well as the investment performed, is accompanied with impact on environment through disposing of waste in land, water and air. Respective to the type of activity, production capacity and kind of fuel used in the technological process there are different levels of environmental pollution.

According to Albanian laws, all companies need to acquire environmental permits, which vary on the industry sector they operate. The permits should be issued within 10-30 days from National Licenses Center (NLC) that functions as one stop shop, but the institutions monitoring the eco-friendly activity of SMEs are weak. Furthermore there are no statistics available regarding companies that use environmental management standards. Only a few companies in Albania, mostly medium and large companies, have ISO 9001 for quality management and ISO 14001 for environmental management, but none of them have ISO 50001 for energy management. For micro and small companies the environmental management certifications is almost absent because the government didn't grant any incentives for SMEs for acquiring those standards.

Legislation Issues for SMEs related to Environmental Management

The transposition of European acquis into the national legislation regarding environmental protection is quite low. As per the EC Progress Report (2015), Albania is at an **early stage of preparation** in the area of sustainable development and protection of the environment. In the area of industrial pollution control and risk management, the law transposing the EU Directive on the control of major accident hazards has still not been adopted. Preventive measures are not enforced and risk preparedness is not applied. Self-monitoring of emissions is not reliable. A framework law on chemicals management has not been adopted yet. (EC, Albania Progress Report, 2015). The overall, implementation and enforcement of legislation remain weak, while strengthening administrative capacity and inter-institutional cooperation require further efforts (Lushaj, 2012).

The legal framework for the renewable energy is recently adopted, while secondary legislation is still under the drafting process, as well as the monitoring infrastructure is still in its starting phase due to lack of human and equipment capacity.

It is the Ministry of Environment which has the responsibility of drafting policies and legislation for environment protection and waste management, as well as the responsibility for inspections and control concerning the implementation of the law. Other collaborating authorities in this field are the Ministry of Public Works, Transport and Telecommunication, the Ministry of Health, the Ministry of Economic Development, Tourism, Trade and Entrepreneurship, and Ministry of Agriculture, Food and Consumer Protection. (EEA, 2013)

3. GREEN ECONOMY IN ALBANIA

SMEs often need to improve their resource efficiency, in order to increase their competitiveness and contribute to a greener economy. Enhancing the competitiveness of SMEs and promoting renewable energy, energy efficiency and recycling industry are key thematic priorities.

Renewable Energy

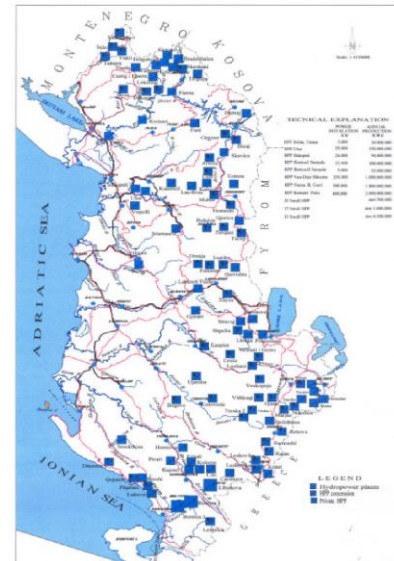
Hydro renewable energy. Albania is the **second country in Europe** after Norway that enjoys **almost 100%** renewable electricity thanks to its hydropower generation system.(Agroweb, 2015). (figure 5)

Albania has a big hydro-energetic potential and only 35.4% out of it is used so far. The country has a total installed capacity of 1466 MW and marks an average hydropower production of 5283 GWh. The total hydro-energetic reserves enable the installation of 4500MW power network and its annual electric power production could reach up to 16TWh. (AKBN, 2013).

During years, through a competitive concessionary policy, there were signed and approved 164 concessionary agreements for building up to 435 hydropower plants (small, medium and large power). The concessions were granted to domestic and foreign investors and it was expected to secure a hydroelectric generation potential of about 1,919 MW, which is projected to produce an amount of electricity from renewable sources of 4 billion kWh per year. AKBN (2015).

Non-hydro renewable energy. Categorizes the energy provided by wind, sun or other alternative power sources. Albania falls far behind on the use of non-hydro renewable energy compared to other countries in the region, even though it has been blessed with plenty of sun (~270-300 days per year) as well as plenty of wind.

Figure 5: The map of HPC distribution



The legislation for the production of this kind of renewable energy is missing. It doesn't exist any wind energy park. The solar panels are used by few private individuals for family needs and very few usages in the industry or public institutions.

Resource Efficiency

Resource efficiency encompasses *the efficient use of energy (including renewable energy), materials, water and other natural resources, as well as the minimization of waste, the selling of scrap material to another company and recycling.* (EC, 2014)

According to Albania Flash barometer survey (EC,2015) results that: only 18% of companies in Albania carry out actions for minimizing waste compared to 60% of the EU companies; 35% for saving energy; 20% for saving raw material; 12% for recycling by re-using material or waste within the company; 4% for using renewable energy or solar energy. 37% of Albanian companies carry out these actions in a spontaneous way compared to 13% of EU companies. (See figure 6)

Q1 What actions is your company undertaking to be more resource efficient? (MULTIPLE ANSWERS POSSIBLE)
(%)

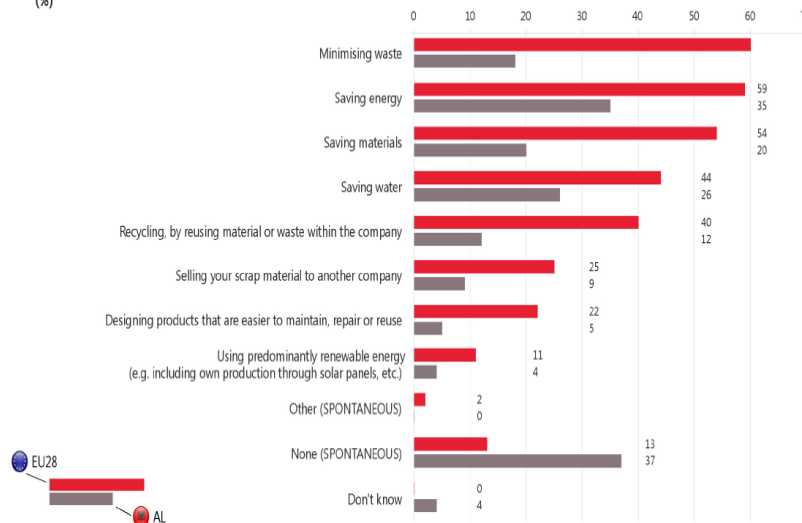


Figure 6: Resource Efficiency in Albania, 2015 Recycling Industry

The world initiatives nowadays are tending toward a more effective management of waste as a potential source for products with low energy consumption and more fuel savings etc. Recycling industry in Albania has been sprawling during the last decade; among the main difficulties, the companies face out the incapacity to secure qualitative and required quantities of plastic waste in the internal market, while import of plastic material is currently banned. Facing an undeveloped recycling market, the recycling companies experience vulnerability and uncertainty for the future.

According to the recycling companies, the recycling system in Albania has high potential for growth; however since it is at its initial phase it is still vulnerable. In such regards, more efforts and investments are required, along with effective operation and management, clearance policy and support from the government, and education of public, etc. for maturation of the recycling system in the future. The manufacture and retail sectors are not interested for minimizing or recovery of plastic, as there is no financial obligation to pay for (fee per weight). (UNIDO-UNEP, 2016)

There is the weak recycling industry in Albania with only 10-15% of waste is actually collected for recycling (Lushaj et.al.2012) especially of plastics; iron; aluminum; paper producing cardboard. But the collections of metal waste such as copper, brass, bronze are exported because the copper processing industry is not established yet.

There are currently about 60 private recycling companies in Albania that collect and process different types of waste, mainly metal scrap, paper, plastic, textiles and used tires. In addition to this, more than 12.000 informal individual collectors gather waste from garbage and sell it to the recyclers. (EEA, 2013) However, there is lack of waste separation at the source. Individual collectors and companies face difficulties in finding clean and separated waste. Most of the recyclable waste comes from urban waste and partly from the industrial sector.

Some sorting of glass bottles, paper and cardboard and metal scrap takes place in Albania. Glass bottles are collected, sterilized and reused by beverage companies. Paper and cardboard are sorted only in small quantities at a paper recycling plant in Tirana and Durres. Aluminium cans are usually exported to neighbouring countries for reprocessing, and a very small proportion of them go to a small private Albanian smelter (UNECE, 2012).

According to the Report on Plastic Waste Management and Recycling in Albania (UNIDO-UNEP, 2016) recycling of plastics, paper and wood, making it possible for about 25-30% of the waste generated by the country recycled naturally indicator still low compared to EU countries that they developed, among other things, to the fact of the absence of their separation at source and collection weaknesses in the way of urban waste which is too chaotic.

4. ASSESSMENT OF SMES IN GREEN ECONOMY

The SME sector is a major driver of economic growth and job creation in the Albanian economy. According to the SME Policy Report (OECD, 2016), SMEs development in Albania is assessed with 3.12 points (out of a maximum of 5 points), with the slight improvement compare to 2012, by which is only slightly less than the average for the region (3.17 points). The evaluation has been made on ten dimensions, which are derived from ten principles of the EU Small Business Act.

Assessment of Albanian Government Policies to Greening of SMEs

Principle 9 of Small Business Act refers to the potential of SMEs to turn environmental challenges into opportunities. From assessing Albania's progress in dimension 9 (SMEs in green economy) it can be pointed out that there was an improvement in ranking by 0.47 points in 2016 compared to 2012 (score 2.29 in 2016 vs. score 1.86 in 2012). However, Albania still lags far behind in this dimension as compared to the other dimensions (see Figure 7).

Albania has already in force general environmental strategies for economic development, however it is to be emphasized that none of them clearly target SMEs. Furthermore, the environmental policies included in the respective SME strategies are not properly designed to meet their environmental goals. The Business & Investment Development Strategy 2014-2020 does emphasize the need to invest in environmental sustainability and more specifically in the development of a recycling industry. Such deficiencies in the policies targeting the greening of SMEs implicate no financial or regulatory incentives to be in place. The

Ministry of Environment is the government body responsible to regulate and implement general environmental policies, however there is an evident mismatch between their policies on environment and those on SME development. The national action plans set general environmental objectives such as efficiency, emission levels and waste management but they do not outline specific strategies or goals for the greening of SMEs.

Furthermore the scarcity of information and tools on environmental issues makes it difficult for SMEs to adopt environmentally friendly practices. In addition Albania has limited capacity to provide regulatory and financial incentives to help SMEs with environmental development. On the other side Albania ensures some facilities regarding getting environmental permits for SMEs, through the one stop shop National Licences Center where SMEs can apply to get an environmental permit and the decision is taken by the Ministry of Environment in the period of 10-30 days.

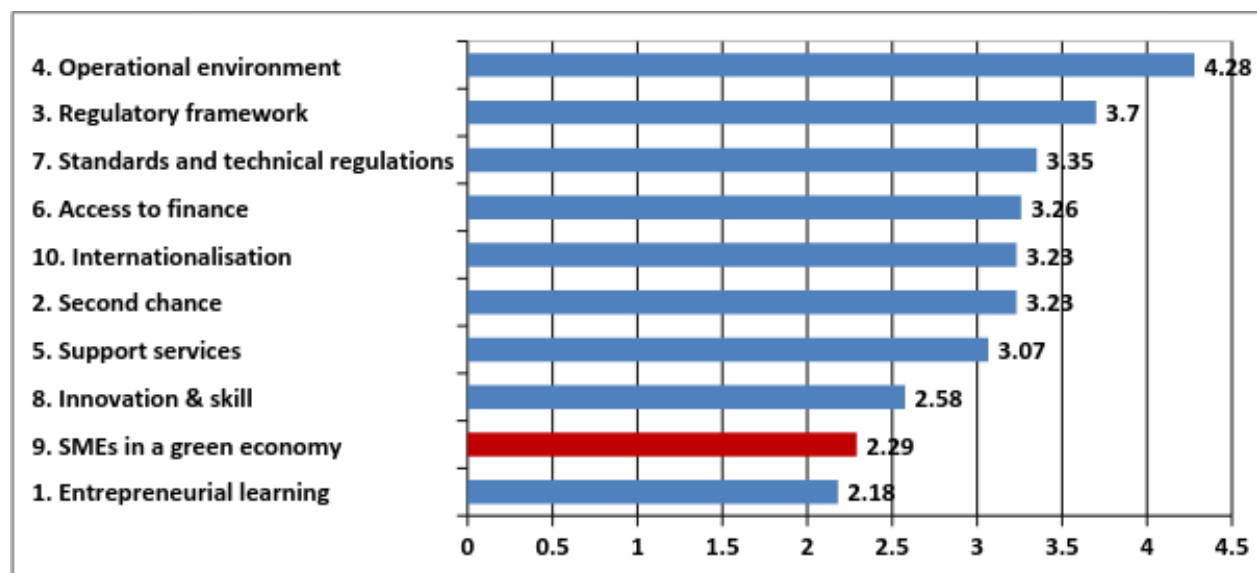


Figure 7: Assessment of SME policy in Albania according to 10 dimensions in 2016

Source: OECD 2016. The SME policy index 2016 in Western Balkan Countries & Turkey

Regarding environmental policy as a sub-dimension, planning and design policy in Albania is assessed very low with score 1.27 (out of 5) and monitoring & evaluation is absent (score 1). Albania does not provide regulatory incentives to reduce the inspection frequency of low-risk facilities, as well as does not offer any form of financial support for the greening of SMEs.

SMEs in a Green Economy in Western Balkan Countries & Turkey

According SME policy index 2016, the economies of the Western Balkans and Turkey have made little progress in targeting green policies at SMEs. In their policies it is noticed a disconnection between environmental targets and SME development targets. SMEs find it hard to adopt environmental friendly approaches mainly due to lack of information and tools. Moreover, policy-makers have limited resources to offer regulatory and financial incentives to help SMEs with the greening of their enterprises.

Albania's performance regarding environment is far below the EU average (EC, 2015b) and during 2014 - 2015 no evident new measures were introduced or announced in this regard. Further the performance of SME in Albania regarding environment is assessed by 2.29 score which is less than Western Balkan & Turkey average by 2.51 score. (see figure 8)

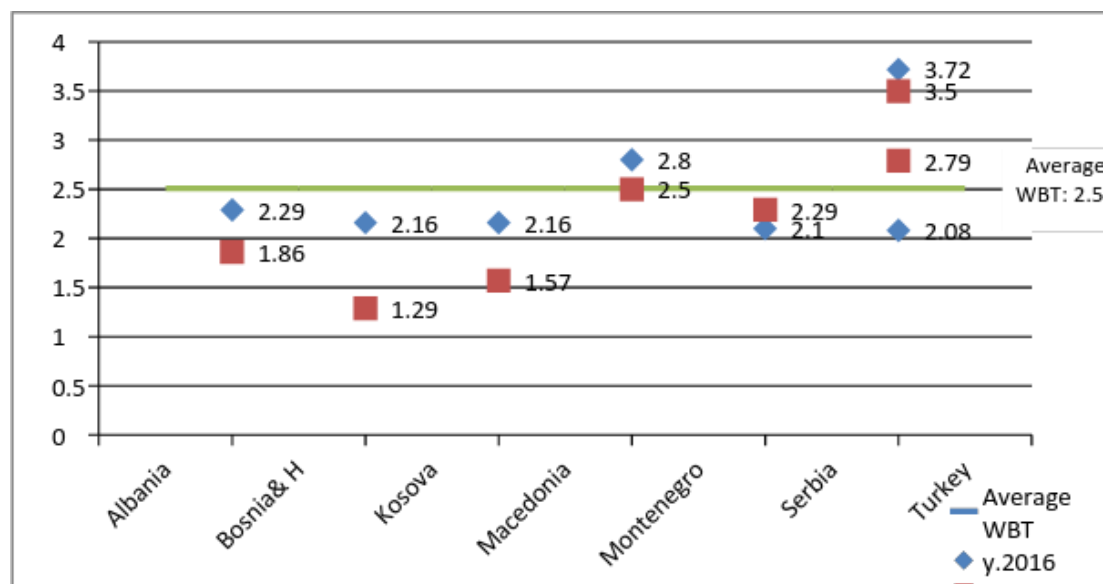


Figure 8: Assessment the SMEs in green economy in Western Balkan Countries & Turkey in 2015

Source: OECD 2016. The SME policy index 2016 in Western Balkan Countries & Turkey. Dimension9: SME in Green Economy

5. PROJECTS SUPPORTING GREEN INDUSTRY

There are very few projects that support SMEs towards green Economy in Albania as following:

National projects:

IPARD is the Instrument for Pre-accession Assistance for the Rural Development. The IPARD Grant Scheme is co-funded by the EU (75%) and the Government of Albania (25%). The project has started since 2012. IPARD contributes with grants to the sustainable development of the agricultural sector and rural areas. There are also some grants for the Green agri-processing.

ECAT assists local governmental and non-governmental organisations, as well as industries and educational institutions, in the development and implementation of projects, programmes of action, and policy instruments to improve the environment. The United Nations Industrial Development Organization (UNIDO) and United Nations Environment Programme (UNEP) in partnership with Albanian government undertook an initiative, the National Cleaner Production Programme for Albania, which aimed to increase the range of eco-efficient products of businesses in selected sectors, but without directly focusing on the SME sector.

Procredit bank and National Commercial Bank (BKT) granted eco-loan with preferential interest rate, but have no evidence on it.

UNDP program Global Solar Water Heating Market Transformation and Strengthening Initiative 2010-2014. To promote and recommend Solar Water Heating (SWH) as one of the promising technologies to reduce electricity and fuel wood consumption with a significant contribution towards greenhouse gas emission reduction. Further the project supported the designing of the new legislation of renewable energy according to the EU directives.

Innovation fund – This grant scheme has started since 2012 and still ongoing covers only 30-50% of approved activities' or project costs of innovation audits. The maximum Grant amount for one SME is up to 3,000 Euro. AIDA is the implementing Agency.

EU Projects Supporting Green Industry

Albania participates in few EU community programmes such as:

CIP (Competitiveness & Innovation program) - Since 2007, Albania is part of CIP, but very few Albanian entities have applied and even less have been elected as winners in partnership with other entities of regional

countries. In these programmes there are also included some projects for promoting Eco-Innovation. In 2013 the new program COSME (Competitiveness SME) (2014-2020) replaced CIP program. Albania ratified in June 2015 an agreement to participate in the EU's COSME competitiveness programme. One of the networks that Albania is part of them is European Enterprise Network (EEN) were consortium headed by - AIDA was selected as a winner in April 2015 in the Participation in the EEN, 2nd call. Horizon 2020 (2014-2020) program replaced FP7 program and offer Grant for research and innovation.

In addition, Albania benefits from an EU-EBRD funded programme supporting small businesses to improve market performance, management effectiveness and skills, and strategic planning. The support of this programme consists in direct transfer of relevant commercial and technical expertise from experienced managers coming from countries with already established market economy. Incorporation and/or improvement of sound environmental practices in the enterprise's activities (such as optimal use of energy and materials, better manufacturing processes and production quality control) are also part of this programme.

6. SOME CASES OF SMEs OPERATING GREEN

EDIPACK <http://www.edipack.al/>

Edipack started producing paperboard and carton in 2003 and was soon transformed into the biggest company for production of packaging materials in Albania. It is specialized in the collection, recovery and recycling of paper and its final product is the paperboard. Edipack activity is based on the philosophy of keeping the environment clean and avoids cutting trees. The company is highly sensitive toward environmental issues. During the manufacturing process the company uses **recycled water**.

In 2014 the company was certified with **ISO 9001: 2008** and **ISO 14001**



Dekoll ltd. www.dekoll.eu

Dekoll ltd is a recently established company, whose activity consists in the production of construction materials like: tile adhesives, mortars, hydro isolating materials, primer, fillers, decorative coatings, auto leveller, plasters and paints. Dekoll ltd is an investment of Brunes ltd (www.brunes.al/)

Dekoll ltd has a production capacity of 30 ton/hour in the field of dry materials. It aims to become the leading company in the production of pre-prepared construction materials in the Albanian market, fulfilling customers' and partners' needs with a wide range of qualitative products. Dekoll aims to expand into international markets, by exporting "Made in Albania" products, with European standards.

Certified by ISO 9001:2008 and EU product certifications.



Everest IE ltd. <http://everestie.com/>

Founded in 1995, EVEREST is a leader in the field of the production and printing of flexible plastic packaging made from polyethylene and the biggest recycler of polyethylene waste in Albania. The main products are: shopping bags for supermarkets, garbage bags of various standards and colours, packaging for food products, packaging for industrial raw materials, etc. Currently the company satisfies about 45% of the needs of the market with these products.

The company has about 120 workers directly employed, as well as another 1,300 employed indirectly through the network of collecting the materials for the recycling. The company has invested in a strong network for collection of used polyethylene (PE) materials for the recycling. These convenient collection points not only divert tones of PE scrap from the landfill, but they also provide another positive impact to the environment: an incentive to reduce PE litter through re-using the recycled raw material. Company's strategy aims to orientate the distributors to set up local stations for collecting of PE waste directly from the big customers.

Quality certificates: **ISO 9001: 2008** since 2010 and **ISO 14001**(for the environment) since 2013. **CSR** Awarded since 2007



Agrotek Albania <http://www.agr.al/en/farm/3/kompleksi-agrotek-farm>

Fresh chickens "TikTik" grow in the complex "AGROTEK FARM" since 2012. They are fed with 100 % natural food, such as corn, wheat, soybeans, etc, without hormones and antibiotics.

During the slaughtering and packaging process very high hygiene criteria apply – complying with the sanitary standards of the European Community.

The farm has a capacity of 120,000 chickens in the cycle. Over 90% of production is distributed to the consumers as “fresh” (unfrozen). This allows to preserve all the nutritional values of chicken meat. Packaging and storage is realized through German technology.



"TikTik" products are certified with HACCP safety systems and ISO 9001: 2008.

7. OBSTACLES AND TARGETS

While access to finance is a general constraint facing SMEs, the limited ability to fund potentially risky green investments and eco innovations particularly deters firms from making the transition to environmental practices.

The lack of financial incentives to get environmental certification such as: Grants, Tax reduction for re-using or recycling, Initial renewable investment etc.

The lack of regulatory incentives such as: Reduction in the number of inspection state authorities for companies with environmental certification.

Obstacles faced by SMEs - Environmental related

According the flash barometer survey some obstacles faced by SMEs are listed below:

- The lack of information and tools on environmental issues makes it hard for SMEs to adopt environmentally friendly practices
- SMEs have scarcity of knowledge regarding green industry and the benefits of resource efficiency.

Why should I be Green?

- Limited capacity of SME – lack of resources, time and expertise
- SMEs face limited access to finance to develop environmentally friendly products and services
- The cost of a new eco-friendly investment is very high and barely affordable for small companies.
- The cost of acquiring the environmental, quality and energy management certifications is considerably high.
- Missing of financial and regulatory incentives to help SMEs with the greening of their enterprises.
- Missing of soft loans for crediting eco-friendly investment such as investment in resource efficiency and renewable energy.

Target by 2020

The targets to be achieved by Albania in 2020 are:

Renewable energy: The European Union has been very clear when setting its conditions to Albania in regard to renewable energy. By 2020, approximately 38% of the energy offered to Albanian consumers would have to come from renewable sources. This is a requirement set forth by the EU, which will in turn provide citizens with lower energy costs, as well as with clean and pollution-free environment. Renewable energy is provided by water, wind, sun or other alternative power sources. (Agroweb, 2015)

Recycled waste: By 2020, Albania should ensure the re-using and recycling at least 50% of the total weight of organic waste generated in 2014, 60% of paper/cardboard, 50% of metal, 22.5% of plastics and 60% of glass. (UNIDO-UNEP, 2016).

8. RECOMMENDATIONS

Although, in Albania there are general environmental policies, more efforts should be done to highlight how these environmental policies can target SMEs. The continuous efforts to raise awareness and facilitate the information flow on environmental policies are an encouraging step toward environmentally friendly economic development. The introduction of regulatory and financial incentives could incentivize SMEs to undertake investment for greening their activities.

Policy-makers increasingly recognise the need to incorporate environmental provisions in SME policies but there is still considerable variation on how far they act on that recognition. Incentives for SMEs are limited by lack of budgets and institutional capacity. Based on the analysis in this paper the following recommendations are listed:

- Settle policies on Green Economy in Albanian government's agenda.
- Setting up the web-based systems to help SMEs obtain information on environmental issues and tools.
- Draft the new Green Industry Strategy or Action Plan 2016-2020 according to EU green action plan 2020 and implement it.
- Transpose all the EU legislation regarding environmental management and renewable energy.
- Establishment of the national management system for treatment of all type of waste as well as the strengthening of human capacities.
- Establishment of a national monitoring system for measuring and monitoring the environmental protection indicators.
- Design and introduce financial and/or regulatory incentives to promote the implementation of the necessary standards for: a) renewable energy b) resource efficiency c) recycling of waste such as:
 - Reduce the number of inspections from state authorities in SMEs which have ISO 9001, 14001, 5001;
 - Set as a standard criterion for participating in bids and PPP the adoption of environment friendly practices (including ISO certification).
 - Tax exemption and reduced-interest loans to invest in greener technology.
 - Remove VAT for recyclable waste.
 - Remove national tax for plastic packaging for single use packaging, which is produced from raw material obtained by recycling.
 - Building up the infrastructure of waste collection in the city through PPP.
- Design and introduce supporting scheme for green entrepreneurship, green products and green jobs.
- Green growth cannot be achieved without innovation (UNECE, 2014). So it is necessary to secure financial subsidy to businesses that are actively innovating environmentally friendly technologies.
- Introduce environmental education in the education system in order that the whole society adopts an eco-friendly approach.
- Government Direct subsidies and free technical assistance to SMEs help to increase their awareness and secure their initial engagement in green practices.

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GO GREEN IN GREECE**ABSTRACT**

Greece under the pressures of the deep economic and social crisis is in a process of going greener. Several public and private initiatives are implemented creating a more environmental friendly ecosystem. 'Green' sectors, such as renewable energy sources and organic agriculture present increasing opportunities. Greek SMEs make increasing efforts to adopt environmental practices. However, the majority of SMEs are still in the early environment consciousness phase undertaking mainly isolated and peripheral actions. Greek SMEs do not seem to realize the benefits of integrating environmental aspects into their operations in order to gain competitive advantage. The present study discusses how Greece meets the green economy requirements and attempts an analysis vis-a vis the Greek SME sector and the current initiatives for going green. Some thoughts relevant to policy recommendation are presented. These thoughts relate to general directions rather than specific policy articulation.

Keywords: Greece, SMEs, green economy.

JEL Code: L21, L26, M14, Q01

ECONOMIC AND SOCIAL SNAPSHOT

Greece is in its seventh year of deep recession. The period of growth the country has enjoyed after joining the single currency of EUR in 2001, gave place to a severe financial crisis. In 2009, the government debt was representing 130% of GDP, whereas government deficit had reached a record high of 15,6% of GDP. Both figures were unsustainable and accelerating fast, resulting in Greece being shut out from borrowing in the financial markets. In 2010, the so-called, troika, formed by the European Commission, the European Central Bank and the International Monetary Fund, started handing Greece loans in exchange for spending cuts and tax hikes. Although, this provided initially some positive results, it did not come along with the rapid implementation of structural and institutional reforms, which would be necessary for the recovery of the economy. In 2014, the GDP has fallen to EUR 177 billion from EUR 242 billion in 2008, showing a decrease by 27% [1]. The GDP per Capita decreased to EUR 18,400 in 2014 from EUR 24,100 in 2008. At the same time, the government debt escalated to the amount of EUR 317 billion in 2014 accounting for 178% of GDP [1]. Regarding unemployment, the relative index reached a record high of approximately 25% in 2015, which although lower than the 27.3% of 2013, attains the first rank among the European countries. The high unemployment rates combined with the reduction of household income and increased taxes resulted in a serious social crisis. Life satisfaction has dropped and poverty has risen sharply, with youth at risk of poverty or social exclusion being the most significantly affected [2].

In July 2015, and following the European Central Bank's announcement that there would be no increase in emergency funding for Greece, the newly elected government of Greece announced capital controls in order to prevent euros flowing out of Greek banks. Although the imposition of capital controls saw the majority of the economic sectors suffering their worst ever period in the single currency, the Greek Economy managed to present a reduction of trade deficit in 2015. This was mainly due to a reduction of imports by 14.8 % compared to 2014, yet an increase of exports (excluding oil products) by 9.2 % has not to be underestimated [3].

As of 2016 and despite the crisis and the serious political problems the Greek Government faces, signs exist to allow for some optimism about the economy slowly turning around. Apart from several reforms that are undertaken and exports that are improving there are also rapid changes in mentality and attitude of population towards entrepreneurship. At the same time there is an overshoot of the number of initiatives for public and private start-up clusters and incubators and an increase of venture capital investment, which

often emphasize on high-tech ventures, mostly ICT. New ventures emerge in the absence of career alternatives becoming a key lever for growth restoration and job creation [4].

In 2016, Greece presents an improvement in “ease of doing business” and ranks in the 60th place out of 189 economies upgrading its 72nd place of 2014 [5]. In 2015-16, Greece becomes also more competitive altering its ranking to the 81st place out of 140 economies [6].

THE GREEK SME SECTOR

Small and medium-sized enterprises (SMEs) in Greece, according to the European Commission 2003 recommendation, are the enterprises:

- employing less than 250 employees,
- with annual turnover not exceeding EUR 50 million or with annual total balance sheet not exceeding EUR 43 million,
- fulfilling the autonomy criterion, i.e not belonging by 25% or more of the capital or voting rights to one or more enterprise which do not fall under the SME or micro-enterprise definition (depending on the case).

More specifically, a) very small or micro enterprises employ fewer than 10 persons, b) small enterprises: employ fewer than 50 persons having either an annual turnover not exceeding EUR 10 million, or an annual total balance sheet not exceeding EUR 10 million and c) medium-sized enterprises: employ fewer than 250 persons, either having an annual turnover not exceeding EUR 50 million, or an annual total balance sheet not higher than EUR 43 million.

According to the 2015 SBA Fact Sheet for Greece [7], the total number of enterprises in Greece is 692,686. This figure covers the ‘non-financial business economy’, which includes industry, construction, trade and services, but not enterprises in agriculture, forestry and fisheries and the largely non-market service sectors such as education and health.

The structure of the Greek firms is presented in Table 1.

	NUMBER OF ENTERPRISES			NUMBER OF EMPLOYEES		
	GREECE		EU27	GREECE		EU27
	Number	Share	Share	Number	Share	Share
MICRO	669,773	96.7%	92.7%	1,225,556	58.7%	29.2%
SMALL	20,058	2.9%	6.1%	361,207	17.3%	20.4%
MEDIUM-SIZED	2 455	0.4%	1.0%	228,692	10.9%	17.3%
SMEs	692,286	99.9%	99.8%	1,815,465	86.9%	66.9%
LARGE	400	0.1%	0.2%	273,518	13.1%	33.1%
TOTAL	692,686	100%	100%	2,089,052	100%	100%

Table 1: Enterprises and Employment by category (Source: SBA Fact Sheet Greece 2015, [7])

As depicted in Table 1, the SME sector is more important in Greece than in the average EU country and Greek SMEs tend to be smaller than their EU peers. SMEs, represent the overwhelming majority of Greek firms and are structured as follows:

- micro firms (including self-employment) total 669,773 companies representing 96.7% of all firms.
- small firms total 20 058 companies accounting for 2.9% of all firms.
- medium-sized total 2 455 companies representing 0.4% of all firms.

The contribution of SMEs to employment accounts for 86.9%. This is much higher than the EU average and is mainly due to the small scale structure of the Greek SME sector. The non-financial business economy is extremely dependent on microenterprises with 0-9 employees, which produce approximately 40 % of value added and provide 58.7 % of all jobs.

The persisting economic crisis has caused a sharp decline in the Greek business economy. Developments in the business lifecycle mirror the recession. From 2013 to 2015, the number of new businesses was almost half of what used to be between 2011 and 2013. On a positive side, deregistration felt

also in the same interval, which allowed for a net increase of businesses of 1,813. The economic risks for businesses remained very high in 2015, with microenterprises being most badly affected [7].

The shrinkage of the economic activity affected the majority of sectors of the Greek economy, with few exceptions. According to an ICAP 2014 report [8], 71 out of 87 sectors of the economy presented annual losses at a smaller or higher degree over a period of 5 years. The remaining 16 sectors presented growth during the same period, with sectors related to renewable energy sources (RES) being the best performing, as shown in Figure 1.

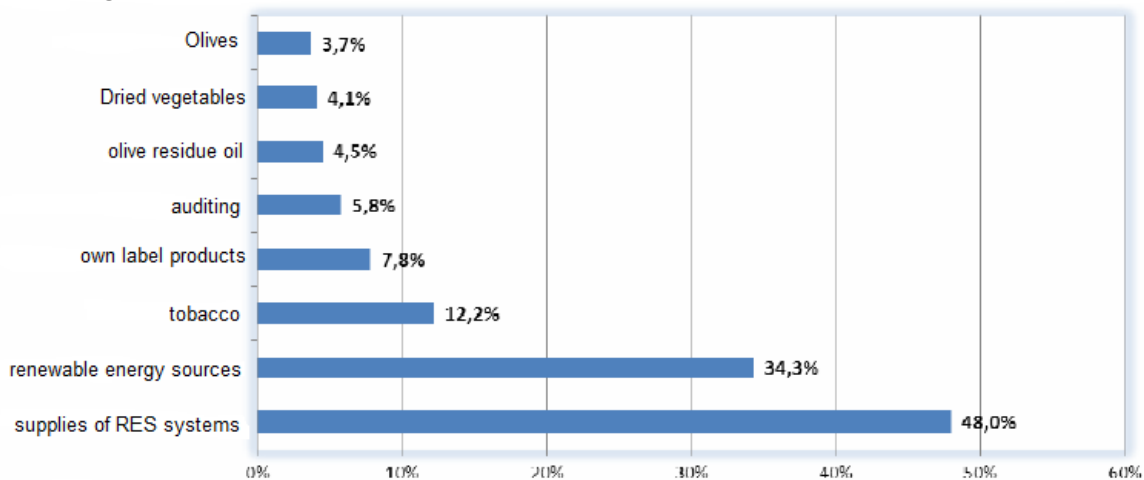


Figure 1: Greek sectors with the highest growth over the last 5 years period (Source: ICAP 2014, [8])

Although the positive performance of the sectors related to RES is to a great extent due to the favourable institutional frame (high energy compensation values), it is also a positive sign of Greece going greener.

In the following sections, the main pillars of the green economy (public bodies, green sectors and environmentally responsible SMEs) in Greece are presented.

PUBLIC BODIES AND REGULATORY FRAMEWORK RELATED TO THE GREEN ECONOMY

There are several public bodies that participate in environmental policy making and the development of the regulatory framework towards the enhancement of environmental performance. These include the Ministry of Regional Development and Competitiveness (www.ypan.gr), the Ministry of Environment, Energy and Climate Change (www.ypeka.gr) and the Ministry of Agricultural Development and Food (www.minagric.gr) at a national level as well as several regional authorities and municipalities.

The national regulatory framework for the green economy is developing on the basis of the European institutional framework and relevant international guidelines. It regulates issues related to environmental responsibility and corporate social responsibility (CSR), the relationships of the business to society and public-private partnerships. Although the regulatory framework is still fragmented, several actions have been taken recently towards its integration. The outcome of these actions is the National Action Plan for Corporate Social Responsibility, of which the public consultation was completed in September 2014.

Some critical points of the Greek regulatory framework are the following [9]:

- National Strategy for Sustainable Development 2005, which defines (at policy level) the general framework for the development of a National Action Programme to introduce the environmental dimension into all aspects of domestic growth. Integrating the priorities of the European Strategy for Sustainable Development with domestic particularities, the key objectives of the National Sustainable Development Strategy are to address issues related to: a) climate change, b) the reduction of atmospheric pollutants, c) the reduction and rational management of solid waste, d) the rational management of water resources, e) the prevention of desertification, and f) the protection of biodiversity and ecosystems.

- Presidential Decree 148/2009 on environmental responsibility, which regulates issues related to the prevention and remedying of environmental damage (harmonization with Directive 2004/35/EC) and the recognition of environmental responsibility by introducing the principle ‘the polluter pays’.
- Law 3855/2010 on green public procurement, which describes the initial administrative actions to develop the national policy and roadmap for green public procurement.
- Ministerial Decree 135/2014 on environmental licensing of projects and activities, which provides the basis for the recognition of the voluntary undertaking of environmental and CSR initiatives by operators of private and public projects and activities.
- National Action Plan for Corporate Social Responsibility, 2014. In the frame of the National Action Plan, there are a number of national policies, plans and programs of the National Strategic Reference Framework (NSRF) 2014-2020, which relate directly or indirectly to environmental responsibility. Among them there are policies related to waste management (such as the end-of-life for cars and boats, used tires, used batteries and accumulators, the rejection of electrical and electronic equipment, building materials, demolition and excavation and industrial oils) and several NSFR programs, which provide incentives in support of greening the economy. Examples of such programs are the following:
 - “Green Tourism”, which provides an incentive for companies operating in the tourism sector to develop environmentally friendly processes and infrastructure.
 - “Green Enterprise”, which provides incentives for firms to undertake investments in order to make their production and supply chain processes environmental friendlier.
 - “Training for exiting the crisis: Green Entrepreneurship - CSR - Social Economy”, which aims to increase the knowledge and skills of employees.
 - “Eco-Commerce”, which provides support to SMEs in order to take actions of green entrepreneurship and CSR.
 - “New Innovative Entrepreneurship”, which provides financial incentives to new SMEs developing and commercializing highly innovative ideas.
- Regional regulatory plans, such as the regulatory plan of Athens/ Attica 2021, which enhances and complements the national development planning and highlight the potential role of Attica / Athens at national and European level.

Several non-governmental environmental organisations can also be included in the list of environmental bodies that participate in policy making and the enhancement of environmental performance. Some examples are "Ecology...vision and action“, Arcturos, National Centre of Sea Research, Clean Up Greece, Hellenic Ornithological Society, Hellenic Wildlife Hospital, Centre for Renewable Energy Sources and Saving, Forest Research Institute, Hellenic Wind Energy Association, Environment and Environmental Training. Finally there are several social enterprises with environmental aim, which operate in the frame of the new law 4019/2011.

‘GREEN’ SECTORS

‘Green’ sectors refer mainly to renewable energy sources, organic agriculture and products, and waste management.

The sector of Renewable Energy Sources (RES)

RES are gaining more ground in terms of satisfying the country’s energy needs. The total installed power in the interconnected system from RES grew at an average annual rate of 22.5% during the period 2002- 2015. However, the annual growth rate presented a dramatic decrease, from 42.5% in the period 2012-13, to 4% in 2014 and 2.7% in 2015 [10]. In 2016, the installed power by RES amounts to 4.676 MW, which represents a record high of 25, 73% to the total installed power in the interconnected system (Figure 2). The amount of energy produced by RES is to a great extent shaped at the government level, with the end customer being the incumbent operator (Public Power Corporation) and not the end user.

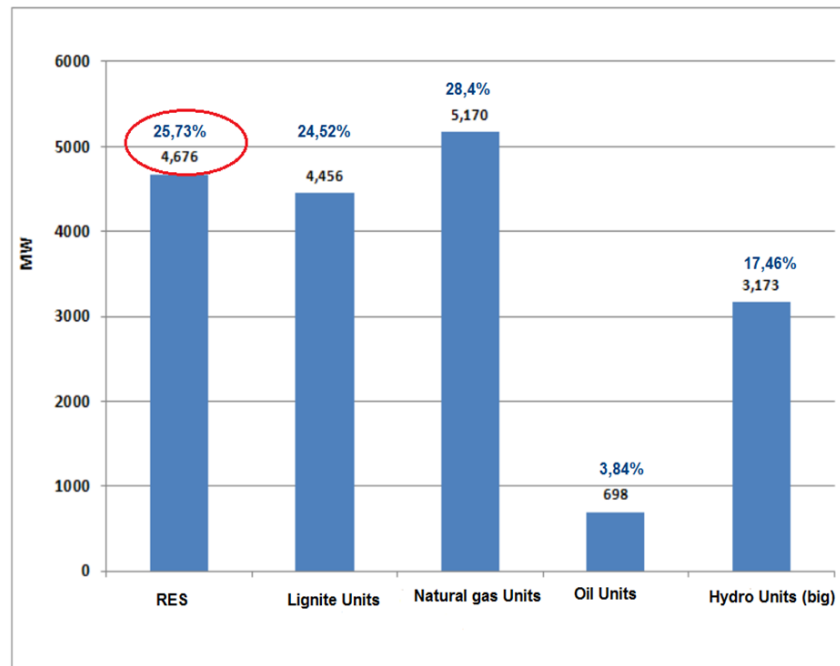


Figure 2: Installed power in the interconnected system by fuel (Source LAGIE 2016 [11])

Till the end of 2012 the installed power from wind energy units represented the highest percentage of RES, however in 2013 the order was reversed giving to the photovoltaic systems the leading position. As of 2015 the contribution of photovoltaic systems in the installed RES capacity raises to 52.1% whereas wind-energy parks follow with a share of 42.3%. Small hydropower plants participate with 4.5%, while much lower remains the contribution of biomass-biogas plants (Figure 3).

The RES sector is among the most growing sectors of the Greek economy, with RES producers presenting an average growth of 34.3% and suppliers of RES systems reaching an average growth of 48% over the period 2009-2014 [8]. The remarkable increase of the number of both RES producers and systems suppliers is to a great extent due to the favourable institutional conditions, such as the feed-in-tariffs instrument, which facilitated them to enter the sector. The feed-in-tariffs instrument is considered not sustainable, therefore more competitive instruments are announced to apply from 2017.

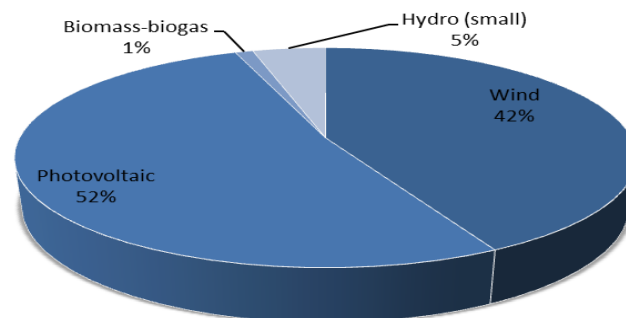


Figure 3: Contribution of RES types to the RES installed power [10]

An attempt to summarize the main points of a SWOT analysis of the sector is presented in Table 2 [10].

<p>Strengths</p> <ul style="list-style-type: none"> - The high energy potential of the country (wind power, sunshine etc.). - The nature of the renewable energy sources in itself, being inexhaustible. - The introduction of new technologies and the continuous improvement of skills making operating costs of RES lower. - The (relatively) high profit margins of the companies operating in the sector. 	<p>Opportunities</p> <ul style="list-style-type: none"> - Large growth potential of the sector. - High energy potential of the Greek islands (upon completion of their interconnection). - The establishment of smart electricity distribution networks (smart grids). - The interest of foreign investors to invest in RES domestically.
<p>Weaknesses</p> <ul style="list-style-type: none"> - The slow pace of implementation of RES investment projects (compared to existing possibilities). - The delay in implementing infrastructure projects (mainly electrical network expansion), which can enhance the penetration of RES. - The saturation of the network in areas with high energy potential. 	<p>Threats</p> <ul style="list-style-type: none"> - The lack of financing, which results in the postponement and/ or cancellation of investments. - Frequent changes in legislation and government policies, leading to reduced investor confidence. - The decline of RES energy selling prices. - Possible delays in payments from the operator of electricity market. - The reactions of local communities.

Table 2: SWOT Analysis of the RES sector (Source: ICAP 2016, [10])

Overall the future of the RES sector seems quite positive. Conditioned by the government willingness to further strengthen the green economy and the undertaking of actions in the short and medium term to alleviate implementation related problems, the industry is expected to gain new dynamics.

THE SECTOR OF ORGANIC AGRICULTURE AND PRODUCTS

The sector of organic agriculture has presented a tremendous growth in Greece during the period 2004-2006 mainly due to the existence of several subsidy programs, which motivated a significant number of producers (small family owned business) to turn in organic agriculture. Since 2010, the lack of sufficient subsidy programs was related to decreasing numbers of organic producers and land. According to the Research Institute of Organic Agriculture (FiBL) and IFOAM – Organics international [12]

- The organic agricultural land in Greece is 256,131ha in 2013 vs. 383,606ha in 2013, showing a decrease of 33% and representing 3.1% of total agricultural land. Olive trees and cereals have the greatest shares.
- The number of organic producers is 20,186 in 2014 vs. 21,986 in 2013.
- However, organic processors amount 1,635 in 2014, presenting an increase compared to the 1,555 processors in 2013.
- Still, on a positive side exports of organic products are growing as a response to the huge global market opportunities.

An attempt to summarize the main points of the SWOT analysis [13] of the sector is presented in Table 3.

<p>Strengths</p> <ul style="list-style-type: none"> - Excellent climatic and soil conditions, low conversion cost to organic agriculture. - International recognition of several products and areas (names of origin, e.g. mastic of Chios, saffron of Kozani). - High growth, exporting Greek companies in the food sector, which can easily expand their activities to process organic products. 	<p>Opportunities</p> <ul style="list-style-type: none"> - High global demand for organic products creating favorable conditions to increase exports of organic products. - Increasing interest for organic business by environmentally responsible individuals. - Domestic market growth potential due to the comparatively low current penetration
<p>Weaknesses</p> <ul style="list-style-type: none"> - High cost of organic production, high dependence from subsidies. - Lack of know-how. - Fragmentation/ Lack of interconnectivity between producers and processors. - Small size of domestic market and insufficient awareness of domestic consumers about the benefits of organic products' consumption. 	<p>Threats</p> <ul style="list-style-type: none"> - Lack of efficient policies and support. - Deficiency of control and certification mechanisms and the associated lack of know-how to comply with required standards of quality, safety, packaging, labeling, e.t.c. - Decrease of domestic demand due to the persisting economic crisis.

Table 3: SWOT analysis of the organic sector (Source: Pireaus Bank, 2013, [13])

Overall, the major problems that constrain the growth of the organic sector in Greece seem to be related to the high dependence of the production to subsidies, the deficiency of support mechanisms and policies and the lack of know-how to comply with the required standards. Organic agriculture in Greece is small scale; however there are huge opportunities mainly for exports. Taking advantage of its inherent strengths the country could become an organic paradise in medium term. Combining organic cultivation with 'names of origin' can assist the promotion of Greek organic branded products in the domestic and international markets. Among the basic conditions for achieving this objective belong: increasing awareness and training of farmers, creating serious control and certification mechanisms, establishing efficient distribution channels in foreign markets.

The sector of waste management

As far as waste management is concerned, it is generally characterized by a lack/shortage of suitable disposal and recovery infrastructure. Waste management is mainly performed by local authorities, using landfill and rubbish dump, although the latter is against regulation. There are limited synergies between sectors in order to improve the management of waste. Among the SMEs providing environmental protection services, several provide exclusively waste management services, such as collection, transport, treatment and disposal of waste. Alternative waste management in Greece is limited and concerns mainly recycling, composting, energy making. It has also to be mentioned that from the 287,000 tons of toxic waste, which is produced annually in Greece, 40-60% is exported, whereas approximately 30% is "temporarily" stored. On a positive side emergent legislation becomes stricter in the "shadow» of the upcoming EC fine and imposes waste producers to conform till 2018. Overall, there is considerable room to enhance control, inspection and sanction mechanisms and improve waste management.

ENVIRONMENTALLY RESPONSIBLE SMES

An increasing number of SMEs that operate in other than green sectors become more environmental responsible. According to a recent research on 247 SMEs [14], the adoption of environmental practices by Greek SMEs is presented in Figure 4.

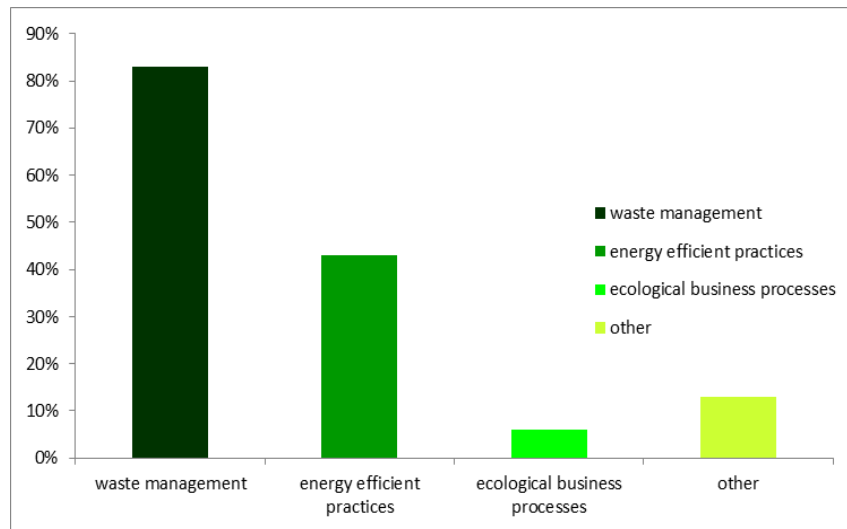


Figure 4: Environmental practices used by Greek SMEs (Source: [14])

The majority of SMEs (83%) adopt mainly some kind of ecological waste management and disposal procedures, often because of the local and EU taxes and rules in matter of environmental impact. More than 40% of SMEs make an efficient use of energy, which is mainly summarized in rational use of energy, installation of low-energy light bulbs and high efficiency equipment and machinery. The diffusion of environmental management systems in small companies is much lower than in larger, while the number of SMEs who are certified by ISO 14001 or EMAS is quite low [14]. In addition, only 10% of SMEs issue sustainability reports, indicating a lack of interest for reporting among SMEs [15]. Concerning the adoption of quality control systems, approximately 10% of SMEs adopt some quality control system, whereas 53% of them express an interest on a specific quality management system for the future [14].

Overall, although there is an increasing trend, the majority of SMEs are still in an early environmental stage, undertaking mainly isolated environmental actions. This can be attributed to the fact that the value and benefits of environmental responsiveness are not yet clear to SMEs and/or that the perceived costs are too large for a small company to afford. In other words, the majority of Greek SMEs, mainly due to lack of awareness and incentives, cannot realize the benefits of integrating environmental practices into strategies, being unable to see environmental responsiveness as a source of competitive advantage.

Yet, research on 149 Greek manufacturing firms from sectors with high ecological footprints, namely wood, paper and pulp, food and beverages, chemicals & pharmaceuticals, plastics, metals, minerals, non-metallic minerals, suggests that the adoption of environmental practices can be a source of competitive advantage [16]. More specifically, the adoption of environmental management systems and practices has been found to assist firms to develop both incremental and radical product innovations. This is especially true, when combined with the gradual development of organizational capabilities through an environmental learning process.

Apart from innovation the benefits of environmental practices for SMEs include resource savings, reputation, improvement of relationships with stakeholders, commitment of employees and customers, co-operations and financing possibilities. Such benefits depend heavily on the ability of firms to integrate environmental practices in their strategy, thus SMEs must go through a transition from the undertaking of isolated and peripheral early actions (such as recycling and waste management) to the embeddedness of environmental aspects in their business models (e.g. production of green products and services) and finally to value creation ‘jointly’ with stakeholders and sustainable development [9].

In this light, we present in the following section some best practices of SMEs, which managed to follow successful environmental paths and gain the benefits from environmental responsiveness.

GREEN SUCCESS STORIES

Masticulture, www.masticulture.com

Masticulture is a locally owned and operated small scale travel bureau in the mastic village of Mesta on Chios island in the Aegean Sea. It is the first and only tourism company specialising in ecotourism on the island. It provides a broad variety of activities related to Chios island environment (natural and social) as well as the people, businesses and associations representing the local traditions and culture of Chios. Masticulture puts together ecotourism packages that combine hospitality and outdoor activities related to all the things that compose the culture of Chios: its customs and traditions, popular arts and crafts, agricultural labour and produce, architecture, and much more. All this takes place on an island that has remained broadly untouched by the tourism development of the last few decades. Chios has also managed to keep its rural societies present because of its active agricultural sector, which until today continues to be the chief source of employment for the many of villagers on the island, whilst also functioning as a prime factor in Chios ' sustainable development. Masticulture belongs to, and operates with the help of Mesta's inhabitants, whilst also cooperating with locals throughout the island [17].

Revive, www.revive.gr

Revive was founded in 2006 and is engaged in the collection of used cooking oil, which can be raw material for the biodiesel industry. More than 2 500 companies nationwide in various categories such as restaurants, hotels, catering and hospitals, as well as households collaborate with the company. Revive collects for free the cooking oil from the fields produced and after appropriate treatment promotes it to the industry. That is, cooking oil is converted into biodiesel and bio-lubricants, which are more environmentally friendly and less polluting. The environmental benefits of using biodiesel relate to the reduction of the emitted soot, sulfur dioxide and carbon dioxide, thus mitigating the greenhouse effect. It should be also noted that for every liter of cooking oil that Revive collects from households, it offers 0.03 euro in the environmental organization WWF Greece.

Ditsios, <http://www.ditsios.com>

Ditsios is a unit for processing and dyeing furs in the city of Kastoria. The environmental performance of the company allows Ditsios to be ranked as the most ecological fur dressing and dyeing factory in the world today. The whole production process is organized and structured to be completely environmentally-friendly, producing few or no pollutants at all, consuming the less possible energy, having an increased sense of social responsibility, while at the same time it fits a high end and totally green factory of dressing and dyeing fur skins. The company has special installations in order to make all the procedures harmless for the local environment, which include: equipment for collection of rain water that will be later use for different production processes, solar panels, waste management processes, energy efficient machinery, and chemical cleaning to separate cleaning and polluted water, which is either reused as agricultural fertilizer or stored in special waste containers. Employees also receive constant training to be able to carry out all working procedures correctly [18].

Voion Land Products, <http://www.voion.gr>

The company operates since 2008, in the region of Voio at Northwest Greece. Its functions include the production, processing, packaging and distribution of Voion legumes, namely lentils, beans of various kinds and chickpeas. The company applies a quality and food safety system according to EN ISO 22000:2005, and also a quality management system. All the processes of the company are environmentally friendly. From the beginning of construction of its facilities the owners placed a system for the collection and use of rainwater in the unit, which are mainly used in the beautification of the surroundings and cleanliness. They also implement a system for recycling paper and packaging materials plant preparations used by producers, such as pesticides and boxes. Two times per year, the company organizes seminars for the farmers, about new methods of cultivation, better practices, and exchanging points of view. These seminars help the farmers improve the quality of their products. For this purpose the company cooperates with the Aristotle University of Thessaloniki for environmental issues. The company pays high attention to the quality and safety of the products. In order to maintain the high standards in quality, products follow traceability from the farm, as the

company puts labels in the plots. Also, to ensure the quality, they implement quality controls to check the possible residuals of pesticides, the time of needed boiling, and the humidity. Voion Land Products encourages all employers to work with high values in order to preserve safe and excellent quality products, as well as participating in actions to protect the local environment [18].

Alfa Koukoutaris, <http://www.alfapastry.com/en>

Alfa Koukoutaris is a family business of frozen pastry products in Northern Greece, which holds a leading position in the Greek food market and has rapidly growing exports to Europe, the USA, Canada and Australia. The company reinforces the local market by using exclusively products from the area, as their material suppliers are local. It is committed to the highest international quality and safety standards ISO: 9001-2008, HACCP, IFS, BRC, and manage to maintain the quality by performing continuous quality controls. Every day all the refrigerators' temperatures are measured, both in the building and in the tracks, to ensure that the products are safely stored and transferred. All the suppliers of the raw materials are certified and must observe some preconditions regarding quality, time of delivery, condition of the ordered products. Alfa has an in-house chemistry and microbiological laboratories possess the latest and most advanced instruments for the analysis and control of raw materials and production sampling. The company emphasizes in training seminars, specialization, information on new techniques and methods concerning production, supply, distribution, sales and service. The company's waste is send to managing companies and to a biological cleaning network. The company also promotes recycling, by having recycle bins for paper, plastic and metal, in different placing all over their premises. [18].

Daphne's club hotel apartments, <http://www.daphnesclub.com>

Daphne's Club is family-friendly and eco-labeled hotel, situated in the city of Xylokastro. The hotel envisions a holistic and personalized travel experience by providing comfortable accommodation, genuine hospitality, tailor-made activities and individualized services. In doing so the company is committed to sustainable tourism by conserving natural resources, raising awareness of the natural environment, promoting local development and contributing to equality and non-discrimination. Daphne's club is a green partner of the green leaders and is certified by EU ecolabel.

CONCLUDING THOUGHTS

Greece is in its seventh year of deep economic crisis. During the crisis efforts to go greener have provided positive results. A National Action Plan for CSR is in place and an integrated regulatory framework for environmental issues is on its way. Green industries gain dynamics. The RES sector presents tremendous growth and the number of companies operating in the sector is markedly increasing. The organic sector, although decreasing in terms of the number of organic producers and land, manages to increase the number of organic processors and exports. The waste management sector, still in infancy, presents opportunities for future growth. Greek SMEs are becoming more environmentally responsible, with an increasing number of SMEs adopting several environmental practices. However, the majority of SMEs are still in the early environment consciousness phase undertaking mainly isolated and peripheral actions. Little or no synergies exist among firms and sectors to increase environmental value. SMEs do not see environmental responsiveness as a source of competitive advantage, which could increase their ability to identify entrepreneurial opportunities. This could be attributed to the lack of information and awareness about the benefits of going greener, and/ or the lack of incentives, which would assist SMEs to overcome the high costs of environmental investments or at least alter their perceptions about such costs. That is why public bodies and policies should intervene to assist greening the economy, guide SMEs, facilitate the transfer of know-how from best practices, and provide incentives for SMEs to integrate environmental aspects into their operations. Some recommendations towards that direction include:

- Ensuring the effective implementation of policies, plans and programs related to the environment.
- Providing consultancy for the implementation of low-mid-high cost environmental projects.
- Creating a green map of all environmental SMEs in Greece, with key performance indicators and success stories.
- Rewarding and promoting environmental SMEs champions.

- Granting public environmental label to environmental certified SMEs.
- Favoring environmental responsible firms as suppliers of public bodies.
- Facilitating interconnectivity of key players in the green economy so as to provide opportunities for the undertaking of joint actions. An example would be the enhancement of the collaboration between regional authorities, firms from green sectors and SMEs for sorting and collecting waste at source, which can be used for both making energy and producing compost for commercialization.

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GREEN ECONOMY AND SMES: THE EXPERIENCE OF REPUBLIC OF MOLDOVA**ABSTRACT**

Lately, both at national and international levels, an attention is drawn to the need for a greater Green Economic development.

The Moldovan Government has also aligned to the development of Green Economy commitments, mentioning that one of the main priorities is the economic development taking into account the environmental protection. Although the transition to the Green Economy is declared as a priority for the competitive development of the Republic of Moldova, issues of the Green Economy, including SMEs involvement in environmental issues today are virtually unexplored, and the policy, which aims at developing and supporting SMEs, is not harmonized with the environmental policy.

This article provides an analysis of the development of the SMEs sector in the Republic of Moldova, as well as the implication of SMEs in ecological activities. The paper presents also the existing measures of state policies to support SMEs greening and programs, aimed at green SMEs support, the characteristics and behavior of SMEs to meet environmental related requirements, the challenges faced by entrepreneurs when making the environmental actions.

Key words: small and medium enterprises, Green Economy, the Republic of Moldova.

Jel Classification: O44, Q01, Q28, Q57, Q58.

1. THE MAIN INDICATORS OF SMEs SECTOR

The role of small and medium enterprises (SMEs) has visibly grown in solving social and economic problems of the society in many countries throughout the world, regardless of their economic level development. Nowadays, the role of SMEs in ensuring the employment of labor force, jobs creation, saturation of consumption market, middle class formation, creation and implementation of innovation is obvious.

According to the Law on Support of Small and Medium-sized Enterprises Sector (No. 206-XVI from 07.07.2006, Official Monitor No.126-130/605 from 11.08.2006) adopted in 2006, SMALL AND MEDIUM-SIZED ENTERPRISES SECTOR includes enterprises of a dimension, limited by 3 quantitative criteria: average annual number of employees, annual sales revenue and total annual balance sheet assets. SMEs also include economic subjects – natural persons, engaged in entrepreneurial activity, if they meet the following criteria:

Micro enterprises correspond to the criteria: annual average number of employees should be no more than 9 persons, annual sales revenue sum – no more than MDL 3 million, total yearly assets cost – no more than MDL 3 million.

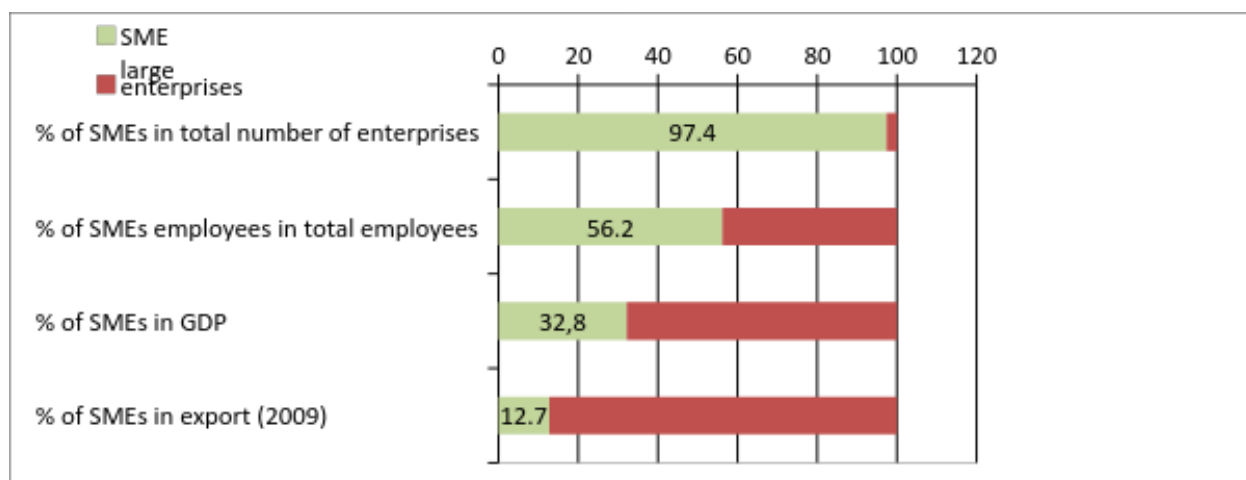
Small enterprises correspond to the criteria: annual average number of employees should be no more than 49 persons, annual sales revenue sum – no more than MDL 25 million, total yearly assets cost – no more than MDL 25 million.

Medium enterprises correspond to the criteria: annual average number of employees should be no more than 249 persons, annual sales revenue sum – no more than MDL 50 million, total yearly assets cost – no more than MDL 50 million.

In 2014 the National Bureau of Statistics of Moldova (NBS) had records of 53.7 thousand economic agents, mostly from SMEs sector (97.4%). This indicator represents approximately 31.7% of all enterprises registered within the State Registration Chamber.

SMEs sector of the Republic of Moldova significantly contributes to jobs creation. In 2014, 56.2% of the total number of employees of the national economy was working in the SMEs. In this sector were achieved 31.8% of all sales revenue and were created 82.3% of total profits before taxation. SMEs share in GDP (market prices) was 32.8%. And the share of SMEs in export is still very low –around 13 % (in 2009) (Figure 1).

Figure 1. The SMEs share in the national economy of the Republic of Moldova in 2014, %



Source: Calculated by the authors on basis of the statistical data

Micro-enterprises prevail in the total number of SMEs (77.6%). Small enterprises make 19.3%, medium-sized enterprises – 3.1% of SMEs.

Similarly to previous years, in 2014 the sustainable positive upward trend in the number of SMEs, which report to the NBS was maintained (52.3 thousand units in 2014 compared to 50.9 thousand units in 2013). Data reveal an increase in the number of SMEs by 2.8% compared to 2013.

From the demographical standpoint, in 2013-2014 the number of SMEs in terms of sector of activity increased in all the areas of activity, except for processing industry, where the number of SMEs decreased by 2.9%. The increase in the total number of SMEs was largely due to agricultural enterprises (+ 6.9% increase), real estate transactions (+ 6.7%) and constructions (+ 4.2%).

The distribution of the number of employees in enterprises of various sizes showed that the largest share of workers are employed by small businesses (40.8%); medium-sized enterprises - 29.4%; micro enterprises - 29.6% of all employees in the SMEs sector.

In (2008-2011) the total number of employees in all enterprises in the RM, including in SMEs, registered with statistical bodies, posted a pronounced downward trend; such evolution was less significant, but however visible also in 2007. In 2012 and 2013, the number of employees per total enterprises reached a slight annual increase as a result of positive developments in large enterprises. In 2013, the number of employees in SMEs decreased compared to the previous period (the index made up 99.4%). The year 2014

was marked by a 1.1% decrease in the number of employees in all enterprises, however large enterprises showed a slight increase of 0.4% in the number of employees compared to the previous year.

In 2014, the rate of employment decreased in enterprises of all sizes of the SMEs sector. As for the evolution of the number of employees, in terms of types of activity, in 2013-2014 the number of employees decreased in most SMEs, except: electric energy, gas and water, real estate transactions and other activities.

In 2014 the amount of profits/losses before tax of all enterprises (including SMEs sector) was the least in the last 5 years, showing values below the year 2009. Since 2012, corporate profits before tax fell significantly compared to the period 2007-2011, except 2009. Hazardously or not, but the dynamic posted over the last three years have coincided with the amendments made in the Tax Code, according to which starting with 2012 the income tax zero rate for the reinvested profit was repealed and a tax rate of 12% for the corporate income tax was established, with some exceptions for certain taxpayers, including companies.

According to the totals, in 2014, SMEs sector' profits before tax amounted to MDL 3,012.7 million (more by 49.9% compared to 2013 when they made up MDL 2,008.5 million) as a whole. Small, micro- and medium-sized enterprises reached a significant increase in profits before tax in 2014 compared to previous period.

The main indicators of SMEs sector are shown in Table 1.

Table 1. Main indicators of SMEs sector in 2014

Indicators	Total SME	Medium-sized	Small	Micro
Number of enterprises, unit.	52,335	1,621	10,099	40,615
<i>% of Total</i>	97.4	<i>3.1</i>	<i>19.3</i>	<i>77.6</i>
Average number of employees, persons	291,737	85,893	119,289	86,555
<i>% of Total</i>	56.2	<i>29.4</i>	<i>40.8</i>	<i>29.6</i>
Sales income, MDL m	83,650.3	28,085.0	44,553.9	11,011.4
<i>% of Total</i>	31.8	<i>33.6</i>	<i>53.3</i>	<i>13.2</i>
Profit(+)/Loss (-) before taxation, MDL m	3,012.8	1,045.0	1,765.7	202.1
<i>% of Total</i>	82.3	<i>34.7</i>	<i>58.6</i>	<i>6.7</i>

Source: Calculated by the authors on basis of the statistical data

2. POLICY DOCUMENTS THAT INDIRECT REFER TO GREEN ECONOMY

Association Agreement with the European Union expressly seeks to ensure sustainable development and promoting the green economy in our country. By signing the agreement, Moldova is committed to harmonize national legislation to European provisions and to ensure the integration of environmental protection, rational use of resources and energy efficiency in all sectors of national economy and social life.

In Moldova there is no special Green Economy policy. However, strategic documents, which determine the goals of sustainable development, ensure some aspects to the transition to a Green Economy:

- National Development Strategy of Moldova -2020
- National Program of Moldova "European Integration: Freedom, Democracy, Welfare"
- Environmental Strategy 2014-2023

- Climate Change Adaptation Strategy of the Republic of Moldova
- National Strategy for radioactive waste management 2013-2023
- State Program of regeneration and forestation of forest fund 2003-2020
- Agriculture and Rural Development Strategy (Action Plan, 2015)
- Strategy of Small and Medium-Sized Enterprises Sector Development for 2012-2020

The Moldovan government has also aligned to the development of Green Economy commitments, recorded in the National Development Strategy "Moldova 2020" and the National Environmental Strategy of the Republic of Moldova, but they are not directly related to green SMEs development.

For instance, the National Development Strategy "Moldova 2020" points out that the country "will undertake all necessary efforts to ensure the transition towards green economic development by integrating and strengthening aspects of environmental protection in all areas of socio-economic development of the country" [3].

Another document - National Environmental Strategy of the Republic of Moldova for 2014-2023 establishes that for the next 10 years to develop a modern ecological system through the development and adoption of an environmental legal framework according to European standards. There are stipulated provisions that will reduce the negative impact of economic activity on the environment, but will also increase knowledge on environmental protection by at least 50%. It also provides measures to protect and conserve biodiversity, exploitation of ecosystems, reduce greenhouse gas emissions by at least 20 percent by 2020, reducing the amount of landfilled waste by 30% and increasing the recycling rate by 20% by 2023 [1].

Declaration of intention on promoting sustainable development and Green Economy. Although the transition to the Green Economy is declared as a priority for the competitive development of the Republic of Moldova, issues of the Green Economy, including SMEs involvement in environmental issues today are virtually unexplored, and the policy, which aims at developing and supporting SMEs, is not harmonized with the environmental policy. The first steps are still taken in this direction, particularly in 2014 Ministry of Economy, Ministry of Environment and Ministry of Agriculture and Food Industry signed a joint statement on their commitment to ensure effective coordination on sustainable development oriented towards a Green Economy in the Republic of Moldova.

3. PROGRAMS, AIMED AT GREEN SMES SUPPORT

There are several programs that have the objective to support the green practices within Moldavian SMEs. Among them, can be highlighted:

- The Moldovan Sustainable Energy Financing Facility II;
- The Moldovan Residential Energy Efficiency Financing Facility;
- The Global Environment Facility;
- The Energy Efficiency Fund;
- The Moldovan Social Investment Fund;
- The Energy and Biomass Project.

Further, we would like to offer some details regarding the most important of the programs mentioned above.

The Energy Efficiency Fund, created in 2012, is a structure that manages financial resources to finance projects in energy efficiency and the renewable energy aimed at energy efficiency, reduction of greenhouse gas emissions.

The main objective of the Energy Efficiency Fund is to attract and manage financial resources to finance and implement energy efficiency and renewable energy projects, in accordance with strategies and programs developed by the Government, by:

- promoting investment projects in energy efficiency and renewable energy sources;
- providing technical assistance for energy efficiency and renewable energy projects development;
- providing financial assistance to the projects;

- direct financial contributions;
- acting as the agent or mediator for other sources of financing;
- providing full or partial guarantees in case of financing by banks;
- providing assistance in identifying optimal combinations for projects funding.

Finance for energy efficiency in the Republic of Moldova – MOSEFF is mainly financed by the European Bank for Reconstruction and Development and European Commission. MoSEFF loans are provided by local partner banks to Moldovan companies applying for financing. MoSEFF loans start from 10 thousand to a maximum of 2 million Euro. The financing is bound to investments fostering sustainable energy saving and production of renewable energy.

Any private company, firm, business or sole proprietor formed under the laws of the Republic of Moldova and operating in the Republic of Moldova can apply for MoSEFF loans and grants. Eligible are the projects that lead to a reduction in primary energy consumption, reduction of CO2 emissions and in general improve rational energy use in industries, agribusiness and commercial buildings.

Moldovan Residential Energy Efficiency Financing Facility – MOREEFF is financed by European Bank for Reconstruction and Development (EBRD), European Union, Government of Sweden and offers grant loans for energy efficiency projects in the residential sector. The MoREEFF facility aims to give householders, Condominiums/Associations of Apartment Owners, Housing Management Companies, Energy Service Companies or any other eligible service companies across Moldova an opportunity to realize the benefits of energy efficiency home improvements by providing them with loans and investment incentives through local participating banks. The amount of the investment and credit is unlimited, and the grant is 20-35% of the investment.

The Moldovan Energy and Biomass Project II aims to contribute to a more secure, competitive and sustainable energy production in the Republic of Moldova from biomass sources, the most readily available renewable energy source in the country. The project will increase the use of energy from biomass sources, thus contributing to both, a more secure, competitive and sustainable energy production and local development.

The first phase of the Project was successfully implemented by UNDP during 2011-2014. However, in the context of a clearly identified need to further support the consolidation of the emerging biomass market in the country, the European Union allocated additional 9.41 million EUR funding to the project. As of January 2015 the project entered into its second phase with an extension timeframe until November 2017. Within this project will be installed 80 modern biomass boilers in public institutions, 250 biomass boilers in households at subsidized price, 7 new Public Private Partnerships for heat supply service created throughout the country will be launched, 80 modern biomass boiler plants will be installed in villages and small towns public buildings, with focus on Transnistria region, ATU Gagauzia, Taraclia district and small towns. Energy and Biomass Project II will promote the educational component, creating a unique training center for operators of central heating, as well as piloting an educational course in vocational schools for future specialists in bio-energy sector.

Also can be mention **the Eco credit offered to SME** by ProCreditBank in 2013. Procredit bank is one of the first banks in Moldova that provides small and medium enterprises "green" credit to finance the following types of projects:

- Investments in energy efficiency - saving resources and energy by at least 20%, while maintaining productivity levels and growth.
- Investment in renewable energy - exploitation of natural resources that are practically inexhaustible, or regenerate itself shortly.
- Investment environment -friendly – measures that exert a positive impact on the environment, though not always can be assessed in terms of reducing the amount of consumed energy and greenhouse gases emitted (ex: organic agriculture, protection of soil and water sources etc.) [7].

4. MEASURES OF STATE POLICIES TO SUPPORT SMES GREENING

4.1 State SMEs support institutions and SMEs development strategies in the Republic of Moldova

In Moldova, institutions that develop and implement SMEs policies are:

- The Ministry of Economy;
- Organization for Development of Small and Medium-sized Enterprises.

The Ministry of Economy elaborates the SMEs sector support policy framework (strategies, action plans, and support programs).

Another state institution that implements policies is the Organization for SMEs Development. Main objectives of its activity include the realization of the state policy, connection between the centre and regions, coordination of all types of financial support to SMEs, and a closer work with the entrepreneurs.

At the local level, each municipality and District Council employs a specialist who controls the SMEs activity in the corresponding territory.

The policy document that determines the main priorities of the state support for SMEs is offered by the Strategy of Small and Medium-Sized Enterprises Sector Development for 2012-2020 and Action Plan on the implementation of the Strategy that is elaborated every 3 years. There are also targeted government programs of SMEs support, orientated at the development of narrow groups of enterprises.

4.2 Governmental policy to support SMEs toward the Green Economy

In the Action Plan 2015-2017 for implementing the Strategy for Development of SMEs 2012-2020, the Government proposed a series of objectives and actions, including several actions with reference to the development of **Green Economy** [4]. Among them, can be mentioned:

- 4.1.4. Providing grants to support SMEs in the implementation of energy efficiency projects
- 4.5.1. Encouraging the implementation of quality management systems, including those integrated into SME sector according to European and international standards
- 5.3.1. Developing proposals on promotion of 'green' practices in SMEs
- 5.3.2. Organize trainings, round tables, workshops in order to adapt awareness of SMEs to new production technologies for the transition to "Green Economy"
- 5.3.3. Elaborate a program to support SMEs in rural areas, aimed to develop businesses based on Green Economy.

However, these measures are not sufficient to involve SMEs in Green Economy and in September-December 2015, the National Institute for Economic Research, at the initiative of the Ministry of Economy, was elaborated a detailed proposal for the Government of Moldova on introducing a new priority policy **direction 8. "Green Economy for SMEs"** in the Action Plan for the period 2015-2017 on the implementation of the SME Sector Development Strategy for 2012-2020, starting in 2016.

The new priority contains 3 main objectives:

- Adapting the legal regulatory framework governing Green SMEs.
- Improving access to finance for Green SMEs.
- Development of training and information to Green SMEs. Promoting the culture of the Green Economy in the business society.

Further, are presented briefly some measures of the new priority policy direction 8. "Green Economy for SMEs":

The first objective set in the Action Plan contains the following measures:

- a. Adjusting the legal framework aimed at developing entrepreneurship to the acquis communautaire on energy, agriculture, environment and Green Economy for SMEs
- b. Development of the study on the implementation of national environmental standards in SMEs from the Republic of Moldova and of the international environmental management system ISO 14001

The second objective is focused on *improving access to finance for Green SMEs* through:

- c. Attracting financial assistance in the form of loans and grants offered by national and international organizations for SME development of green products.
- d. Development and implementation of innovative instruments for financial support of green SMEs (innovation vouchers, technology transfer projects etc.)

And the last objective is focused on *development of training and information to green SMEs. Promoting the culture of the Green Economy in the business society*. This objective will be reached by:

- e. Including the component of ecological management in training seminars for SMEs
- f. Inserting the module "Green Economy" in the curriculum of "Development of entrepreneurship" subject in secondary school
- g. Development and maintenance of web pages dedicated to green entrepreneurship development.

Fulfilling the specific objectives set out in the Strategy allows to attract the attention of many SMEs on environmental activity, and some of them to involve directly in the development of Green Economy - to produce environmental goods; to apply the latest technologies for rational and efficient use of resources; to engage in the treatment of production waste and overall, to strengthen the green entrepreneurial culture.

5. SMES AND ENVIRONMENT ISSUES – SHORT FACT SHEET

5.1. Characteristics and behaviour of SMEs to meet environmental related requirements

The action plan of the new priority “Green Economy for SMEs” was developed based on real needs of entrepreneurs that were identified based on a survey conducted by the National Institute for Economic Research within the project "Promotion of improving the environmental performance of SMEs" (2014) [6].

SMEs represent the major part of companies, but they are insufficiently informed about their environmental impact and do not fully understand that greening business can bring a competitive advantage. However, the willingness and ability of SMEs to implement sustainable business practices oriented towards efficient use of resources and the shift towards a Green Economy usually face a potential of limited resources.

This state of affairs is confirmed by the survey results of small and medium enterprises in Moldova described below. Total, 400 enterprises from 34 regions of the Republic of Moldova, except for Transnistria, were involved in the poll.

The results of the survey have shown that:

- A relatively small proportion of the surveyed companies have some environment-related permits or licenses -13.5% of respondents indicated that they have authorization for atmosphere emissions; 12.0% - authorization for special water use; 8.5% - waste management authorization; 2.3% - authorization for exploitation of mineral resources. Almost 16.5% of the surveyed companies noted the presence of other permits, such as authorization for the use of chemical fertilizers, sanitary authorization and others.
- Around 58% of the surveyed enterprises has no authorization or permission or are not subject to environmental regulation.
 - The source of information about environmental requirements - directly from environmental inspectors during their site visits (60%).

- 54% of surveyed companies complies with national environmental legislation and is contemplating doing more. Around 20% of the enterprises say that additional environmental actions are not a priority for the company.
- 63% of the surveyed companies do not use environmental management systems or standards, the main reason being the lack of demand from suppliers or customers. Only 4.3% of the surveyed enterprises use Standard ISO 14001, and only 1.8% - ISO 16000 (energy management).
- To be more resource efficient enterprises more often undertake such activities as: saving energy (67.3%) and saving water (57.8%); the majority (67.8%) acts in this way due to changes in the prices of energy and raw materials [6].

5.2. Challenges faced by entrepreneurs when making the environmental actions

According to the survey results “Promoting better environmental performance of SMEs. Moldova”, among the main challenges faced by entrepreneurs when making the environmental actions can be highlighted the following:

- The main problems that entrepreneurs face when trying to conduct environmental actions, are traditionally associated with the lack of financial resources (32.8%),
- cost of environmental measures (24.3%),
- complexity of administrative procedures (28.0%), lack of specific environmental skills (12.5%). Also, SMEs often complain that it is difficult to track environmental requirements changes, particularly requirements, which are applied directly to their businesses (9%). Entrepreneurs have difficulty in finding methodic indications and get advice on actions that they need to take to comply with relevant rules [6].

6. BEST PRACTICES IN THE GREEN ECONOMY

Although Moldova's experience in the area of Green Economy is very modest, however there are some case of success of SMEs related to this topic.

The advancement of Moldova in energy supply from renewable sources has led to an increase of businesses that produce fuel from biomass. Fuel from biomass is attractive as price, environmentally friendly and represents an advantage for both consumers, businesses, and environment

Further, are presented 2 success cases of Moldovian SMEs.

- **Solid Biofuel. Director: Eugeniu Scurtu . Company: “Arin Alb” SRL (Ltd), s. Sociteni, district Ialoveni , Initial investments - 700 thousands MDL**

In the first year, business was aimed at introducing and promoting the use of agricultural waste (biomass) for energy generation based on efficient technologies, in order to solve energy supply problems, faced by rural communities and agricultural enterprises in Moldova.

Wider adoption of technologies based on biomass improves air quality and thus human health, because the impact of these technologies is neutral in terms of carbon emissions [2].

- **Biogas extracted from trash used to produce electricity . Company: TEVAS GRUP SRL (Ltd), s. Țînt ă reni, Anenii Noi district. Investments - 14 million MDL**

Another exemple is the case of a SME that extract biogas from trash used to produce electricity. Polygon waste from Tantareni covers an area of over 24 hectares. Here were brought and deposited all waste from Chisinau for more than two decades. A few years ago, this mountain of garbage was a real headache for authorities and residents of neighboring villages. Due to the ambition and confidence of a group of enthusiasts was found a solution which, in addition to all, brings economic benefits. To be successful, the project has traveled a long and arduous period. From the decision of municipal council from Chisinau, which gave the company the right to extract biogas and up to drafting and installation, have been almost 6 years.

Waste materials are ideal for the formation of biogas composed half of the methane and half of the carbon dioxide and other gases. Thus, the garbage dump can provide a large amount of energy that, if it had not recovered would be lost to the atmosphere, polluting the environment and affecting human health [2].

CONCLUSIONS

The transition to a Green Economy directly influences the competitiveness of both individual businesses and the competitiveness of the country as a whole.

The transition to an economic model environmentally friendly, low-carbon and efficient in terms of resource use is not only desirable, but also essential to maintaining and strengthening competitiveness and prosperity, protect the environment and implicitly health and welfare of the people.

Green Economic development is one of the top priorities declared recently by the Government of Moldova. The Association Agreement with the European Union expressly aims to ensure sustainable development and promoting the Green Economy in our country.

Although the transition to the Green Economy is declared as a priority for the competitive development of the Republic of Moldova, issues of the Green Economy, including SMEs involvement in environmental issues today are virtually unexplored, and the policy, which aims at developing and supporting SMEs, is not harmonized with the environmental policy.

In order to attract the attention of many SMEs on environmental activity, and some of them to involve directly in the development of Green Economy, the Government, introduced a new priority policy direction 8. "Green Economy for SMEs" in the Action Plan for the period 2015-2017 on the implementation of the SME Sector Development Strategy for 2012-2020, starting in 2016.

The central role that would facilitate the companies transition to a Green Economy rests with the public sector and local authorities.

For a transition to a Green Economy it is extremely important that efforts of promoting the activity of green SMEs to be directed to several main directions:

- 1) *energy efficiency*, which means implementation of measures that would allow optimizing the relationship between the amount of energy and products / services obtained;
- 2) *reducing energy consumption*;
- 3) *reducing pollution and carbon emissions*;
- 4) *providing better information to the private sector*, through the organization of round tables and seminars for information on Green Economy, sharing best practices and development of training;
- 5) *access to financing*, which means that it is essential to ensure the availability of funds through the development and implementation of innovative instruments for financial support of green SMEs, attracting financial assistance in the form of loans and grants offered by national and international organizations for SMEs development of green products, etc.

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CREATION OF INNOVATIVE CLUSTERS IN GREECE: THE GENERAL SECRETARIAT FOR RESEARCH AND TECHNOLOGY – GSRT – APPROACH

ABSTRACT

Many countries all over the world have developed cluster policies and programmes to enhance the impact of their research and innovation policies. Clusters provide governments with an excellent opportunity to address social and economic challenges through business development and innovation support programmes. However, clusters have to be considered as a tool not as an objective in itself.

“The Community Framework for State Aid for Research and Development and Innovation”, defines innovation clusters as “groupings of independent undertakings, operating in a particular sector and region and designed to stimulate innovative activity by promoting intensive interactions, sharing of facilities and exchange of knowledge and expertise and by contributing effectively to technology transfer, networking and information dissemination among the undertakings in the cluster”.

The mi-Cluster is the first innovation cluster in Greece since 2006. It has geographical concentration and shares common premises at the Microelectronic Innovation Centre in Athens. It implements the Corallia business model. The Corallia Clusters Initiative is a well-organized, systematic, strategic (with long-term scope) national cluster initiative.

General Secretariat for Research and Technology (GSRT) in the framework of National Strategic Reference Framework 2007-2014, implemented a three phase cluster development program and by 2009, there were more than 150 members involved.

There is an ongoing evaluation process by GSRT, including consultation with stakeholders, for defining the next **day for clusters and the role of the state, within the strategies of smart specialization**.

Keywords: cluster, technology transfer, innovation policies, smart specialization

JEL Classification: L1, O1, O2, O4

CLUSTERS AND CLUSTER POLICIES

1 Assessment of Cluster Policies applied in Greece

Greek cluster policies developed from the second half of the 1990s, predominantly through research and academic initiatives and by an attempt of the State to replicate industrial policies of other more advanced countries rather than in response to the needs of businesses, sectors or regions.

The General Secretariat for Industry [1] (GSI) launched the first policy initiative based on a large-scale study "The Future of Greek Industry" that was conducted from 1994-97. The study concluded that there was a potential for establishing 19 clusters in various Greek industrial sectors, an estimate that proved over-

optimistic in practice. Neither the first call launched in 1997 under the Community Initiative for SMEs nor a second call via the OP for Industry resulted in a cluster worth mentioning.

Despite this first failed attempt, the GSI pursued the effort under the OP Competitiveness [2], in 2003, through the call 'Promoting Industrial SMEs networking (clustering)'. Even though the call was well-intentioned, it adopted cumbersome and bureaucratic pre-conditions and restrictions both on the definition of a cluster and the eligibility of costs that made it unattractive. The response was very poor: only three proposals were approved and only one took off. The GSI also announced in 2003 the call "Strengthening Environmental Networks" for the promotion of entrepreneurship in environment-related sectors. Two proposals were co-funded (the call procedures were similarly bureaucratic) but only one project was completed without managing to create even a rudimentary cluster or network.

An attempt was also made in a leading Greek sector, tourism and hospitality, with the aim to build clusters on the already successful businesses of the sector. The call "Promotion of Networking in Tourism SMEs (clustering)" was opened in 2005 and received proposals from only four small clusters. By the end of the co-funding period none of them developed to be considered a good practice and the intervention was unable to either build on success or to exploit the strengths of the sector.

In short, up to 2005, the results of Greek cluster policy can be considered far from satisfactory: none of the funded clusters developed a high-visibility nor provided a national model to follow. Some of the factors that led the policies to fail were:

- the design followed an authoritarian top-down approach;
- the calls did not differ significantly from traditional business state aid measures, and stringent requirements and restrictions placed constraints on the operation and development of a cluster;
- most Greek companies were not ready for strategic collaboration with 'co-opetitors' and the calls were not preceded by sufficient 'ground-work' (seminars, workshops, special meetings to present good practices to candidates, etc);
- limited emphasis was placed on innovation and the connection with academic and research institutes and policy-makers generally failed to grasp the necessity of the triple-helix;
- the role of the cluster facilitator was underestimated and the calls requested the facilitator to become a legal entity for purely administrative reasons;
- the calls did not require evidence of prior cooperation between, at least some, cluster members or the pre-existence of at least an embryonic network;
- the calls prohibited the participation of large enterprises that in many cases are crucial factors for the formation of clusters;
- the calls did not consider that clusters have various integration levels which correspond to different stages of maturity and therefore require a step by step approach, with intermediate control gates and labelling levels;
- and finally the monitoring framework adopted was similar to traditional state aid calls, with no metrics related to clustering effects and results.

Overall, the policy was based on an assumption that a single call could develop flourishing networks and clusters instead of establishing a holistic framework for the deployment of cluster policies with a long term strategy. In the meantime, already since late 2003 and in view of the 2004 revision of the OP Competitiveness, policies for innovation started to somehow alter. It became evident that:

- the knowledge economy requires constant interaction of innovation actors;
- policies need to support specialisations and concentrations;
- calls need fermentation, exchange of views, technical sessions, workshops, presentations and other preparations for the initiation and maturation of collaboration of candidate participants on joint initiatives.

The first action to assist the formation and emergence of clusters, in this respect, was the Regional Innovation Poles [3], initiated by the General Secretariat of Research and Technology [4] (GSRT). The call

preparation started in mid-2003 with series of meetings and discussions with technology parks, research institutes and business representatives. The discussions were complemented with the study “Regional Innovation Poles” that was delivered in 2004, recording the research, technological and productive tissue of the Greek regions and proposing an implementation plan and call bearing in mind the structural funds framework. Five regional innovation pole projects were selected in 2007, after a competitive tender aiming primarily to underpin partnerships between research institutions and businesses of the same region, to focus on one or two themes per region, to launch technological platforms where diverse stakeholders would agree on a common vision for the development of technologies that concern them and to create a critical mass that would later evolve into clusters.

At the same time a second action towards a similar scope was the Thessaloniki Innovation Zone [5] also instigated by GSRT. The aim was to develop innovation and high-tech activities in an area of Thessaloniki, where there is high concentration of universities, research laboratories, technology parks, incubators and businesses. The strategy of the Thessaloniki Innovation Zone soon focused on selected themes that would eventually lead to the creation of a critical mass of companies and clusters.

Both these actions started with high expectations but delivered mediocre results and failed to develop into a recognised cluster. The development of the poles and the zone:

- stagnated due to the failure of the stakeholders, including public administration, to embrace the projects, mobilise the necessary resources and create the necessary regulatory environment for the concepts to become functional;
- had an overly top-down-driven approach and constraints that hindered entrepreneurship;
- had few planning/maturing activities and did not set out clear long-term measurable objectives and roadmap;
- were also hit hard by lack of long-term commitments, cash flow issues, central and regional public services bureaucracy and poor management.

In 2004, as policy makers became concerned about the potential for Greek cluster policies, a new approach was backed by the Research and Innovation Centre Athena [6] and the most promising Greek-based high-tech industries. The original vision of the founders was to establish R&D centres of excellence that would attract investments in industrial sectors where a competitive advantage exists. The aim was to reverse the accelerating brain-drain, to reinforce entrepreneurship and to underpin the design and fabrication of products based on “Innovation Made in Greece” for the world markets, in a similar fashion to what Taiwan, Korea and Israel have achieved.

Early in 2005, after a broad consultation with a significant number of stakeholders, the vision found support from both the public and private sector. The failures/lessons learnt from previous attempts were recognised after a study of worldwide best practices, a SWOT analysis and the elucidation of the specificities of the Greek research and industrial fabric that was delivered early in 2006 (phase-0). The vision, strategy and implementation track took form in the Hellenic Technology Clusters Initiative (HTCI) that was established in 2006, and renamed soon after to Corallia [7], as an independent unit of the Research and Innovation Centre Athena.

The Ministry of Development mandated Corallia in 2006 [8] to design and manage a programme that would create a favourable environment for underpinning entrepreneurship and innovation and fostering emerging technologies in exports-oriented and high-technology market segments where Greece had the capacity to build a sustainable innovation ecosystem and could attain a worldwide competitive advantage and yield world-class results.

Due to the previous failures, the policy makers decided to implement initially a small-scale pilot programme in one of the most promising sectors. In the period 2006-2008, the pilot cluster programme (phase-1) implemented within the OP Competitiveness, yielded very positive results through the establishment and expansion of the nano/microelectronics based systems and applications cluster (mi-Cluster) and the milestones achieved by its cluster members such as double-digit growth rates in turnover (+59%), exports (+109%), employment (+92%) and patent applications (+137%). In the course of the pilot programme,

Corallia inaugurated in 2007 the Athens InnoCenter (Marousi, Attica), a thematic building that concentrated the mi-Cluster members, creating a reference point for the microelectronics industry and optimising the geographic focus of the cluster.

In 2008, Corallia started the implementation of one of the most important interventions for the development of clusters in Greece, the “Phase-2 Microelectronics” programme, within the OP Competitiveness and Entrepreneurship [9], including a dedicated measure covering activities from the call for proposals to the monitoring of granted projects. The results were noteworthy: in the period 2009-2011 the cluster companies exhibited an estimated growth rate of turnover +145%, employment +70%, exports +108% and investments by private investors +369%; patent applications grew by 76% (a total of more than 60 applications); while joint industry-academia diploma and doctoral thesis grew by 160% (80 in total). Within this intervention, in 2011, Corallia established one more Innovation Centre, the Patras InnoHub (Kastritsi, Western Greece) to concentrate the mi-Cluster members in Western Greece.

The main features of the new approach can be summarised as follows:

- based on international good practices;
- deployed a clear bottom-up, customized, phased and holistic approach;
- put strong emphasis on innovation and exports’ orientation;
- focused on talent & people and niche market orientation;
- insisted in a strong and sustainable cluster facilitator;
- set a long-term strategy that outperform short-term gains;
- determined long-term goals and integrated control gates with metrics;
- deployed a plan-do-check-act management method for the control and continuous improvement;
- accepted no more than zero-tolerance to nepotism, corruption, discrimination;
- designed the program with eligibility of actions based on needs of sectors instead of limitations of funding frameworks;
- invested in good publicity reaching out worldwide.

By 2008, Corallia had been widely recognised in Greece for its impact and had started its globalisation journey, with early recognition at European and global level. This rapid and significant success rejuvenated the interest of policy makers and created a favourable climate for cluster policies.

The heads of the Ministry of Development and the Managing Authority of the OP Competitiveness and Entrepreneurship, the GSRT and the GSI looked again into the implementation of cluster policies following the new paradigm, organised fermentation events, meetings with stakeholders, participated in international events for clusters and special missions abroad to visit successful clusters. This led to

- a two-step call by GSI in May 2011: The call, entitled “Clusters”, even though improved in design from previous GSI calls, still had some stringent requirements and restrictions. Most importantly, however, was the fact that even though the first step call gathered considerable interest and was evaluated swiftly, GSI never announced the second step of the call. Indeed, the GSI never informed the proposers of the reasons for discontinuing the process, damaging the trust that had begun to be built around the government strategy on cluster policies;
- a June 2011 update of the Incentives Investment Law (3908/2011) [10] incorporated a special chapter for clusters, is another rather imperfect example of cluster policies. Mature clusters did not apply and the call received only one proposal (no official announcement has been made). The chapter on clusters is currently open for a new consultation to receive feedback from stakeholders for improvement;
- a two-step call by GSRT in September 2011 [11]: the call, entitled "Establishing Innovative Clusters - A Greek Product, One Market: The Planet", had a good design, received 21 proposals in the first round announced in September 2011, of which the nine highest ranked proposals were asked to submit a final proposal to in September 2012. While some improvements could be made to the design of this call, the most important deficiency has been the extremely long time lag for evaluating

proposals (more than 18 months) which creates a concern about the capacity to follow up with the implementation of the programme. Nonetheless, this initiative signified the adoption of cluster development policies at a wide National level. The follow-up cluster development phase is expected to be launched by GSRT in early 2016, within the new programming period 2014-2020.

2. Support to Innovation Clusters

Cluster initiatives are flourishing all over Europe in the fields of research and innovation, regional policy, enterprise and industry. There is a global trend for geographical and thematic focus, developing synergies and networking in the triple helix model.

Based on the structure of the Greek productive sector, of >90% SMES, clustering initiatives could be a suitable tool to achieve economies of scale and scope, following the European Innovation Strategy.

The Micro-electronics cluster (Corallia), initiated by 2005, worked as a good practice for GSRT to plan an action (2011) to support the creation of innovation clusters in further sectors (co-funded by European Regional Development Fund).

The Corallia Clusters Initiative -or in short Corallia- is a Unit of the Research and Innovation Centre Athena, established in Greece for the management and development of Innovation Clusters. In those clusters, Corallia acts as Cluster Facilitator implementing targeted support actions, which involve all innovation ecosystem actors.

In 2014, Corallia became a full member of the world-leading network EBN [12], was awarded with the EU|BIC certificate and internationally recognised as a quality-certified business support organisation. Corallia being an EBN qualified BIC has access and closely collaborates with a large Pan-European ecosystem of around 150 quality-certified BICs and 100 other organisations that support the development and growth of innovative entrepreneurs, start-ups and SMEs.

Corallia is also one of the founding members of three European Strategic Cluster Partnerships in the fields of semiconductors, space and creative industries, that are established under an initiative supported by the European Commission. They implement a number of coordinated support actions in order to unleash the innovative capacity of SMEs, improve their performance and increase their competitiveness as well as nurture cross-sectoral innovation through the development of new industrial competitive value-chains based on the combination of competences of SMEs.

Corallia is awarded with an ISO 9001:2008 certificate by TUV NORD CERT for the management programmes, measures and actions as final beneficiary of Operational Programmes, the design and maturing of programmes and projects, the schedule, implementation, monitoring, control and validation of project deliverables and the management of State Aid Programmes. Corallia was also awarded with the Bronze Label of Cluster Management Excellence for the mi-Cluster (2011), si-Cluster (2013) and gi-Cluster (2013).

GSRT's CALL "ESTABLISHING INNOVATIVE CLUSTERS – A GREEK PRODUCT, ONE MARKET: THE PLANET"

GSRT launched a new Action to support the creation of innovation clusters (co-funded by European Regional Development Fund) in 2011.

1. New Cluster Initiatives

Call for expressions of interest: (Step 1), launched September 2011.

The Action aimed to develop in Greece innovation clusters in thematic areas or economic activity sectors with a competitive advantage for the country. The goal of the innovation clusters was to develop and take advantage of high value-added, internationally recognised and competitive innovative products and services. The members of the network coordinated and represented by the proposed Facilitator, principal catalyst for the innovation clusters.

The Call was Open to all sectors/ thematic fields and to all Greek regions and was addressed to existing networks of undertakings, research / academic organisations and other public / private-sector support organisations with potential for evolving into innovation clusters. Each network, prior to the submission was not required to assume any specific legal form and should included at least 10 undertakings

(of which at least 8 should be SMEs) and at least one research/academic organisation based in Greece. The Proposals examined by the following criteria:

- Composition and maturity of the network.
- Documentation of the clustering needs.
- Completeness and reliability of the Thematic and geographical focus.
- Degree of innovation of the emerging cluster.
- Suitability of the Facilitator.
- Strategy of the emerging cluster in relation to market dynamics in the addressed market, benefit for the national economy, potential competitive advantage and penetration in international markets.

The networks whose proposals were evaluated as worthy, invited at a next step, to submit a fully-fledged business plan (according to a specific template), in the framework of a relevant Call for Proposals.

Evaluation Results Step 1 (January 2012)

Undertaken by Evaluation Committees composed of five members, scientists from Greece or abroad, with specialization and experience in innovation clusters, know-how transfer and knowledge-based entrepreneurship in general, 23 proposals submitted (October 2011- January 2012), 9 proposals selected to proceed to Step 2, in thematic areas of Health & Biomedicine, IT, Communications & Knowledge-intensive Services, Energy & Environment, Materials & Chemicals.

Call for pilot operation phase / submission of Business Plans (2nd Step), launched July 2012:

The nine (9) selected applicants invited to submit a 5-years business plan for the cluster as a whole, as well as individual proposals for the facilitator and each participating enterprise. The Call remained open to any of the nine (9) networks wishing to expand the list of their members. The proposals comprised the following:

A full-scale 5-year business plan for the implementation of the cluster's pilot operation phase and subsequent development and evolution.

- Funding plans of the enterprises participating in the cluster at the time of submission of the proposal.
- Aid/infrastructure project of the Facilitator.

The Cluster members should number a minimum of ten (10) autonomous enterprises, of which at least eight (8) should be SMEs. Eligible activities for funding, were:

Consultancy services for enterprise reorganisation and modernisation.

- Innovation advisory services and innovation support services.
- Registration of industrial property rights.
- Participation in fairs.
- Training (general and specific).
- Remodelling of spaces and purchase of equipment and software.
- Relocation/collocation in share infrastructure.
- Experimental development / demonstration.
- Aid to young and to already existing very small innovative enterprises for the development of prototypes.

Identification	Project Title	Sector	Region	Facilitator
118	Hellenic Biocluster	Health/Bio medicine	Attica	FORTH/PRAXI
74	Hellenic Space Technologies and Applications Cluster	Space Technologies	Attica	Corallia/RC Athina
76	Innovative Gaming Technologies and Creative Content Cluster	ICT	Attica	Corallia/RC Athina
104	Chorus Cluster for Green Energy	Energy	Central Macedonia	Centre for Research and

				Technology Hellas
105	Hellenic Photonic Cluster	Photonics	Attica	FORTH/PRAXI
136	Life Sciences Cluster in Greece and South East Europe – BIONIAN Cluster	Health/Bio-medicine	Attica	Non For Profit (Civil Enterprise for B/T, Bio Science and Culture
77	Innovation Cluster for Development of Organic Electronics Industry in Greece	ICT/Electronics	Central Macedonia	University of Thessaloniki
125	Hydrogen-Fuel Cells Energy	Energy	Western Greece	Patras Science Park
132	Production Systems and Technologies /PV Smart Installing	Energy	Western Greece	University of Patras

Table 1: The nine (9) proposals selected/ invited to 2nd Step

Evaluation Results/ 2nd Step (January 2013)

Undertaken by Evaluation Committees composed of five members, scientists from Greece or abroad. Eight (8) proposals submitted - results announced by January 2013 - 4 proposals selected for funding. The Proposals were evaluated in three (3) successive stages.

Stage 1: Preliminary check / compliance with the requirements.

Stage 2: Evaluation of the business plan: Composition and maturity of the cluster, administrative and organisational structure, degree of innovation and extroversion, financing plan, cluster development strategy – impacts / Performance Indicators.

Stage 3: Evaluation of the technical-economic information i) Facilitator: Feasibility of the proposed activities, Clarity of the technical scope and deliverables, Suitability of the budget, justification of the costs required ii) Enterprises: Reliability / innovative character, Feasibility of the proposed activities, linkage to the cluster's objectives, Clarity of the technical scope and deliverables, Qualifications and experience of the staff, Suitability of the budget, justification of the costs required.

The final proposals awarded for funding (27/2/2013):

- Civil enterprise for B/T, Biosciences and Culture, BIONIAN,
- Corallia cluster initiative/R.C. Athena, si-cluster,
- Corallia cluster initiative/RC Athena, gi-cluster,
- CERTH/CPERI/APTL, Chorus cluster

The level of public funding for the implementation of a 2-years pilot program of joint activities, varied from 15% to 100%, depending on the nature of the Facilitator (public or private), and the type of expenditure required. Three types of financial support applied : State aid, Public funding of non-economic activities, De minimis aid. The total budget for public funding/aid €. 15,300,000. Expected Project completion: 31/12/2015.

THE ACTIVE CLUSTERS SUPPORTED BY mi-Cluster

Mission and Vision

The Nano/Microelectronics-based Systems and Applications Cluster (mi-Cluster) brings together highly specialised companies and public research institutions with the vision: “to create a world class cluster on nano/microelectronics-based systems and applications” and with the mission of: “establishing and promoting Greece as a significant and competitive global provider of nano/microelectronics technologies and

applications” that will open new markets, foster new international collaborations for its’ members, and attract Direct Foreign Investment from major global industry leaders. mi-Cluster is a high-tech innovation cluster with the following characteristics that have proven to accelerate growth and success:

- Is knowledge-intensive, focusing on innovative, state-of-the-art, highly competitive products.
- Has strong exports orientation, boosting the competitiveness of Greece in world markets.
- Possesses success stories of international calibre, capable of convincing potential investors that Greece has world-class potential boosted by a “can-do” mentality.
- Comprises mostly of SMEs, including start-ups and spin-offs, benefiting the most from supportive activities spanning under the cluster umbrella.
- Exhibits pre-existing/pre-cluster formation (“bottom-up” rather than “top-down” approach), in order for participating members to recognize the importance of clustering in their value-chain operations and reach critical mass to pursue larger projects.
- Leverages the top-tier Hellenic human capital, constituting the pillars that support competitiveness, entrepreneurship and innovation in the clustering ecosystem

Main activity areas of the cluster organisation

mi-Cluster main activity areas include:

1. Has created and manages Facilities / Innovation Centers in Greece (Athens, Patras) in order to boost geographic concentration and increase synergies, economies of scale and scope.
2. Collaboration Domestic and international initiation and accompanying of collaborative projects between companies and Research Institutions
3. Training/Coaching/Mentoring Business Acceleration Program, workshops and seminars for IP Management, patent filing, new technical skills, coaching executives with a focus on start-ups, ect.
4. Assists its members in attracting Foreign Direct Investment, VCs, BAs
5. Organizing international business delegations for international fairs, study trips, roadshows, B2B match-making, international business development, support for participation in EU R&D projects
6. Marketing & PR Promotion of Youth Entrepreneurship Acceleration Program (YEAP) to attract young people for the industry, cluster related PR, newsletters, website, networking days, Career Days, social responsibility events, branding

Legal Form

The mi-Cluster is the first innovation cluster in Greece and since its establishment has demonstrated a continuous development. By the end of 2012, mi-Cluster consisted of 130 members (small, medium and large companies, academic labs and research institutes, science parks, etc.) from all over Greece. Specifically, it consists of 75 large and small companies, 40 members that represent academia (universities, research centers, laboratories etc), and 17 other institutions necessary for the support of the whole ecosystem (services providers, financial institutions, associations, infrastructure providers, media). Currently mi-Cluster has no explicit legal form.

si-Cluster

Mission and Vision

The vision of the Hellenic Space Technologies and Applications Cluster is to create a world class cluster on space technologies and applications. To serve this vision the following are the main strategic directions and targets:

- Creation, at international level, of an image of industrial and scientific excellence in specific technological and application fields while respecting the different missions, roles and responsibilities of industry, academia as well as the end-users.
- Development of the necessary prerequisites in order to have a highly competitive, innovative and transparent economy. This can be supported through the innovation provided by the space related technologies and investments from the private as well as the governmental organizations.

- Development of a compensative and flexible mechanism which will be able to absorb, retain and further enhance of the intellectual capital developed by the local space industry.
- Full exploitation of the services provided today by the modern space technology, emphasizing on the security and safety of the citizens. The provided services include disaster monitor, border surveillance and control, weather forecast, environmental disaster monitoring, smart citizen's transportation, electric power transfer, services for the reduction of the digital divide as well as high bandwidth internet services.
- The integration of its scientific and industrial communities, consistent with the proper role of each community in the different phases of the value chain associated to navigation (e.g. EGNOS & GALILEO), telecom, earth observation, especially those with a high added value for the industry and thus for the national economy.
- The integration of all space related programs of different ministries and governmental organizations (e.g. Ministry of Defence, Ministry of Transportation, Ministry of Education, General Secretariat for Research & Development, etc) in order to maximize economies of scale emphasizing on specific technological areas of national interest.
- Development of the appropriate research culture in the local space industry in order to closely monitor related developments in technologies and applications in global scale.

si-Cluster brings together renowned and highly specialised companies and public research organisations with the following common mission: "Aiming to develop Greece as a leading region for Space Technologies and Applications with a high international visibility, capable of developing and attracting high impact research, development and innovation and business activities, si-Cluster brings together private and public actors in the field of space technologies and applications and provides an efficient framework around themes of common interest in order to reinforce the competitive advantage of its members".

Legal Form

The si-Cluster was established in 2008 following a joint endeavour on behalf of a significant part of the Hellenic industry activated in this field with the formation of the Hellenic Association of Space Industry (HASI), followed with the establishment of cooperation with the Corallia Clusters Initiative in 2009.

gi-Cluster

Mission and Vision

gi-Cluster was established early in 2012 with the mission to become a fully functional innovation and business ecosystem with substantial international market share, which will be able to support viable industry growth and competitiveness, while gradually evolving into a world-class cluster and contribute towards elevating Greece in the global competitiveness chart.

Main activity areas of the cluster organisation

The cluster facilitator of gi-Cluster, is pursuing 6 key areas of activities:

- **Research & Networking;** involves information gathering, publishing cluster reports, creating websites, bridging the Hellenic with the global industry and promoting networking. On that respect, Corallia places its focus on information sharing among cluster members, raising awareness about the cluster in several different audiences and gathering information about the cluster's progress over time.
- **Policy Action;** involves improving the microeconomic conditions for business, through upgrading the physical infrastructure and enhancing the legal and institutional setting. On this ground, Corallia addresses particularly the development of a common building infrastructure for co-location of cluster members.
- **Commercial cooperation;** includes collective purchasing or sharing of services (such as business assistance, market intelligence, and export promotion) to reduce costs. Corallia targets to successfully

network firms with other innovation actors, from either external or internal markets, towards the establishment of synergies and cooperation.

- Education & Training; Corallia organises both management training programs and sector-specific training for the cluster members in a systematic manner.
- Innovation and Technology; Corallia supports common R&D projects among the cluster members in order to enhance innovation and research excellence and cooperation between businesses and academic/research organisations
- Cluster expansion; includes the development of a strong branding identity for the gi-Cluster, as a vital element for cluster expansion (extroversion), while combining the provision of business and management related assistance through the operation of one-stop-shop for entrepreneurs.

CERTH/CPERI/APTL – CHORUS

CLUSTER FOR GREEN ENERGY

Mission Statement

The CHORUS Cluster concept and vision are to activate a critical number of companies, located in the broader area of Central Macedonia Region, and to create synergies among them with the aim of establishing an arsenal of renewable/‘zero or low carbon footprint’ technologies, transformable into specific commercial products that will define the identity of the Region in the future.

These technologies included very well balanced approaches that are either in a relatively mature (i.e. ready for commercialization) stage or in a pre-market state of development. In all cases, the CHORUS strategic choices are based on products-to-be that in the mid-term (i.e. 5 years) horizon will result to the creation of markets that are currently at their embryonic or virtually non-existing stage. At the same time, the Cluster aims to fully exploit the substantial experience, expertise and production capacities of its members regarding clean energy-related markets and products. The complementarities of the core-members’ activities are such that synergies are in most cases obvious and clearly promote the ‘strength in unity’ approach.

The Cluster Members

The CHORUS Cluster comprises 21 members and the participating organizations were chosen with the rationale of being product/market developers in their vast majority. The Facilitator is an experienced knowledge transfer organization with long-term experience in the implementation of applied research projects. The consortium also includes a Venture Capital company that will be actively involved in the process of required capital raising to be invested in selected developed products, especially after the initial 2-year period of CHORUS operation.

The Technology, Innovation and Business Model

The specific products of the CHORUS Cluster, as defined in its establishment stage, are:

1. Autonomous waste-to-energy station
2. Smart retrofit automotive exhaust aftertreatment systems
3. Recharging station for electric vehicles
4. Autonomous solar refuelling station
5. Low-carbon-footprint cement processor

During the Cluster operation, the inclusion of new emerging products/technologies was also considered. The process of the CHORUS products selection followed the “low-hanging fruits” strategy where candidate products fulfil certain criteria:

- They encompass a highly innovative character.

- There is a significant, already developed, scientific background and technological know-how by the Research partners and/or the involved companies.
- They demonstrate strong clean energy potential.
- They possess certain advantages with respect to market penetration within the local and/or the international energy-related business environment

FUTURE PERSPECTIVES / CONCLUSIONS

New Programming Period 2014-20

The objective of smart specialization strategy (RIS3) is the focused productive reconstruction of the country having as main pillar the research, the technological development and the innovation in order to mitigate regional disparities and to create sustainable employment with respect for people and society, environment and culture. Also, the strategy of smart specialization is expected to contribute to the creation of stable employment relationships and more generally to the formation of the appropriate conditions for the effective exploitation of the country's workforce.

Priority fields in National Smart Specialization Strategy and Complementarities with regional RIS3

The main conclusions resulting from the analysis of regional RIS are the following:

- The national strategy has to play a multiple role composing regional impulses with greater cooperation actions at national level.
- Regions are called for the first time to design and fund RTDI actions and to develop their own short and long-term strategies to enhance innovation.
- All regions must continue to actively participate in an ongoing pursuit of policy priorities and developing each one its own structures and procedures for data collection and ongoing consultation.
- In addition to the above, it is important that the process of entrepreneurial discovery be combined with suggested policy scenarios at regional or national level.
- Finally, the research infrastructures should encourage their entrepreneurial potential by collaborating more with the business sector and by offering new ideas.

A correlation between the regional and national priorities highlights the following remarks:

- Out of the eight national priority fields, Agrofood, Tourism-Culture, Materials and Life Sciences & Health /Medicine are vertical priorities at regional level with direct needs for the relevant private sector. ICT, Energy, Transport and Environment, are more supporting areas for entrepreneurship and innovation for most regions.
- Only three regions reveal as their priority to support entrepreneurship (and especially young entrepreneurship) through the collaboration between academia and the private sector: Attica, Epirus and Crete. Relevant policy measures should be promoted by other regions as well that host RDTI infrastructure. For example, the model of Crete may well help the model of Epirus and the opposite and central planning should play its role as a facilitator.

The RIS3 actions were designed in order to cover the entire range of pre-competitive stages of creating new products, services or processes in order to overcome the so-called "death valley" i.e. to survive and expand to the critical stages after their establishment. Public funding decreases as the chain goes from research to the research results exploitation, to the establishment of new businesses and clusters, and to the enhancement of extroversions and integration in international value chains.

There are extensive thoughts and concerns about the next day of the cluster and the role of the state, within the strategies of smart specialization. New criteria for international cooperation and networking are setting realistic and measurable objectives both qualitative and quantitative, for the extension of state aid/public funding of existing and new clusters for the establishment of a critical mass of their activities.

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Withered leaves
Photo © by Antal Szabó

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**ANALYSIS OF FINANCIAL SOLVENCY OF MEDIUM-SIZED ENTERPRISES IN
THE REPUBLIC OF SERBIA****ABSTRACT**

The purpose of this paper is the evaluation of financial solvency of medium-sized enterprises in the Republic of Serbia. The subject of research is the data disclosed in the official financial reports of all medium-sized enterprises registered on the territory of the Republic of Serbia. The research covers the period between the years 2010 and 2014, providing temporal comparability and insight into the dynamics of the basic indicators of financial solvency. The financial solvency of medium-sized enterprises was measured on the basis of indicators of the liquidity ratio and the solvency ratio. The emphasis was on medium-sized enterprises since they represent the backbone of the activity of the SME sector as well as the entire Serbian economy. Applying the method of financial analysis the results showed that the medium-sized enterprises did not have a sufficient amount of liquid assets (cash, short-term securities, receivables) at their disposal, however they had sufficient short-term assets (cash, short-term securities, receivables and inventories) for covering short-term liabilities.

Key words: medium-sized enterprises, Republic of Serbia, liquidity, revolving funds, SME, solvency

JEL Classification: M21, L26

1. INTRODUCTION

The competitive sector of small and medium-sized enterprises (SME) has a significant impact on the growth and development of countries in transition. Successful examples of the economically most developed countries in Europe and the Balkans, where the process of transition has been completed successfully, implicate the significance of this sector for the future economic development of the Republic of Serbia. The characteristics of SMEs, such as flexibility and responsiveness to rapidly growing demands of modern markets, point to the significance of these companies for the national strategic documents of economic growth and public policies. (Đuričin S., Pantic O., 2013, page 617). Over the past few years, a large number of documents which analyse the current state of the SME sector and the direction of its future development were published. Consequently, the year 2016 was announced as the “Year of Entrepreneurship and Stimulation of the development of SMEs” in the Republic of Serbia when the institutional changes simplifying business operation and enabling easier access to financial resources were implemented. “The Strategy for support of the development of small and medium-sized enterprises, entrepreneurship and competitiveness for period from the year 2015 to year 2010” represents the latest strategic document of the Serbian Government analysing the former development of this sector, as well as the goals and instruments which will be applied by the institutions in Serbia to enable the SME sector a higher level of development from the development so far.

The analysis in this paper is directed at the financial solvency of medium-sized enterprises in the Republic of Serbia which represent the backbone of the SME sector. The analysis consists of three chapters. The first chapter covers the basic characteristics of medium-sized enterprises in the Republic of Serbia over the period between years 2010 and 2014, their role in the economic development, the significance in the process of European integrations, but also their role in the development of the SME sector. There are several

indicators which were monitored: the number of medium-sized enterprises participating in the economy and the SME sector, the number of hired employees, the turnover, value added to factor costs, import and export of goods, the level of basic, domestic and foreign capital. With the combination of these indicators we can conclude that the position of medium-sized enterprises is more favourable in comparison with micro and small enterprises, and that their impact on the development of SME is notable. The second chapter covers the methodological analysis of financial solvency of medium-sized enterprises through liquidity and solvency as two of the most important indicators. The companies were regarded as liquid if they were able to settle financial liabilities in full amount and on time without the change in the scope and structure of revolving funds participating in the operation of current business activities. Solvency of medium-sized enterprises registered on the territory of the Republic of Serbia is evaluated on the basis of the ratio between the operating assets and total liabilities. The third chapter covers the application of the financial analysis method in official financial reports of medium-sized enterprises in Serbia over the period between years 2010 and 2014 in order to determine the level of liquid assets and the potential of covering the company's short-term liabilities.

2. THE ROLE AND SIGNIFICANCE OF MEDIUM-SIZED ENTERPRISES

The development of modern economy is characterised by a dynamic process of globalization and continuing change in the external surroundings of economic entities, the creation of a unique market and the development of global competition. Consequentially, an extensive use of new discoveries and innovations in the business operation of economic entities has an impact on their existence and the development in such dynamic economic surroundings. Business entities capable of answering to modern market demands due to flexibility and an intense possibility for introduction of innovations to their business processes make up the sector of micro, small and medium enterprises (SMEs). Multiple contributions of small and medium-sized enterprises have an effect on the rise of economic competitiveness through innovations, rise of the employment rate due to increasing needs for workforce and stimulation of the export of competitive modern market goods. Therefore, the size of the company can be viewed as an important factor of the economic development of a country in transition, such as the Republic of Serbia. The abilities of small and medium-sized enterprises to innovate the business processes and quickly answer to the demands of customers and market in transitioning countries are more significant than the advantages of large enterprises which are primarily focused on the economy of scale and a larger availability of financial, material and human resources.

The significance of the SME in the Republic of Serbia can be viewed on a local level, as well as the national level. Operating locally, the SMEs create the opportunity for employing low-skilled workers which lost their jobs during the privatisation process, women who are traditionally less present in the employment sector and the young, while simultaneously fulfilling the needs of customers belonging to specific market niches. Consequently, the decline in poverty which is achieved through a rise in the employment rate and the standard of living of the population is especially significant for the Republic of Serbia on a national level (Erić D., Beraha I., Đurićin S. et al, 2012, page 21). At the same time, the significance of the economic development of the Republic of Serbia represents an interrelation and cooperation between large economic entities and the SME sector. In the largest number of cases, the SMEs represent important providers of the production input and business processes of large enterprises, especially in the processing and manufacturing industry. (Pantić O., Filimonović D., 2013. page 576).

Medium-sized enterprises in Serbia represent a part of the SME sector providing an important contribution towards the economic growth. Even though they differ from micro and small enterprises in the organizational structure and the style of management, they have an equal significance in the progress of the Republic of Serbia on its road towards European integration and economic development. Compared to the small enterprises, the medium-sized enterprises in Serbia are distinguished by a more complex organizational structure since they employ a larger number of workers so the process of business organization is therefore more compound. Micro and small enterprises in Serbia have an informal organizational structure traditionally composed of a smaller number of employees which are mainly hired on the basis of family ties and bonds of friendship and where the decision process is being run by only one person – the company owner. In medium-

sized enterprises the managing is more complex, there is a clear differentiation between the jobs and positions, as well as delegation of responsibility and the decision process. Even though medium-sized enterprises have access to larger capital and income than the small enterprises, they encounter the same problems of long-term financing and business development as the small enterprises.

According to the available data from the Statistical Office of the Republic of Serbia, there were 93,150 enterprises operating in Serbia in year 2014. Of those companies, 87.3% belong to the category of micro enterprises, 9.87% i.e. 9,198 companies belong in the category of small enterprises while 2.29% i.e. 2,131 companies make up medium-sized enterprises. The largest number of enterprises operate in the industry of Wholesale and retail trade, repair of motor vehicles and motorcycles (33,115), then in the Process industry (16,724) and the Sector of professional, scientific, innovation and technical activity (11,239). In year 2014, the largest number of medium-sized enterprises operated in the Manufacturing industry (825), then in the Wholesale and retail trade, repair of motor vehicles and motorcycles (359) and in Construction (180).

Table 1. The number of medium-sized enterprises according to the chosen industry between 2010-2014.

Republic of Serbia	Total	Manufacturing	Wholesale and retail trade, repair of motor vehicles and motorcycles	Construction
2010	2,257	882	317	208
2011	2,218	861	376	219
2012	2,142	834	353	199
2013	2,132	816	357	192
2014	2,131	825	359	180

Source: „Companies according to size and entrepreneurs in the Republic of Serbia, 2010-2014“, Statistical Office of the Republic of Serbia, year 2016.

Table 1 shows the number of medium-sized enterprises, according to the industries they are most present in. In year 2010 a total number of 2,257 medium-sized enterprises were noted, with 126 more companies than in year 2014. In year 2010, there were 882 enterprises operating in the Manufacturing industry, an insignificantly larger number compared to year 2014. In the Wholesale and retail trade, repair of motor vehicles and motorcycles and Construction industries the number of medium-sized enterprises didn't fluctuate greatly over the period in question.

The second indicator pointing to a development of the SME sector is the number of employees. There were 553,791 employees working in the SME sector in year 2014. From that number 147,641 worked in micro enterprises, 185,206 in small enterprises, while 220,944 employees worked in medium-sized enterprises. Over the observed period, from year 2010 to year 2014, a total number of employees working in medium-sized enterprises fell by 13,751 i.e. 6%. In year 2010 medium-sized enterprises hired 234,695 workers, respectively 220,944 workers in year 2014.

Table 2. The number of employees in medium-sized enterprises in relation to specific industries over the period between years 2010 and 2014

Republic of Serbia	Total	Manufacturing	Wholesale and retail trade, repair of motor vehicles and motorcycles	Construction
2010	234,695	93,141	38,103	21,895
2011	232,279	90,889	37,640	22,708
2012	224,223	88,390	35,277	20,943
2013	222,994	86,047	35,710	20,121
2014	220,944	86,685	35,904	18,724

Source: „Companies according to size and entrepreneurs in the Republic of Serbia, 2010-2014“, Statistical Office of the Republic of Serbia, year 2016.

Table 2 shows the number of employees in medium-sized enterprises in specific industries over the observed five year period. In year 2014, the largest number of employees worked in the Manufacturing industry (86,685 or 39.23%) which is 7% less compared to the year 2010. An employment decline was also noted in other industries.

The company turnover is one of the indicators pointing to the success of operation of the SME sector. The total turnover of the SME sector in year 2014 was 42,970mil EUR. Of that amount 11,622mil EUR was generated by small enterprises while 16,618mil EUR was generated by medium-sized enterprises. Over the observed five year period between the years 2010 and 2014, the total turnover of the SME in year 2014 grew by 9,956mil EUR compared to the year 2010. The increase in the turnover is also noted in medium-sized enterprises, from 13,606mil EUR in 2010 compared to 16,618mil EUR in 2014, i.e. by around 39%. The largest turnover in medium-sized enterprises was generated in the Manufacturing industry (5,730mil EUR), then the Wholesale and retail trade, repair of motor vehicles and motorcycles industry (4,969mil EUR) and the Supply of electricity, gas and steam industry (1,699mil EUR).

Value added to factor costs is also considered to be an indicator of the progress of economic entities in the Republic of Serbia. In year 2014 in the SME sector it amounted to 6,764mil EUR. Of that amount, 22.61% is the generated value added to factor costs in micro enterprises, 35.20% in small enterprises and 42.19% in medium-sized enterprises.

Table 3. Value added to factor costs in medium-sized enterprises in relation to specific industries, over the period between years 2010 and 2014 in EUR million

Republic of Serbia	Total	Manufacturing	Wholesale and retail trade, repair of motor vehicles and motorcycles	Construction
2010	2,535	926.11	486.96	265.08
2011	2,802.22	997.52	531.69	294.03
2012	2,846.11	1,103.62	534.90	264.03
2013	2,802.62	1,033.65	488.26	268.85
2014	2,853.44	1,090.96	466.75	252.02

Source: „Companies according to size and entrepreneurs in the Republic of Serbia, 2010-2014“, Statistical Office of the Republic of Serbia, year 2016.

Note: during the interpretation of result values expressed in RSD have been converted to EUR based on the yearly average currency exchange rate according to official data from the NBS

Over the observed period between years 2010 and 2014 the value added to factor costs in medium-sized enterprises grew by 28%. Medium-sized enterprises generated the largest value added to factory costs in the domain of the Manufacturing industry, where the largest increase was noted. Significant changes were not recorded in the other economic fields.

Foreign exchange trading of an economy has a great impact on the intensity and characteristics of the economic growth. In circumstances of the globalization of markets and competition, the foreign market activities largely determine the foundation of economic progress of the economy and its population, especially with the transitioning countries, such as Serbia. Foreign exchange trading of the SME sector therefore becomes an important element for the development not only of the national economy but also the companies themselves. The indicators pointing to elements of foreign exchange trading of the SME sector are the total value of import and export of goods as well as the number of import and export companies. The number of companies participating in the export of the Republic of Serbia in year 2010 from the SME sector was 10,634, while 11,297 micro, small and medium-sized enterprises participated in the year 2014. The total value of the

SME sector export to foreign markets in year 2010 was 3,234mil EUR, with an increase of around 50% in the year 2014 with 4,824mil EUR. Table 4 shows the number of exporters and the export of goods by medium-sized enterprises in the Republic of Serbia over the period between year 2010 and 2014.

Table 4. Number of exporters and the export of goods by medium-sized enterprises in the Republic of Serbia, years 2010 to 2014

Year	Number of exporters	Export of goods (mil.EUR)
2010	1,102	1,506
2011	1,085	1,852
2012	1,062	2,134
2013	1,061	2,184
2014	1,089	2,384

Source: „Companies according to size and entrepreneurs in the Republic of Serbia, 2010-2014“, Statistical Office of the Republic of Serbia, year 2016.

Note: during the interpretation of result values expressed in RSD have been converted to EUR based on the yearly average currency exchange rate according to official data from the NBS

The number of enterprises exporting goods decreased by 1.2% in year 2014 compared to the year 2010 and amounts to 1,089. The export of goods over the observed period increased significantly. In the year 2010, the value of exported goods was 1,506mil EUR while an increase of 58% was achieved in 2014 amounting to the value of 2,384mil EUR.

In year 2010 17,464 micro, small and medium-sized enterprises participated in the import. In year 2014 there was an insignificant increase in their number to 17,861. The value of imported goods in the year 2010 amounted to 5,144mil EUR and in 2014 to 8,550mil EUR.

Table 5. Number of importers and the import of goods by medium-sized enterprises in the Republic of Serbia, years 2010 to 2014

Year	Number of importers	Import of goods (mil.EUR)
2010	1,379	2,551.10
2011	1,335	2,702.59
2012	1,329	3,157.79
2013	1,349	3,317.05
2014	1,386	3,564.49

Source: „Companies according to size and entrepreneurs in the Republic of Serbia, 2010-2014“, Statistical Office of the Republic of Serbia, year 2016.

Note: during the interpretation of result values expressed in RSD have been converted to EUR based on the yearly average currency exchange rate according to official data from the NBS

The number of medium-sized enterprises importing goods in the year 2014 increased by 0.5% compared to year 2010 and amounted to 1,386. The import of goods significantly expanded over the observed five year period. In year 2010 the import of goods by medium-sized enterprises was valued at 2,551mil EUR while the amount in year 2014 was 3,564mil EUR.

The characteristics and the size of capital at the disposal of medium-sized enterprises is valuable for the purpose of analysis of their liquidity, as well as the overall development of the SME sector. The Statistical Office of the Republic of Serbia keeps track of the level of basic capital of these enterprises, as well as the domestic and foreign capital in medium-sized enterprises over the period between year 2010 and 2014.

Table 6. Basic, domestic and foreign capital of medium-sized enterprises, years 2010 to 2014, mil. EUR

Year	Capital (basic)	Capital (domestic)	Capital (foreign)
2010	4,832	3,726	1,105
2011	5,354	3,972	1,382
2012	4,639	3,494	1,145
2013	4,766	3,517	1,248
2014	4,870	3,570	1,301

Source: „Companies according to size and entrepreneurs in the Republic of Serbia, 2010-2014“, Statistical Office of the Republic of Serbia, year 2016.

Note: during the interpretation of result values expressed in RSD have been converted to EUR based on the yearly average currency exchange rate according to official data from the NBS

In year 2010 medium-sized enterprises had basic capital in the amount of 4,832mil EUR and in year 2014 4,870mil EUR which represents an increase of 0.8%. The value of domestic capital of medium-sized enterprises in year 2010 was 3,726mil EUR and in 2014 3,570mil EUR. Foreign capital in medium size enterprises was worth 1,105mil EUR in 2010 and 1,301mil EUR in 2014. In regards to different industries, medium-sized enterprises operating in Manufacturing, Wholesale and retail trade, repair of motor vehicles and motorcycles, Agriculture, forestry and fishing and Construction had the most significant value of basic capital, as well as the domestic and foreign capital.

3. METHODOLOGY: LIQUIDITY AND SOLVENCY AS INDICATORS OF FINANCIAL SOLVENCY

The ability of medium-sized enterprises in the RS to settle their overdue liabilities on time was concluded on the basis of results obtained from the analysis of solvency. Enterprises are considered as being liquid if they are capable of settling financial liabilities in full amount and on time without the change in scope and structure of the assets which are required for the operation of current business activities.

In ideal circumstances, the results of adequate management of business liquidity are reflected in the payment of overdue liabilities only in cash obtained from inflow from the primary activity (collection of receivables on the basis of sales of products, goods or services). However, the dynamic market environment with the operation of high levels of competitiveness excludes, in the largest number of cases, the possibility of settling overdue liabilities solely by cash as an absolutely liquid asset. The deficiency of cash money at the moment of maturity of overdue liabilities is compensated by short-term assets of different levels of liquidity, with the advantage always given to those with quicker mobilisation. The levels of liquidity are determined depending on the amount of time necessary for the transformation of assets to into cash money:

- primary level of liquidity (absolute liquid assets) is that of cash in the cash register and sight deposit accounts;
- secondary level of liquidity is typical for accounts receivable, promissory notes and other securities which can be cashed within 30 days ;
- tertiary level of liquidity is that of short-term investments;
- quaternary level of liquidity is typical for inventories and
- nth level of liquidity is that of the remaining assets depending on the rate of their transformation to cash, whereby the real estate, which does not amortize, is of the lowest liquidity level.

The evaluation of liquidity of medium-sized enterprises in Serbia was performed on the basis of the ratio of second and third levels of liquidity, while the circumstances for its permanent maintenance are determined with a calculation of the revolving funds.

- **Secondary level of liquidity** (*Quick Ratio*) measures the liquidity for a period up to a year and is calculated from the ration between the total cash in the cash register and sight deposit accounts and

one year term deposit accounts (Y), securities redeemable within one year (R) and short-term receivables with a collection period of up to one year (SR), on one side and short-term liabilities with the maturity date up to one year (SL), on the other side.

$$QR = \frac{Y + R + SR}{SL} \quad (1.1)$$

The preferred secondary level of liquidity ratio is at least 1 (one), although the company cannot be considered as non-liquid even if the ratio is below 1. The secondary level of liquidity ratio value below 1 is acceptable if the company has seasonal inventories at its disposal.

- **Tertiary level of liquidity ratio** (*Current Ratio*) is calculated from the ratio of revolving funds (RF) i short-term liabilities (SL).

$$CUR = \frac{RF}{SL} \quad (1.2)$$

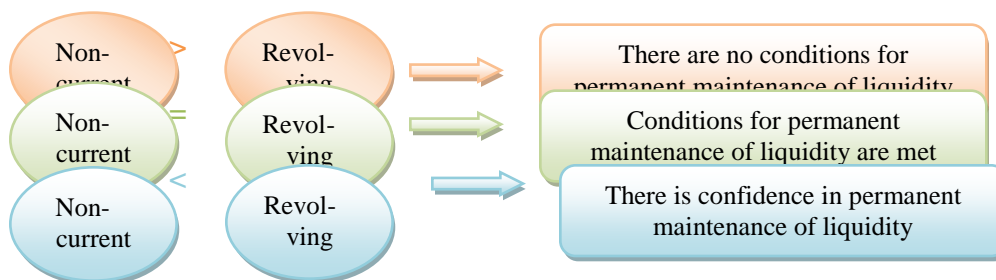
Assuming that half of the revolving funds consist of non-current assets (fixed supplies), the company is liquid if the value of this ratio is at least 2 (two). Bearing in mind that this assumption is difficult to recreate in practice, the acceptable ratio value of the tertiary level of liquidity is at least 1 (one).

With the calculation of revolving funds it is established whether medium-sized enterprises in Serbia operate in conditions which offer the possibility of maintaining permanent liquidity. The revolving funds are calculated as the ratio between the revolving assets and short-term liabilities. The worth of the revolving funds indicated the part of the revolving assets which are financed from long-term financial resources, i.e. the capital, long-term reservations and long-term liabilities.

$$\text{REVOLVING FUNDS} = \text{REVOLVING ASSETS} - \text{SHORT-TERM LIABILITIES.} \quad (1.3)$$

The evaluation of the circumstances for permanent maintenance of liquidity was performed on the basis of the analysis of the coverage of fixed inventories by the revolving funds. The variation between the revolving fund and fixed inventories is viewed as an asset adding security the in permanent maintenance of liquidity. A higher level of coverage of fixed inventories by revolving funds means more security in the maintenance of liquidity.

Picture 1: Conditions for permanent maintenance of liquidity



Source: Đuričin, S., 2014, p. 103

Solvency of medium-sized enterprises registered on the territory of the Republic of Serbia is evaluated on the basis of the ratio between operating assets and total liabilities.

$$\text{Solvency ratio} = \frac{\text{operating assets}}{\text{total liabilities}} \quad (1.4)$$

The value of this ratio more than or equal to 1 (one) points to the ability of the company to settle its total liabilities from the operating assets.

4. ANALYSIS OF FINANCIAL SOLVENCY OF MEDIUM-SIZED ENTERPRISES

From the aspect of the secondary liquidity ratio medium-sized enterprises registered on the territory of the Republic of Serbia in the period between the years 2010 and 2014 weren't able to settle overdue short-term liabilities on time. The secondary liquidity ratio below 1 (one) is considered unacceptable since most companies don't have seasonal inventories at their disposal. Over the period between the years 2010 and 2014 every 100 RSD of company short-term liabilities was covered by 80 RSD of liquid revolving assets on average. Converted to Euros, each 1 Euro of company's short-term liabilities was covered by 65centes of liquid revolving assets on average. Observed over time, the financial solvency of the company decreased over the period between years 2013 and 2014 compared to the period between years 2010 and 2012 because of the inability to pay short-term liabilities.

Table 1: Liquidity of medium-sized enterprises over the period 2010-2014.

Ratio	2010.	2011.	2012.	2013.	2014.	Average value
Quick Ratio	0.8	0.8	0.8	0.7	0.7	0.8
Curent Ratio	1.15	.18	1.18	1.08	1.05	1.1

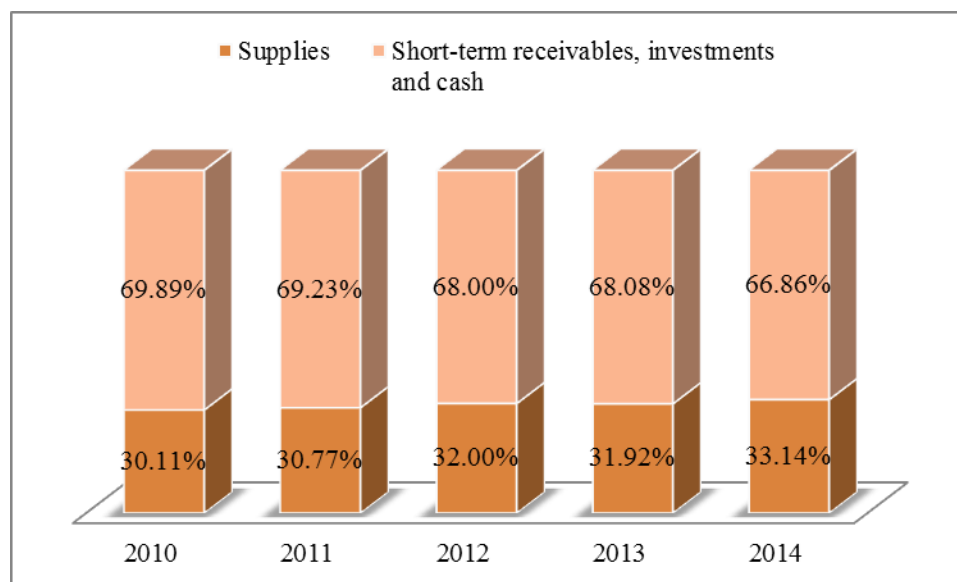
Source: Calculation by author according to the data from the Serbian Business Registers Agency.

Note: In the interpretation of results the values expressed in RSD have been converted to EUR based on the average currency exchange rate in the last six months of year 2016.

Over the period between years 2010 and 2014, in medium-sized enterprises in the Republic of Serbia, every 100 RSD of short-term liabilities were covered by 110 RSD of revolving assets. From the aspect of the tertiary level of liquidity ratio the financial solvency is evaluated as conditionally acceptable. It is acceptable for the reason because the companies had short-term assets at their disposal which were sufficient to cover the overdue liabilities. Conditionally acceptable because the level of the liquidity ratio was lower than 2 (two) is acceptable only if half of the revolving assets consist of fixed revolving assets. It was established through analysis that fixed revolving assets (inventories) participated 31.59% in total in the revolving assets of medium-sized enterprises over the observed period. Even though the basic requirement was not met the precise evaluation of liquidity on the basis of this ratio requires the analysis of the revolving funds.

Over the period between the years 2010 and 2014 medium-sized enterprises in the Republic of Serbia had the opportunity to maintain the liquidity long-term. The reason for this is that over the observed period, the companies which were analysed financed their entire inventories from long-term financial resources with 0.72% on average of those resources remaining available for the provision of additional fixed revolving assets.

Graph 1: The structure of revolving assets of medium-sized enterprises over the period between years 2010 and 2014 in %



Source: Calculation by author

Table 2: Analysis of the revolving funds of medium-sized enterprises over the period between years 2010 and 2014

- in % -

Percentage of inventories covered by revolving funds	2010.	2011.	2012.	2013.	2014.	Average value
	45.66	50.85	48.31	54.84	53.92	50.72

Source: Calculation by author

According to the values obtained from the analysis of the revolving funds the liquidity of medium-sized enterprises is viewed as acceptable from the aspect of the tertiary level of liquidity ratio. Over the period between the years 2010 and 2014 medium-sized enterprises in the Republic of Serbia had revolving assets sufficient for covering overdue short-term liabilities at their disposal.

The conclusion is that the medium-sized enterprises in the RS over the period between years 2010 and 2014 did not have sufficient amounts of liquid assets, i.e. sufficient amounts of cash, receivables and short-term securities to cover all of their overdue short-term liabilities. However, these enterprises have sufficient assets for covering overdue short-term liabilities under the assumption of cashing in their total revolving assets. Apart from this, the operation of medium-sized enterprises registered on the territory of the RS over the period between years 2010 and 2014 is viewed as solvent.

Tabela 3: Analysis of solvency of medium-sized enterprises over the period between years 2010 and 2014.

Solvency ratio	2010	2011	2012	2013	2014	Average value
	1.61	1.69	1.65	1.59	1.55	1.62

Source: Calculation by author

Over the entire observed period, the enterprises were able to cover their total liabilities from their operating assets.

5. CONCLUSION

Over the period between the years 2010 and 2014 medium-sized enterprises registered on the territory of the Republic of Serbia were financially solvent. The final conclusion on financial solvency is derived on the basis of results obtained from the analysis of the tertiary level of liquidity and the analysis of the revolving funds.

Even though the same conclusions cannot be derived from the aspect of value of the secondary level liquidity ratio the authors are opting to evaluate the financial solvency on the basis of the tertiary level of liquidity ratio and the level of revolving funds. This is because the evaluation of financial solvency from the aspect of the secondary level of liquidity ratio is considered as being too rigorous taking into consideration the fact that over the entire observed period the inventories were covered by long-term financial resources.

The fact that medium-sized enterprises, as the backbone of Serbian economic activity, were financially solvent in the previous five years gives optimism with respect to further strengthening of the national economy.

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Christmas Eve Pictures
in Budapest



Photo © by Dr. Antal Szabó

NEWS

EUROPAWARDS 2016: ESBA SECRETARY GENERAL WINS IN HOUSE PROFESSIONAL OF THE YEAR



On 16 November 2016, the prestigious European Public Affairs awards took place in the Stanhope hotel in Brussels. The European Small Business Alliance was shortlisted for three awards: Trade Association Campaign of the Year, In House Team of the Year and In House Professional of the Year. **ESBA** is proud to announce that its **Secretary General, Patrick Gibbels**, took home the award for best In-House Professional of 2016.

The award recognises the hard work we do for small businesses throughout Europe and provides a boost for even better work in 2017!



SURVEY ON THE ACCESS TO FINANCE OF ENTERPRISES” (SAFE) Published on 30 November 2016

file: http://ec.europa.eu/growth/tools-databases/newsroom/cf/itemdetail.cfm?item_id=9006&lang=en

Small businesses from the EU are increasingly confident about their access to finance, according to a joint survey published today by the European Commission and the European Central Bank.

Access to finance is the least pressing problem in general and businesses' demands for financing were often fulfilled. However, financing might still be a barrier for smaller and younger companies or in specific countries.

Bank loans and credit lines remain the most relevant sources of financing for SMEs in the EU. 55% of SMEs used credit lines in the past or considered using them in the future, while 50% said that about bank loans and 47% about leasing. Equity financing is relevant for 13% of SMEs.

Access to finance in general is not the main challenge for enterprises. In 2016 it's only a problem for 9%, compared to 16% in 2009 and 10% in 2015. The top 3 most important problems the SMEs are facing are:

- finding customers (for 25% of them)
- availability of skilled staff or experienced managers (20%)
- competition (13%)

However, in Greece and Cyprus, almost 1 out of 4 SMEs (24%) report major issues with financing.

27% of the EU SMEs actually applied for a bank loan in 2016, while only 6% of them did not apply because of fear of rejection. Out of those that did apply, 7% of SMEs' bank loan applications were rejected and only 2% declined the loan offer from the bank because they found the cost unacceptable. Some of the applications were still pending at the time of the survey. It means that in total 79% of SMEs managed to get the full or part of the requested bank loan.

In fact, the EU SMEs are reporting fewer loan requests being turned down in general. The rejection rate went down from 15% in 2009 to 8% in 2015 and 7% in the current year. However, bank loan applications from smaller companies are still rejected more often: 12% of micro companies compared to only 1% of large ones.

The financing is mostly used for fixed investments (by 38% of the EU SMEs) and inventory or working capital (34%). Development of new products and hiring or training employees are both reported by 15% of SMEs.

SMEs in the EU also indicated an improvement of the general situation in net terms. There was a net increase in turnover, in the number of employees and a slight net increase in profits. In net terms, they increased investments, fixed assets and inventories and working capital, while the interest expenses decreased. However, the companies are still reporting increases in labour costs and other costs.

More information

- The survey was conducted from 19 September to 1 November 2016. The total EU sample size was 17,354 firms of which 15,668 (90%) had fewer than 250 employees. The study mainly provides evidence on changes in the financial situation, financing needs and access to external financing of SMEs in the EU and compares it with that of large enterprises. The reference period is April to September 2016.
- The full report and descriptive statistics results of the survey can be found on the Commission's SAFE web page (see at <http://ec.europa.eu/growth/access-to-finance/data-surveys>). The corresponding report and data for the euro area can be found on the ECB's website (see at <http://www.ecb.europa.eu/stats/money/surveys/sme/html/index.en.html>).
- SME access to finance is supported by the European Fund for Strategic Investments (see at <http://www.eib.org/efsi/http://www.eib.org/efsi/>), Europe's programme for small and medium-sized enterprises [COSME](#) and the EU's research and innovation funding programme [Horizon 2020](#). Businesses can contact selected financial institutions in their country to access EU financing through the access to finance website (see at <http://europa.eu/youreurope/business/funding-grants/access-to-finance/>)

INSTITUTIONAL PROFILE

CENTRE FOR TECHNOLOGICAL RESEARCH OF CRETE

The **Centre for Technological Research of Crete** (CTR-Crete) was founded by Presidential Decree 143/ΦΕΚ 123/20-06-01, is under the supervision and financing of the Ministry of Education and Religious Affairs, and is a Private Legal Body, self-governed within the framework of articles 11 and 12 par. 1 of 1771/1998 Greek law and its internal regulation. CTRC is affiliated with the Technological Educational Institute (TEI) of Crete and includes eight Divisions of Technology Transfer and Research operating at all four Prefectures in the District of Crete.

Research at CTRC is conducted mainly by members of the research staff of TEI of Crete, including leading scientists and currently numbers: 31 Researchers, 18 Assistant Researchers, 18 Associate Researchers and 14 Visiting Researchers.

CTRRC fosters technological research, develops novel technological applications and products and implements Scientific and Technological results in order to:

- Solve specific problems and improve the methodologies of the production process, thus catalyzing social and economic growth in the District of Crete.
- Couple research to industry through the transfer of technology and know-how as well as through the incorporation of research results in products and services of production units.

Through these activities, CTRRC:

- Collaborates with the associated Technological Educational Institute of Crete and promotes the development of the relations with other Institutes, Research Centres, Universities or other organizations of the public and private sector.
- Maintains an interactive relationship with the productive units and the organized unions of the local economy.
- Qualifies students and graduates in state of the art technological sectors.
- Supports handicraft and industrial units.
- Maintains an active presence in all four prefectures in the District of Crete, thus promoting the homogeneous development of the Island, and dampening differences in development and the standard of living among prefectures of Crete.
- Improves quality of products and services as well as the competitiveness of economy in Crete as well as in the greater Mediterranean Area.
- Elaborates studies and carries out specific technological projects either funded by the EU or ordered by third parties or in collaboration with third parties.
- Promotes the advanced technology transfer and disseminating of know-how.
- Supervises the organization and financing of Research of Technological programmes in Greece and abroad, as well as of Publications, Seminars and Conventions.
- Produces technological products and provides novel services in accordance with its research-technological interests.

CTRRC participates in ATHENA project through the Sector of Design and Development of Systems and Constructions. **This sector is actively involved in many areas of information technology and telecommunications, including:**

- Broadband wireless networks;

- Terrestrial interactive digital TV;
- Satellite communications ;
- Spread spectrum communications;
- Networked Multimedia;
- Interactive broadcasting;
- Multimedia applications and services;

Contact:

[Professor Vassilis Zacharopoulos](#), President CTRC :

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PHOTOS ON HERAKLION

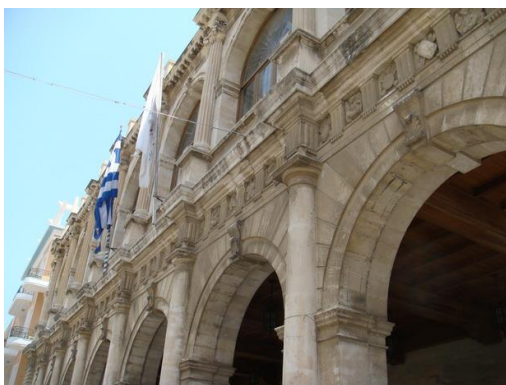


Photo © by Dr. Antal Szabó

NEW COMING EVENTS AND CALL FOR PAPER

CALL FOR PROPOSALS OF THE EASTER PARTNERSHIP CIVIL SOCIETY FORUM



Following the success of the past two years, the Eastern Partnership Civil Society Forum (EaP CSF) Secretariat is launching the 3rd Call for Proposals in order to support projects of the EaP CSF members with a regional dimension that can contribute to achieving the mission and objectives of the EaP CSF.

This call aims to support the work of the **five thematic Working Groups of the EaP CSF**. The priorities for each Working Group and the application process are described in the *Guidelines for Applicants*.

Applicants are encouraged to develop proposals that would contribute to the **effective policy-making and advocacy of the objectives of the EaP CSF at the EU level**. They should focus on **advancing reforms in the EaP countries** and should encourage activity of the civil society in policy domains where the civil society has not been active so far. The projects proposals should particularly focus on **connecting the envisaged activities with the interests and needs of the wider public**. Proposals that comply with more than one of these objectives are especially encouraged.

Any project funded through this Call for Proposals **should cover at least three EaP countries** (Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine) with the aim of developing results **with a regional perspective**.

The overall amount for this call for proposal is EUR **328,595**. Any grant requested under this Call for Proposals must fall between the following minimum and maximum amounts:

- minimum amount per project: **EUR 10,000**
- maximum amount per project: **EUR 25,000**

A project proposal and budget proposal templates are available for potential applicant organisations to make the application process more convenient.

Proposals must be submitted to the following email address: applications@eap-csf.eu by **29 January 2017, midnight (24.00 Brussels time)**.

The Guideline for Application see at www.eap-csf.eu



XIV EUROPEAN CONFERENCE SMEs-Europa LISBON 16-18 March 2017



DIGNITY and WELL-BEING - TOGETHER
it's possible CHANGE through EXCHANGE

SMES-Europa, with the colleagues of Lisbon invite you to actively participate in preparing and realising the **XIV European SMES Conference** which is going to take place in **Lisbon on 16-17-18 March 2017**.

25 YEARS AGO, December 1992 the 1st European Seminar SMES in Rome focused attention on “*Mentally ill people at risk of homelessness*”. **TODAY** this risk is reality: more and more people with mental health problems, rough sleeping.

15 YEARS AGO, October 2002 the 7th European SMES seminar in Lisbon especially emphasize the word “*Exchange for changng*”, for pathways synergetic. **TODAY** – unfortunately - ‘*co-working*’ more than a reality, is a good intention, especially at the institutional level.

25 YEARS AFTER, again in Lisbon, SMES Europa, is co-working with Municipality, Santa Casa de la Misericordia, Psychiatric Hospital Centre, National Program for Mental Health, and more than 22 other Associations, co-working under a single umbrella ‘NPISA’, SMES-Europa propose again to focus our attention on co-working: ***we don't need – today – in multiply the services , we absolutely needs of:***

- **TOGETHER** *carefully listening the voice expressed or not, of home-less – health-less – hope-less, living in chronically way, in scandalous conditions absolute social and health exclusion, deprivation conditions.*
- **TOGETHER** *coherently & efficiently responding to people in specially way facilitating access of this person to their fundamental rights and global needs;*
- **TOGETHER** *to identify some innovative and effective practices; to recommend absolute priorities in social & health policy and project*

To these 2 questions we would invite you especially to answer, preparing this XIV European Seminar

1. **HOW YOUR SERVICE**, co-working with other sectors and services, contribute to promotion of the **dignity and well-being** reducing all barriers and facilitating the access for each one to Services of
 - **HEALTH** for CURE: Hospital Institution & Services in Community
 - **ASSISTANCE** for CARE and assistance of primarily needs;
 - **HOUSING** for HOME : find again privacy & identity at different level
 - **PARTICIPATION in CITIZENSHIP** for recognising and inclusion in community
2. **WHY** some homeless people - with mental health problems - rough sleeping in permanent way or in emergency centres and squats - despite the proposed services and facilities promoted - giving the impression that they refuse any institutional offer of assistance and integration ?

Dignity & well-being and **Fundamental Right & Solidarity** are the keywords, which were oriented - from 1992 - the social mission and initiatives of SMES Europa.

For further information, please contact Luigi Leonori, SMES Europa President at
smeseu@smes-europa.org



Challenging & shaping your strategy in a turbulent world
 IMD FAMILY BUSINESS FOCUS SERIES
 -19 May 2017



The Lausanne (Switzerland) based IMD is organizing a two day learning journey called **IMD Family Business Focus Series "Challenging & shaping your strategy in a turbulent world"**.

The first day focuses on setting the context: understanding the macro-economic trends that will impact businesses in the future, as well as exploring how likely they are to hit Family Businesses at their core, challenging traditional key success factors and sustainable family conventions.

The second day focuses on developing your strategic roadmap and exploring how to prepare your business for future turbulent times. The day will involve workshops exploring how to shape strategies for the future, how to engage your family and business leadership in building a roadmap and agenda and how to lead during times of continual change, maximizing your business chances of winning across generations.

Keynote speakers:

Arturo Bris, Professor of Finance at IMD

Keynote address from a leading family business.

This exceptional two day learning journey is brought to you by:

Denise H. Kenyon-Rouvinez, Wild Group Professor of Family Business, Family Office

Governance and Director of IMD Global Family Business Center, co-author of the book "Governance in Family Enterprises: Maximizing Economic & Emotional Success"

Thomas W. Malnight, Professor of Strategy and General Management, co-author of the book "Must Win Battles: How to Win Them, Again and Again"

Date: Thursday 18 and Friday 19 May 2017

Participants: The IMD Family Business Focus Series is for all members of business owning families, including:

- Active and inactive family members and spouses
- Spouses and next generation family members
- Non-family CEOs and board members if accompanied by family

For ideal learning benefits, we **highly recommend** multiple representatives of the family with ideally at least one person per generation.

for registration visit:

https://imd.co1.qualtrics.com/SE/?SID=SV_6JcZK4cpNwNY1iR&Q_JFE=0

BOOK

UNDERSTANDING IRAN

by

Ercan Ciglioglu
(Baskent University)

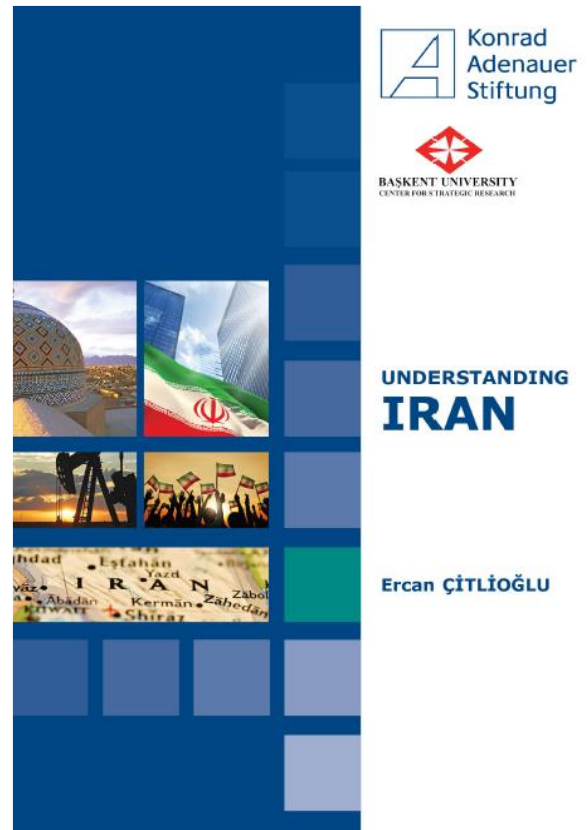
Issued by the Konrad Adenauer Foundation in 2016
(Ankara)

ISBN: 978-605-4679-16-4

An unbiased understanding of Iran that has one of the most ancient people of its region along with an long history and established state tradition is crucially important for the sake of regional balances of power, regional stability and sustainable regional and global peace.

It has an individual ethnicity (Persian) which is versus the Arab identity in its regional contest, and despite being a Muslim country, it has Shi`a ntensive popzlation (90%) which differs from the dominant Sunni Islam. This is a most important factor that determines Iran`s socio-political structure.

Iran has an impressive strategic and geo-political importance. In terms of its geographical location, the country is geo-strategically the second most important country after Turkey. According to some strategists is has similar or primary geo-strategic importance depending on conjectural developments. The present publication discusses, inter alia, major dynamics shaping Iran, recalls the road to Iran's Islamic Revolution and its aftermath and explains powerful political figures in Iran, it's military power, nuclear journey and possible impact of the Vienna Deal on Turkey.





The address of the ERENET Secretary see below:

Dr. Antal Szabó, Scientific Director

Padányi Emese, Secretary

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