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on
"SMEs AND GREEN ECONOMY"

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SMEs AND GREEN ECONOMY

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ABBREVIATIONS

AIDA	Albanian Investment Development Agency
AUP	Ukrainian Paint and Coatings Association
BGN	Bulgarian lev
bn	billion
BRDO	Better Regulation Delivery Office in Ukraine
BRICS	grouping acronym for the association of the five major emerging national economies of Brazil, Russia, India, China and South Africa
BSC	Regional Business Support Centre in Ukraine
BSEC	Black Sea Economic Cooperation / Organization of the Black Sea Economic Cooperation
BSEC PERMIS	Permanent International Secretariat of the Organization of the Black Sea Economic Cooperation
CEE	Central and Eastern European Countries
CIP	Competitiveness and Innovation Framework Programme
CIS	Commonwealth of Independent States
CNIPMMR	National Council of Small and Medium-sized Private Enterprises in Romania

COP21	2015 United Nations Climate Change Conference
COSME	EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises
CPI	consumer price index
CSR	corporate social responsibility
DCFTA	Deep and Comprehensive Free Trade Agreement
EaP	Eastern Partnership, a joint initiative comprising the EU, its Member States and its 6 eastern European partners of Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine
EBRD	European Bank for Reconstruction and Development
EC	European Commission
ECAT	Environmental Centre for Administration and Technology in Tirana, Albania
EEA	European Economic Area
e-government	the use of information and communication technologies (ICTs) to improve the activities of public sector organizations
EIO	Eco-Innovation Observatory, financed by the EC Directorate-General
EFQM	European Foundation for Quality Management
EMAS	Eco-Management and Audit Scheme
EMS	environmental management system
ENP	European Neighbourhood Policy
ERENET	Entrepreneurship Research and Education Network of Central and Eastern European Universities
EU	European Union
EUR, €	euro, official currency of the eurozone
EU SURE	EU Support to Ukraine to Re-launch the Economy
FDI	foreign direct investment
GAP	Green Action Plan, adopted by the EC
GCCI	Georgian Chamber of Commerce and Industry
GCI	Global Competitiveness Index
GDP	gross domestic product
GEF	Global Environment Facility
GEL	Georgian lari
GEN	Global Ecolabelling Network
GITA	Georgia's Innovation and Technology Agency
GIZ	German International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit), previous-

	ly known as German Technical Cooperation (GTZ, or Deutsche Gesellschaft für Technische Zusammenarbeit GmbH in German)
GoG	Government of Georgia
ha	hectare
Horizon 2020	the biggest EU Research and Innovation programme ever with nearly €80 billion of funding available over 7 years (2014 to 2020)
HACCP	hazard analysis and critical control point
ICAP	The ICAP Group is one of the most successful regional Business Services Groups in South Eastern Europe. ICAP stands for Intercapital, the previous name of the business service group.
ICT	information and communication technology
IEEP	Institute for European Environmental Policy
IIED	International Institute for Environment and Development
ILO	International Labour Organization
IPARD	Rural Development component of the Instrument for Pre-accession Assistance
IUS	Innovation Union Scoreboard
INSTAT	Institute of Statistics in Albania
ISO	International Organization for Standardization
JEREMIE	Joint European Resources for Micro to Medium Enterprises
KAS	Konrad-Adenauer-Stiftung
KOSGEB	Republic of Turkey Small and Medium Enterprises Development Organization
LLC	Limited Liability Company
Ltd	Limited company
m	million
MDL	Moldavian leu
MECMA	Romanian Ministry of Economy, Commerce and Business Environment
MNP	Armenian Ministry of Nature Protection
MoESD	Ministry of Economy and Sustainable Development of Georgia
MoREEFF	Moldovan Residential Energy Efficiency Financing Facility
MoSEFF	Moldovan Sustainable Energy Financing Facility
MSIF	Moldovan Social Investment Fund
MSME	micro, small and medium-sized enterprise

na	not available
NACE	Nomenclature statistique des activités économiques dans la Communauté européenne, translated into English by the EU as Statistical Classification of Economic Activities in the European Community
NLC	Albanian National Licensing Centre
OECD	Organisation for Economic Co-operation and Development
OHSAS	Operational Health and Safety Management System
RA	Republic of Armenia
RECP	Resource Efficient and Cleaner Production
RES	renewable energy source
RON	Romanian leu
RSD	Serbian dinar
RUB	Russian rouble/ruble
SBA	Small Business Act for Europe
SEE	Southeast Europe
SME	small and medium-sized enterprise
SME DNC	Small and Medium Entrepreneurship Development National Center in Armenia
TPES	total primary energy supply
TRY/TL	Turkish lira
UAH	Ukrainian hryvnia
UAQ	Ukrainian Association for Quality
UN	United Nations
UNCSD	United Nations Conference on Sustainable Development, also known as Rio 2012, Earth Summit 2012 or Rio+20
UNCTAD	United Nations Conference on Trade and Development
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UN SDG	United Nations Sustainable Development Goal
US	United States
USAID	United States Agency for International Development
USD	United States dollar
VET	vocational education and training
WHO	World Health Organization
WTO	World Trade Organization
WWF	World Wildlife Fund

PREFACE

OPENING STATEMENT ON THE OCCASION OF THE BSEC-KAS JOINT WORKSHOP ON "SMEs AND GREEN ECONOMY"

Ambassador Michael Christides
Secretary General,
Permanent International Secretariat of the Organization of the Black Sea Economic Cooperation (BSEC PERMIS)

On behalf of BSEC PERMIS, I wish to welcome you all to this important workshop organized jointly by BSEC and KAS.

Allow me to begin my brief salute with my sincere thanks to KAS and the Head of its office in Turkey, Dr. Dürkop, for their longstanding and fruitful cooperation with BSEC.

I also wish to publicly thank Dr. Szabó from ERENET, for his faithful, long years of support as well as his eagerness in sharing his outstanding experience and knowledge.

The theme of this present workshop is "SMEs and Green Economy". Although "Green Economy" was a fashionable cliché used by specialists or fanatical environmentalists a few

years ago, it has become a very relevant issue today due to the serious problems we face in our small global village.

Not only do we have to ensure harmony among the three main components of Green Economy – social, environmental and economic; we also have to resolve the problems wrought by the acute degradation of our environment worldwide. The Green Economy is especially important today because these global environmental issues will be aggravated further if the appropriate remedies are not implemented. Thus, from this point of view, the theme of our workshop is very timely.

As knowledgeable specialists, we have to come together to draw up with the necessary answers in order to provide the right solution for the benefit of SMEs in our Member States.

SMEs stand to benefit from the Green Economy because they are the most important economic driving force in our respective countries, constituting the backbone of our economies.

BSEC, as a regional organization promoting economic cooperation among its Member States and beyond, attaches great importance to the principle of sustainable development. We are actively promoting the general concept of the Green Economy in many ways, of which the BSEC Green Energy Network is a prime example.

Of the nearly 50 specialized entities in our Member States, the BSEC Green Energy Network emphasizes the promotion of concrete policies and measures towards the better implementation of good practices within the Green Economy.

As you know, all countries have undertaken concrete commitments following the twenty-first yearly session of the Conference of the Parties (COP) of the United Nations Climate Change Conference (COP21) held in Paris in 2015. The countries that took part in COP21 have vowed to gradually implement greener changes in their economies.

BSEC, with the support of specialized partners, is already working on the formulation of projects that will promote energy conservation, energy efficiency and the use of renewable energy sources.

In this way, we wish to help and support our Member States in their efforts to achieve their green objectives within the existing and binding time-frame.

Through cooperation and dialogue, valuable policy instruments and future similar events may develop in the fight to promote the Green Economy. At the end of this workshop, the findings and recommendations would be given to the BSEC Working Group on SMEs, which is next meeting on 27 May 2017 in Moscow. It is my dearest wish that the findings of our workshop will facilitate the adoption of necessary policies and measures by the governments of our Member States, and that these measures will harmonize the activities of SMEs with the exigencies of the Green Economy.

I sincerely hope that the findings drawn from this workshop would also lead to the formulation and implementation of BSEC projects of joint interest to our Member States. In this way, we would be able to positively touch the lives of the peoples of our region and help our countries in their transition towards the Green Economy. Thus, in this context, I appeal to all participants to come up with concrete joint project ideas that could be implemented within the framework of BSEC. It is my belief that such joint projects would be an excellent way of achieving tangible, high-impact and lasting results.

For all these reasons, I thank you all for coming to the beautiful capital of Ukraine that is hosting us, and wish you success in your discussions and deliberations.

INTRODUCTION

Dr. Colin Dürkop
Head of the Konrad-Adenauer-Stiftung (KAS) Office in Turkey

With over 7.4 billion people in the world today, human consumption of natural resources has increased exponentially in recent years to the point where our natural resources are insufficient to keep up with demand. This ever-increasing human consumption, the solid waste produced by the world population as well as the industrial waste from all the goods and services we rely upon in this modern age have engendered ecological scarcity and aggravated the deterioration of our environment. The lack of adequate good quality resources from our ecosystem has negatively affected the economy as well, as industries no longer have sustainable resources on which they can draw. In turn, their production processes become costlier and their goods and services are more expensive for consumers.

The importance of the green economy in generating growth, and improving economic, social and environmental well-being along sustainable lines of development is underlined in its goals to reduce ecological scarcities, promote economic

growth without further degrading the natural environment, reduce environmental risks for both industries and society, and inculcate the economic value of natural capital as well as ecologically friendly public goods and services in governments the world over. The 2011 UNEP Green Economy Report stresses that a green economy ought to be fair as well as efficient, thereby implying that sustainable development is as much about being resource efficient as it is about social equity. Ecological protection, energy conservation, climate protection, use of renewable energy, and environmentally safe modes of production have the potential to reduce carbon emissions, increase the sources of clean drinking water for the world population, protect the planet that is our home, as well as protect the physical well-being and health of all living creatures.

Developed countries in the West are not the only ones moving towards the green economy and sustainable development, as the Member States of the Organization of the Black Sea Economic Cooperation (BSEC) are putting in the effort to make the same transition. The chapters assembled in this volume on the BSEC and KAS workshop on SMEs and Green Economy underscore the importance of greening our industries and lifestyles in a globalizing economy.

The transition towards the green economy would not be truly effective if all countries are not on the same page regarding its goals. Professor Vyacheslav Potapenko from the Institute of Green Economics in Kyiv stresses this in his opening chapter on the harmonization of EU, UN, OECD and Ukrainian green economic development indicators. Regardless as to the approach taken, it is generally accepted that greening goals are universal because they focus on nature, justice, sustainability and valuing the care for all kinds of life. The universal nature of the goals of sustainable development and growth, social inclusivity, resource and energy efficiency without adding to the damage already inflicted on our environment have allowed the EU countries to band together for the creation and enactment of holistic eco-innovation efforts, as Dr. Antal Szabó, Scientific Director of the Entrepreneurship Research and Education Network of Central European Universities (ERENET), points out in his chapter on eco-innovation and the Green Action Plan (GAP) for SMEs in the EU. The subsequent national country studies demonstrate their respective country's efforts towards the achievements of these noteworthy goals.

Albania's transition towards the green economy is analyzed by Arbër Demeti, Erjona Rebi (Suljoti) and Arlinda Demeti, who show that SMEs – by dint of their sheer numbers – have as much to contribute to greening efforts as they have to gain from green growth, and should therefore be included any government drive towards sustainable development. Extending on this theme of SMEs' contribution to greening, Lilit Apujanyan highlights the way in which the Armenian government is striving to overcome the challenges of encouraging SMEs to adopt more ecological practices in their businesses through the regulation of their green performance. Azerbaijan's recent economic reforms, as outlined by Farid Amirov, emphasizes the country's commitment in transitioning towards a national economy that is less dependent on the oil sector and more favourable towards the efficient utilization of energy and resources. Georgi Stoev's study on Bulgarian SMEs and the green economy goes even further by delving into the relationship between energy conservation measures and SMEs as they go green, as well as the state's support of SMEs that develop their businesses along these lines. In Eteri Mamukelashvili's chapter, the role of the Georgian government in fostering SMEs' greening efforts and the importance of meeting ISO environmental management standards are emphasized. Greece's endeavours at going green is explored by Irini Voudouris through a thorough analysis of the different Greek strategies for sustainable development and the green economy, and weighing their impact on SMEs in the green sectors.

While the government in Moldova has prioritized SME development as well as sustainable development and the green economy in order to boost the competitive economic development of the country, Prof. hab. Alexandru Stratan, Dr. Alexandra Novac and Diana Russu's chapter on Moldova illustrate that more has to be done to align state environmental policy with its SME support mechanisms if it is truly to transition towards a green growth model. In evaluating the role and evolution of the SME sector in Romania as part of her study on the green economy and eco-innovation of Romanian SMEs, Zsuzsanna Katalin Szabó looks into the eco-innovation capacity of Romanian SMEs to identify their strengths, achievements and the barriers preventing them from doing more towards sustainable green efforts. Olga Generalova-Kutuzova's chapter on ecological entrepreneurship in Russia details the ways in which environmentally friendly SME operations can meet the state's sustainable development and green economy goals. Although most green SMEs are associated with the recycling and reuse of waste in their activities, Olja Munitlak-Ivanović and Mirjana Radović-

Marković call attention to ecotourism as a way in which SMEs can exploit Serbia's predominantly rural landscape so as to contribute to and operate in the green economy in the country. Turkey's energy saving potential as well as the implications of improved energy efficiency for SMEs and the country as it takes on the green economy is discussed by Murat Alper Öztürk.

Volodymyr Semenichin outlines Ukraine's Strategy of Development of Small and Medium-sized Businesses for the period until 2020 to shed light on his country's aspirations in the green economy. The Ukrainian green economy goals are proven to be attainable in the final two chapters on best practices in greening in the country. Inessa Oleynykova details this through a breakdown of the environmentally friendly measures employed by her family's paints and coatings manufacturing business in their production process. Similarly, Petro Kalyta outlines the ways through which ISO standards and excellent quality management systems can facilitate an SME's greening activities, thereby enhancing their competitiveness.

The different BSEC countries' experiences in moving towards green growth and sustainable development have shown that they are conscious of the harmful environmental impact of the market economy system on their societies. They have also exhibited a keen awareness of their need to improve their competencies and capacities, if they are to better enact changes to the mindsets of their people, the SMEs in their countries and their policymakers in their transition towards the green economy and truly sustainable development. Their acknowledgement that more has to be done to integrate green economy principles into their state strategies and their SME management systems will put them in good stead, as they slowly rise to the challenge of moving towards an ecologically sound socio-economic future.

1. HARMONIZATION OF EU, UN, OECD AND UKRAINIAN GREEN ECONOMIC DEVELOPMENT INDICATORS

Prof. Vyacheslav Potapenko
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Institute of Green Economics,
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ABSTRACT
Ukrainian and EU indicators of green economic development have to be harmonized in accordance to the Ukraine-European Union Association Agreement. SMEs' environmental policies and green modernization will benefit from the improvement of these green economic indicators. It is necessary to dismantle the Soviet brown economic development system and replace it with a new system of green economic indicators that is in line with the data collection methods of the European Union (EU), United Nations (UN), and Organisation for Economic Co-operation and Development (OECD). The author compared Ukrainian indicators of green economic development and Ukrainian legislative data with those used by the United Nations Economic Commission for Europe (UNECE), European Environment Agency (EEA), OECD, United Nations Sustainable Development Goals (UN SDGs) and the United Nations Environment Programme (UNEP). The key findings suggest that 16 Ukrainian green economic indicators are harmonized with EU and other international indicators. The Ukrainian Ministry of Ecology and Natural Resources have also suggested 16 indicators of green economic development as part of the governmental environmental policy assessment system. The author hopes the implementation of these indicators will support the green modernization of SMEs in Ukraine.

Keywords: harmonization, green economic indicators, EU, UN, OECD, Ukraine
JEL Classification: Q58

1. METHODOLOGY

The signing of the Ukraine-European Union Association Agreement in 2014 and the full introduction of the economic part of the Agreement necessitated the urgent development of green economic indicators that simultaneously met the Ukrainian regulatory and legal framework as well as

current indicators of the European Union (EU), United Nations (UN) and Organisation for Economic Co-operation and Development (OECD), and were based on statistical multi-year researches. The author has developed a special methodology to analyze EU and UN environmental policies, their harmonization with the statistics and official figures of Ukraine, and the development of indicators of public administration efficiency. Several stages were noted in the methodology:

1. A draft amendment to the Law of Ukraine on the Basic Principles of Environmental Policy was attached. This draft listed the goals and objectives of the country's environmental policy. The author then analyzed these goals and objectives according to the draft National Action Plan on Environmental Protection 2016-2020 and the indicators of environmental policy adopted as part of the Law on the Basic Principles of Environmental Policy.
2. The following environmental policy indicators used by the EU institutions, the UN and the OECD were analyzed:

- European Environment Agency (EEA) indicators of green economy
- OECD "Green" indicators
- UN SDG indices
- UNECE indices of "green" growth
- UNEP indicators of "green" economy

3. The informational content of international indices were assessed according to the goals and objectives laid down in the draft amendments to the Law of Ukraine on the Basic Principles of Environmental Policy.
4. Specific EU and UN indices were selected to assess the environmental policy outlined in the draft amendments to the Law of Ukraine on the Basic Principles of Environmental Policy. These indices were then compared to Ukrainian multi-year statistics.

Through these four stages, the author was able to analyze EU and UN environmental policies, their harmonization with the statistics and official figures of Ukraine, and the development of indicators of public administration efficiency in Ukraine. By harmonizing Ukrainian and international quantitative indicators with official information methodological approaches, the author was able to examine environmental policy in the country and develop a system of environmental policy indicators.

2. ANALYSIS OF GREEN ECONOMY INDICATORS

The author chose international green economy indicators that could be harmonized with Ukrainian ones. To that end, the following indicators were selected:

- Green economy indicators of the EEA
- Green indicators of the OECD
- United Nations Sustainable Development Index
- Green growth indices of the UNECE
- UNEPs indicators of green economy

The green economy indicators of the European Environment Agency (EEA) describe both the state of the environment and the level of human impact.

The green indicators of the Organisation for Economic Co-operation and Development (OECD) describe the problems of resources, industry and business development. Unfortunately, there are no Ukrainian equivalents to most of the OECD indicators.

The indices of sustainable development used by the UN are similar. While the indicators describing environmental policies are detailed, they are mostly qualitative rather than quantitative. This makes it difficult to compare UN green indicators to Ukrainian ones.

After analyzing these different indices, the author identified sixteen Ukrainian green economy indicators that are identical to the international ones. These sixteen indicators characterize green growth and environmental policy.

The Green Growth Indices of the UNECE is the most detailed, as it discusses environmental policy in the natural and industrial spheres.
Even though the UNEP's indicators of green economy do not describe the environmental aspects in detail, they come closest to the green indicators used in Ukraine.

3. DEVELOPMENT AND HARMONIZATION OF GREEN ECONOMIC INDICATORS

The indicators assessing Ukrainian environmental policy were based on the quantitative indicators used by the EU. Out of the 31 international indicators studied, 16 were found to have equivalents in the Ukrainian Law on the Fundamental Strategy of Environmental Policy. By comparing Ukraine's performance in these 16 indicators to the statistics in the international green economy indicators, the author was able to measure the progress of the greening and modernization of country's economy.

I. Nature Reserve Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Coverage of land and marine conservation areas (ha)	Total area under protection (1000 km^2)	Nationally designated protected areas (km^2)	Protected areas overlaid with biodiversity at the national level (ha)	Arable and cropland, % of total land area	Area of nature reserve, % of state area

It should be noted that on 1 January 2016, 17 sustainable development goals (SDGs) were adopted by world leaders as part of the 2030 Agenda for Sustainable Development.

II. Agricultural Land Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
-	Land uptake for technical infrastructure (1000 km^2)	-	-	Pastures and meadows, % total land area	Share of agricultural land, % of the total territory of the state

III. Forest Coverage Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Forest coverage (ha)	Total forest area (1000 km^2)	Forest growth (km^2)	Area of forest under sustainable forest management as a percentage of forest area (%)	Forest, % total land area (%)	Forest area

IV. Fresh Water Access Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Water scarcity (%)	Total freshwater use (million m^3)	-	Percentage of urban population using basic drinking water (modified MDG Indicator)	Water stress, total freshwater abstraction as % against total available renewable resources	Fresh water use against total % of available renewable freshwater resources

V. Land Re-cultivation Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
-	Land uptake in the country area (1000 km^2)	Land uptake (%)	Annual change in degraded or desertified arable land (% or ha)	Pastures and meadows, % total land area	Recultivated and renewed lands exposed to technogenic pollution

VI. Land Use Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
-	Land uptake in the country area (1000 km^2)	Land uptake (%)	Annual change in degraded or desertified arable land (% or ha)	Pastures and meadows, % total land area	Recultivated and renewed lands exposed to technogenic pollution

VII. Energy Consumption and Waste Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Coal consumption intensity (ton/GDP)	1000 kilotonne of oil equivalent (ktoe) Production of energy	index 1990=100 Energy intensity	-	Energy productivity, GDP per unit of TPES (%)	Energy productivity GDP Amount of waste to GDP

VIII. Environment-related Technologies Indicators

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
R&D investment (% of GDP) Environmental Goods and Services Sector (EGSS) investment (%/year) CO2 productivity of government operations (ton/$) Expenditure in sustainable procurement (USD/year and %) Training expenditure (USD/year and % of GDP)	-	-	-	Development of environment-related technologies, % inventions worldwide, % all technologies	Financing of scientific and technical works to GDP

IX. Environmentally Related Tax Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Fossil fuel, water and fishery subsidies (USD or %)	-	-	-	Environmentally related taxes, % GDP (%)	State budget funds for environmental protection Environmental taxes

X. **Green Enterprises Indicator**

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
-	-	-	-	The share of “green” enterprises in the total number of state enterprises,% (ISIC 25.12; ISIC 37; ISIC 41) Employment in the EGS sector (in % of total employment)	Registered number of enterprises by NACE 2010: 22, 36, 37, 38, 39 that can be attributed to the green economy

XI. Renewable Energy Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Renewable energy incentive ($ or %)	1000 Total primary energy supply (ktoe)	Renewable electricity (%)	-	Renewable electricity, % total electricity generation (%)	Share of renewable energy in state energy consumption

XII. Access to Sanitation Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Access to sanitation (%)	Population connected to water supply industry (million)	-	Percentage of urban population using basic sanitation (modified MDG Indicator) (%)	Population connected to sewage treatment (%)	Share of population with access to central sewage

XIII. Access to Water Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
Access to water (%)	Population connected to water supply industry (million)	-	Percentage of urban population using water supply industry (modified MDG Indicator) (%)	Population with sustainable access to safe drinking water (%)	Share of population with access to centralized water supply

XIV. Emissions of Pollutants into the Atmospheric Air Indicator

UNEP Indicator	UNECE Indicator	EEA Indicator	UN SDG Indicator	OECD Indicator	Ukrainian Indicator
	Emissions of pollutants into the atmosphere (1000 t/year)	Emissions of pollutants into the atmosphere (1000 t/year) Specific air pollutant emissions (1000 tonne/year)	-	-	Emissions of pollutants (excluding CO2) into the atmosphere

The author has thus identified 16 Ukrainian environmental policy indicators that are in harmony with international, UNECE and EU green economy indicators.

Ukraine can use these indicators to implement green growth indicators as part of its national environmental policy evaluation system. This is the first step towards the implementation of a green growth strategy in line with the Ukrainian realities of state administration.

CONCLUSIONS

The following results were obtained as a result of the author's research:

1. Ukraine has to elaborate on its harmonization methodology in order to ensure that its green economic indicators are commensurate with international ones.
2. Ukraine has a lot to learn from the green economy indicators used by the OECD, UN Sustainable Development Index, UNECE indices of green growth and UNEP.
3. The comparison of Ukrainian green economy indicators with international ones resulted in the careful study of the country's statistical databases and will lead to better green economic development.
4. A system of green economic indicators was developed and officially proposed to the Ukrainian Ministry of Ecology and Natural Resources and Parliament so that changes can be made to Ukrainian environmental legislation.
5. The use of existing Ukrainian environmental and economic indicators should be harmonized with international indicators and legalized via the regulatory framework of the Ukrainian Ministry of Ecology and Natural Resources. Parliament should update the country's environmental laws so as to introduce green economic development indicators in Ukraine.

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2. ECO-INNOVATION AND GREEN ACTION PLAN FOR SMEs IN THE EUROPEAN UNION

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ABSTRACT
This paper presents the definition and concept of the green economy, as highlighted in the United Nations Environment Programme (UNEP). Green economy is defined as a concept that **improves human well-being and social equity, while significantly reducing environmental risks and ecological scarcities. The green economy aims to achieve sustainable economic development by improving human well-being, increasing social equity, reducing environmental risks and reducing ecological scarcities.**

Patrick ten Brink and Leonardo Mazza's model showing the transition to a green economy and the current situation of the so-called brown economy will be examined.

The holistic eco-innovation efforts by the European Commission's Directorate-General for Environment and its project to compile the Eco-Innovation Observatory will also be highlighted. The "green transformation" of the EU would provide significant business opportunities for SMEs as important suppliers of goods and services. To facilitate such a green transformation, the European Commission has recently prepared a Green Action Plan (GAP) for SMEs, detailing a clear direction and framework to improve the resource efficiency of European SMEs and support green entrepreneurship. GAP aims to contribute to the re-industrialization of Europe by enhancing SMEs competitiveness and supporting green business developments across all European regions.

Keywords: green economy, transformation model to the green economy, eco-innovation, Eco-Innovation Observatory, European Commission Green Action Plan
JEL Classification: L26, Q56, Q57

Motto:
"We do not inherit the Earth from our ancestors;
We borrow it from our children."
Native American Proverb

PREFACE
The **United Nations** defines the concept of a green economy as one that "carries the promise of a new economic growth paradigm that is friendly to the earth's ecosystems and can also contribute to poverty alleviation."

The Green Economy is not an entirely new concept. It was first mooted in 1989 by the London Environmental Economics Centre. It was a joint venture created in 1988 by the International Institute for Environment and Development (IIED) and the Department of Economics of University College London (UCL). However, the concept did not receive wide acceptance at that time. With the outbreak of the financial crisis in 2007 and the failure of most countries to move to a sustainable development path, the green economy became more relevant. One of the reasons for the financial crisis and the stagnation of sustainable development stemmed from businesses' lack of investment in the environment. Policy and decision-makers have to be convinced of the economic benefits of investing in the environment, before countries can transition to the green economy.

Despite growing awareness that the environment can no longer be treated in isolation from mainstream economic policy, environmental issues continue to be addressed separately from social and economic policies.

In 2011, the United Nations Environment Programme (UNEP) developed a working definition of the green economy as one that results in **improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.** In its simplest expression, a green economy can be thought of as one which is **low carbon, resource efficient and socially inclusive.** [1]

The UNEP-led Green Economy Initiative consists of several components whose collective overall objective is to provide analysis and policy support for investing in green sectors and in greening environmental unfriendly sectors.

Within UNEP, the Green Economy Initiative includes three sets of activities: [1]

1. Promoting the **Green Economy Report** and related research materials so as to analyze the macroeconomic, sustainability, and poverty reduction implications of green investment in a range of sectors from renewable energy to sustainable agriculture. It will also provide guidance on policies that can catalyze increased investment in these sectors.
2. Providing **advisory services** on the ways in which specific countries can move towards a green economy.
3. Engaging a wide range of **research,** non-governmental organizations (NGOs), business and UN partners in implementing the Green Economy Initiative.

Critically, the concept of the green economy is not just "greening" economic sectors; it is a means of achieving the sustainable development in the following areas:

- Improving human well-being: securing better healthcare, combating new infectious diseases like HIV, the Ebola virus disease and the Zika virus, implementing preventive drugs measures, improving the education and safeguarding job security;
- Increasing social equity: launching poverty alleviation programmes, and ensuring social, economic and financial inclusion;
- Reducing environmental risks: addressing climate change, managing deforestation and desertification, melting of the ice caps at the North Pole and Antarctic, the release of hazardous chemicals and pollutants, and excessive or mismanaged waste; and
- Reducing ecological scarcities: securing access to fresh water, natural resources and improving soil fertility.

The Institute for European Environment Policy (IEEP) is an independent, not-for-profit institute dedicated to advancing an environmentally sustainable Europe through policy analyses, development and dissemination. The report **Nature and its Role in the Transition to a Green Economy** was authored by a team of IEEP researchers and funded by UNEP. The report aims to clarify and help mainstream nature's role in the transition to a green economy within the context of sustainable development and poverty eradication.

Different countries have to adopt green economy policies tailored to their national circumstances. The mix of national policies differs from one country to another. Countries are currently trying to utilize a balanced approach by taking into consideration both supply and demand measures, as well as balancing between production and consumption-focused measures. The model of the transition to a green economy by Patrick ten Brink and Leonardo Mazza (IEEP) highlights the current situation in the so-called brown economy, the possible building blocks in the transition and the desirable future. [2] Figure 1 shows the model of transition from the brown economy to the green economy.

The six building blocks of good governance in the transition to a green economy are:

1. Minimizing losses and avoiding inappropriate trade-offs
2. Investing in environmental infrastructure
3. Active management of environmental risks
4. Proactive investment in natural capital
5. Further eco-efficiency for relative decoupling
6. Absolute decoupling of the economy from resource use and its negative impacts

Eco-innovation is the second important issue in the transition to the green economy

What is Eco-Innovation?

Any form of innovation aiming at significant and demonstrable progress towards the goal of sustainable development. This can be achieved either by reducing the environmental impact or achieving a more efficient and responsible use of resources. [3]

"Eco-innovation is any innovation that reduces the use of natural resources and decreases the release of harmful substances across the whole life-cycle." [4]

Eco-innovation projects aim to produce quality products with less environmental impact, whilst innovation involves moving towards more environmentally friendly production processes and services. Ultimately, they will contribute towards the reduction of greenhouse gases or more efficient use of various resources. The idea of eco-innovation is very new.

In 2013, the European Commission's Directorate-General for Environment

founded a project to compile the **Eco-Innovation Observatory (EIO)**. The EIO put together a practical and comprehensive introductory guide to eco-innovation and is addressed primarily to small and medium-sized enterprises (SMEs). [5] The booklet overviews the emerging business opportunities offered by eco-innovation to companies that are reconsidering their business models, developing new products, technologies or services, and desirous of improving their production processes.

Eco-innovation can manifest itself as a new start-up or product; it can also make improvements to existing operations. Eco-innovation not only introduces new technologies; it also creates new services and introduces organizational changes. At its core, eco-innovation is about reducing the resource intensity of products and services by creating business models that are both competitive and respectful of the environment.
Figure 2 shows the holistic approach of the eco-innovation process.

Figure 1. IEEP's Model of Transition from the brown economy to the green economy

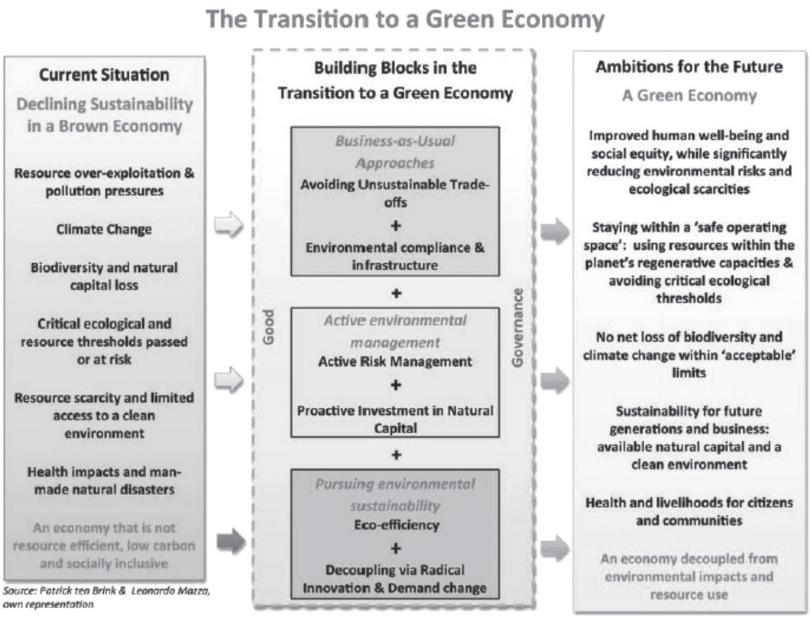
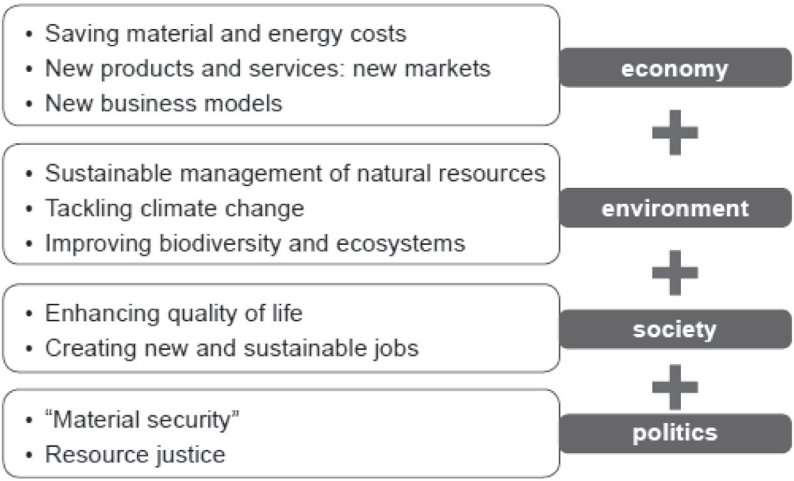


Figure 2. The Holistic Approach of the Eco-innovation Process



Source: Eco-Innovation Observatory, 2013

2. THE ROLE OF SMEs IN GREENING THE ECONOMY

As SMEs account for approximately 99% of all enterprises and for 60-75% of employment within the EU-28 and BSEC countries, their transition to sustainable practices in both manufacturing and services is vital.

The individual environmental footprint of small enterprises may be low, but their aggregate impact can exceed that of large businesses in some respects. Some of the key sectors where SMEs have a significant environment impact include livestock farming, construction, metal finishing, waste treatment, food and drink industry, textile and leather manufacturing, etc.

SMEs account for approximately 64% of the industrial pollution in Europe. Sector variations are generally within the 60-70% range. When employees are used as an indicator, statistical data shows that an average of 64% of environmental impact originates from SMEs in the EU27; this is especially true of the four broad indicators of energy use, greenhouse gases, air emissions and waste or hazardous waste. [6]

It is important for manufacturing firms and SMEs to transition to the green growth economy because they account for a large part of the world's consumption of resources and generation of waste.

The main barriers to green growth and eco-innovation must be identified in order for SMEs and entrepreneurs to fully participate in the transition towards sustainable economic patterns. Similarly, consistent policy strategies should be identified and implemented to encourage SME investment in eco-innovation and sustainable practices in both manufacturing and services.

Figure 3. Internal Barriers in SMEs impeding the Adoption of Environmental Improvement

Resources	Attitudes and company culture	Awareness
• Lack of time to investigate issues or locate support or tools • Severe time pressure in small enterprises • Lack of resource allocation to address environmental issues • Lack of investment in training • Cost constraints on investment • No employee allocated responsibility for environmental issues	• Belief that SMEs have a low environmental impact and have no environmental issues to consider • Mismatch between beliefs and actions: positive attitude toward the environment is not translated into actions • Perception that environment has no relevance to the business: environment given no status as a business issue • Scepticism about the potential cost savings and market benefits • Prevalence of short-term business planning; belief that costs of environmental measures arise quickly while benefits accrue slowly	• Low awareness of environmental legislation • Low awareness of support organisations and information sources

Source: European Commission, 2002

In the green economy, SMEs are able to reduce negative environmental impact in both manufacturing and services. However, SMEs are often unwilling to adopt sustainable practices and seize green business opportunities because they face difficulties and resource constraints such as skills deficit and knowledge limitations. SMEs are often unaware of many financially attractive opportunities for environmental improvement. There is a widespread misperception that it is technically complex, burdensome and expensive to protect the environment. Even when enterprises are aware of the potential of improved environmental performance enhancing their firm's competitiveness, a lack of appropriate skills and expertise commonly prevents them from acting upon win-win opportunities.

According to the OECD guide for green SMEs, "green transformation" is a significant business opportunity for SMEs as they are important suppliers of goods and services. Indeed, the main driving forces behind SMEs' adoption of green practices are non-regulatory, and they include: [7]

- The rising price of commodities and key raw materials
- Potential cost savings and competitive advantage
- Market pressure from customers

The European Union (EU) considers small businesses as central in its green economy policy. Accordingly, the EU is pushing governments across its Member States to introduce better regulation initiatives. The major policy initiatives for SME greening in the EU is **The Small Business Act for Europe** (2008), which was developed to establish the **"Think Small First"** approach to policymaking and regulation so as to promote SME growth. One of its ten high profile principles is to **"enable SMEs to turn environmental challenges into opportunities"** – a paradigm which lies at the heart of the transition to green growth.

The European Commission has committed itself to "rigorously assessing the impact of forthcoming legislation and administrative initiatives on SMEs (known as the 'SME test'), and taking the relevant results into account when designing proposals". The European Commission has recently prepared a **Green Action Plan (GAP)** for SMEs, which give a clear direction and framework to:

- Improve resource efficiency of European SMEs
- Support green entrepreneurship
- Exploit the opportunities of greener value (supply) chains
- Facilitate market access for green SMEs

GAP complements the Green Employment Initiative that taps into the job creation potential of the green economy. GAP works in tandem with the Green Employment Initiative through a roadmap supporting green jobs creation across the EU. GAP also complements the EU's Resource Efficiency Opportunities in the Building Sector Communication as well as the Circular Economy Package and Waste Target Review.

According to the European Industrial Renaissance Communication (COM (2014) 14), GAP aims to contribute to the re-industrialization of Europe as advocated by the European Council. GAP will also enhance SME competi-

tiveness and support green business developments across all European regions. This is particularly important, as there are significant differences in resource efficiency between sectors and Member States.

The European Economic and Social Committee and the Committee of the Regions on the Green Action Plan for SMEs highlight the ways in which greening SMEs will contribute to better competitiveness and sustainability. [8]

The European Commission has set several objectives to be achieved through the following actions:

1. Provide European SMEs with practical information, advice and support on how to improve their resource efficiency in a cost-effective manner.
2. Support efficient technology transfer mechanisms for green technologies.
3. Facilitate access to finance for resource-related improvements and energy efficiency in SMEs.

This Action Plan builds on the Eco-Innovation Action Plan (EcoAP), which provides directions for eco-innovation policy and funding under the umbrella of the Europe 2020 strategy. [9] EcoAP actions and instruments relevant to the greening of SMEs are:

- the European Innovation Scoreboard
- the Eco-innovation Observatory
- the European Forum on Eco-innovation
- European Innovation Partnerships and financing instruments for eco-innovation under Horizon 2020.

GAP has set out a series of objectives and actions that will be implemented across Europe within the framework of the Multiannual Financial Framework 2014-2020.

2.1 GREENING SMES FOR MORE COMPETITIVENESS AND SUSTAINABILITY

Improved resource efficiency in SMEs offers enormous potential for the reduction of production costs and for productivity gains. A better use of resources is calculated to represent an overall savings potential of €630 billion per year for European industry. [10]

At least 93% of SMEs in the EU are taking at least one action to be more resource efficient. In most cases, the action adopted is a low-cost one. However, only 42% of SMEs implementing measures to improve resource efficiency have seen a reduction of their production costs. [11] This indicates that proper guidance on the cost-effectiveness of resource efficiency investments should be provided to SMEs.

2.2 GREEN ENTREPRENEURSHIP FOR COMPANIES OF THE FUTURE

SMEs need a favourable business environment in which green ideas can be easily developed, financed and brought to the market. Green entrepreneurship should already be addressed in (higher) education, to prepare the mindsets of future green entrepreneurs. A green entrepreneur is someone who starts a business to make or offer products/services which benefits the environment. Green entrepreneurship should also be encouraged by helping potential entrepreneurs to identify business opportunities resulting from the move towards a resource efficient, low carbon economy. One way of encouraging green entrepreneurship is through new creative forms of cooperation between businesses and academia. All forms of innovation that foster green entrepreneurship should be supported.

3. OPPORTUNITIES FOR SMES IN A GREENER VALUE CHAIN

Re-manufacturing, repair, maintenance, recycling and eco-design have the potential to become drivers of economic growth and job creation, while simulatenously addressing environmental challenges. Through innovation and the redesign of products as well as production and business models, companies can reduce the use of expensive primary raw materials and create less waste. According to the Eurostat Waste Statistics (2011), 60% of total waste in the EU that is not recycled, composted or reused will offer SMEs the economic opportunities to capitalize on cross-sectoral value chains that make more efficient use of resources.

The Commission has set several objectives to be achieved through the following actions:

- Address systemic barriers to cross-sectoral and cross-national value chain collaboration and business creation and cooperation, by facilitating the creation of service business models and the re-use of materials, products and waste.
- Facilitate cross-sectoral collaboration to promote the circular economy.

The forthcoming action on "Cluster facilitated projects for new industrial value chains" under Horizon 2020 will allocate at least 75% of the total budget to supporting innovation in SMEs. It seeks to support cross-sectoral and cross-regional collaboration and innovation projects driven by SMEs, by better integrating them into clusters and different value chains.

4. GREEN SMEs' ACCESS TO MARKETS

It is in the EU's interest to tackle major global environmental challenges such as climate change. With high economic growth and, in some cases, early stages of industrialization, environmental depletion and emissions are growing at a fast pace in many countries of the world.

The EU makes up roughly one-third of the world market for environmental industries, and is a net exporter. This world market is growing by 5% a year and is expected to triple by 2030, thus offering important opportunities to EU businesses. [12] However, few SMEs in the EU offer their green technologies, products or services in countries outside the EU. Products and services of 87% of SMEs in the EU only circulate within their national markets. [13] This lack of SME internationalization is usually explained by the absence of a supportive framework enabling them to access foreign markets.

4.1 Promote a greener European internal market:

European Standardization Organizations will be encouraged to take into account circular economy objectives when creating standards, in order to continue the European Commission's previous efforts to integrate environmental aspects into European standardization.

4.2 Facilitate access to international markets for green entrepreneurs:

- Establishment of European Strategic Cluster Partnerships fostering alliances between clusters from different sectors, with a view to develop a joint strategy for internationalization. Alliances in the field of green technologies and eco-innovation will be encouraged.
- The financial instruments under COSME will specifically support the internalization of SMEs by promoting their cross-border development.

4.3 Facilitate the uptake of resource efficiency technology in partner countries through cooperation with European SMEs:

- A Low Carbon Business Action will provide technical assistance for the establishment of Cooperation Partnerships between EU businesses, clusters, businesses and other counterparts in middle income countries, and for the elaboration of joint bankable proposals.
- Building of new entrepreneurial activities based on green technologies.

5. GOVERNANCE

The actions linked to this Green Action Plan for SMEs will be regularly monitored, including dedicated financial resources and dialogue with SME stakeholders. The effectiveness of the programmes will also be evaluated. Updated information on the actions will be provided through the European Commission website.

The SME Performance Review will monitor and assess countries' progress in implementing the Small Business Act on an annual basis. Assessment will also be made on the countries' performance in principle IX of the Small Business Act which seeks to "enable SMEs to turn environmental challenges into business opportunities", thereby complementing the Green Action Plan monitoring. [14]

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3. NATIONAL COUNTRY STUDIES IN THE BSEC REGION

3.1. SMEs AND GREEN ECONOMY IN ALBANIA

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ABSTRACT

Green economy and green growth are the necessary preconditions for sustainable development. To facilitate the greening of SMEs, the European Commission (EC) has prepared an action plan to help small and medium-sized enterprises take advantage of the opportunities offered by the transition to a green economy. SMEs need to improve their resource efficiency before they can 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 in the green economy.

Nearly 99.8 % of businesses in Albania are SMEs. For this reason, Albanian policymakers ought to design policies to aid businesses so that they can smoothly and effectively transition to environmentally friendly and sustainable practices. However, there is a noticeable gap between the drafting and implementation of environmental protection, SME development and greening policies by the Albanian government due to the lack of an integrated policy for SME development vis-à-vis environmental protection. While Albania has general environmental strategies for economic development, none of them clearly targets SMEs. As an upshot, Albania is

unable to meet its environmental goals as it does not have clearly defined environmental policies in its SME strategies. Insufficient information and tools on environmental issues, as well as the government's limited capacity in providing regulatory and financial incentives for SME environmental development have also exacerbated Albanian SMEs' difficulty in adopting environmentally friendly practices.

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

JEL Classification: 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 sixteen years. Before the global financial crises in 2000-2007, real GDP grew by 6.0% on average. Economic growth was driven by a boost in domestic consumption and productivity gains, which were both supported by a surge in credit availability. The financial crises caused economic growth to slow to an average of 2.4% in 2010-2015. The deterioration of macroeconomic development in Albania's main EU trading partners, high economic uncertainty, worsening investor confidence, weak credit and falling remittances have exponentially reduced domestic demand in the post-crisis years.

Albania is a small open economy operating consistently under a trade deficit and a relatively high current account deficit that averages close to 11% of GDP. However, the overall balance of payment is positive due to very high foreign inflows, driven mostly by foreign direct investments (FDIs). In recent years, the trade deficit has narrowed, reflecting the decline in imports of goods and services. The narrowing trade deficit has similarly led to the decline of Albania's current account to almost 11.2% of GDP in 2015. Albania has constantly run a budget deficit that averages close to 4% of GDP in the last ten years. In this regard, the public debt has accelerated in the last four years, and is at 72.5% of GDP as of the end of 2015. Albania's current account deficit and the fiscal position continue to be the main vulnerabilities for the Albanian economy.

The financial system in Albania has experienced substantial changes in the last ten years. Financial intermediation has deepened and more innovative financial instruments have been introduced. The banking system is one of the more active and developed segments 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 competiveness and efficiency in the market. The ratio of banks' assets to GDP has increased to 91.3% as of 2015. The banking system is characterized by a high ratio of liquidity and capitalization, which have helped withstand shocks to the system (Bank of Albania 2016a).

During the transition period, Albania has been characterized by a low level of inflation of its consumer price index (CPI). In the aftermath of the global financial crises, inflation remains low as the economy operated below its potential. Average annual CPI inflation rate in 2015 has been close to 2%, lower than the 3% target of the central bank. As a result, the monetary policy is in the easing cycle. The key interest rate was lowered progressively from mid-2011 to the actual level of 1.75% (Bank of Albania 2016b). 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 decelerating 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 economic growth and employment. SMEs contribute more than 73% in GDP and more than 74% in employment in the non-agricultural private sector (INSTAT 2016). At the end of 2014, there were 112,537 active enterprises in Albania, increasing by 9.2% from 2010, and by almost 86% from 2005. Female involvement in business management accounted for almost 28.5% of total businesses (INSTAT 2015), increasing by 17.4% from 2010 and 131% from 2005. A total of 17,377 new enterprises were registered in Albania in 2014, and the birth rate registration was 15.4%. The number of active enterprises per 10,000 inhabitants reached 389 by the end of 2014, increasing by 7.3% from 2010. Of all the enterprises in Albania, 76% are registered as physical persons, 24% are juridical persons, and 4.7% are Albanian companies with foreign investors (Demeti et al. 2016).

At the end of 2014, 94.6% of Albanian SMEs were microenterprises with one to nine employees (see Figure 1). In 2014, over 55% of active enterprises were operating in the Tirana and Durrës regions.

78% of Albanian SMEs operate in the services sector; with 40% of them in the trading industry, 16% in the accommodation industry by 16%, and so on. As can be seen in Figure 2, 9% of SMEs operate in the manufacturing and extraction industry, 7% in transport, 4% in construction 4%, and 2% in Information and Communications Technologies (ICT).

Figure 1. SMEs by size, 2014

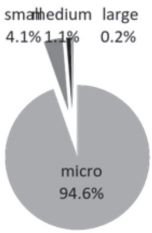
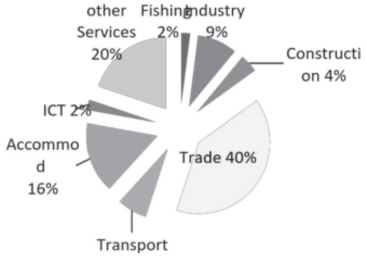


Figure 2. SMEs by activity, 2014

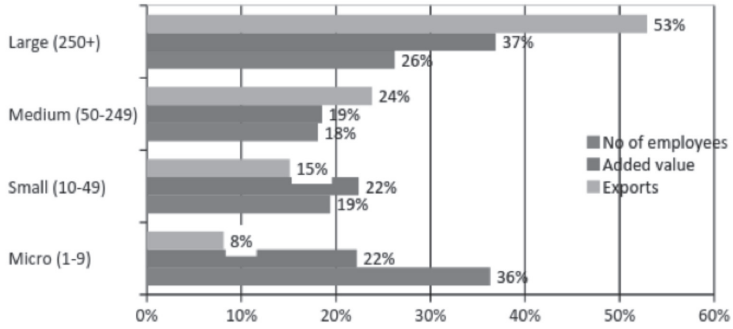


Source: INSTAT, 2015

Contribution of Entrepreneurship and SMEs

Although SMEs currently contribute 74% of total employment in the non-agricultural private sector (INSTAT 2015), this figure is 7% lower than in 2013. Albanian SMEs contribute 47% to exports, increasing by 6% from 2013. SMEs account for 63% of total value added of the economy, decreasing by 3.6% from 2013. Microenterprises contributed to 36% of employment in the non-agricultural private sector (decreasing by 7.7% from 2013), 8% of exports (remaining almost the same from its 2013 figures), and 22% in value added (decreasing by 2.8% points from 2013). Small firms contributed 19% to employment (increasing by 1% from 2013), 15% to exports (increasing by 2.7% from 2013), and 22% to value added (remaining almost the same from its 2013 figures). Medium firms contributed 18% to employment (decreasing by 1.4% points from 2013), 24% to exports (increasing by 3.3% points from 2013), and 19% to value added (decreasing by 0.9% from 2013). Full details of these statistics can be seen in Figure 3.

Figure 3. SMEs' Contribution to the Albanian Economy, 2014

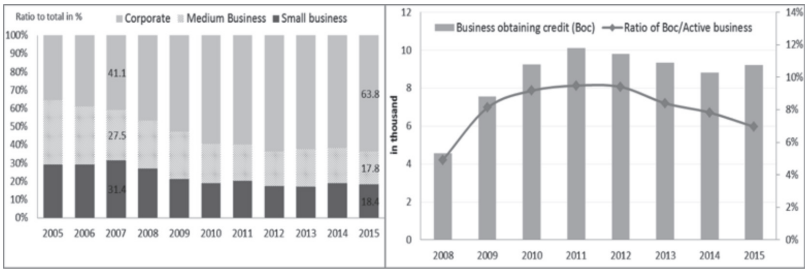


Source: INSTAT, 2016

Lending in the economy

In developing countries characterized by an underdeveloped financial market, bank credit represents the dominant source of financing. Bank lending activity in Albania accelerated in 2003-2008, supported by the private sector's high demand for financing, low usage of financial leverage, and an ample supply of loans from the establishment of experienced European banks in the country. After the 2008 global financial crisis, bank lending activity decelerated considerably. Although the ratio of credit to GDP rose to 40% in 2012, it has been steadily declining and is close to 35.3% in 2015. Growth rate has remained negative in the past two years and there is no growth in positive value. The contraction of the credit portfolio in 2015 was especially driven by loan write-offs and nonperforming loans (NPLs) arising from stricter regulatory enforcement by the supervisory banking authority. The decline in demand for loans is a key factor in the under-performance of the Albanian economy, and has resulted in high economic uncertainty. The deterioration of loan quality and the deleveraging policies of the large European banks have led to the strengthening of the lending standards and contracted credit supply. The reinforcement of the lending standard also exacerbated the decline of credit demand. However, banks eased their lending standards to households in 2015. This contributed to the recovery of the household credit demand, which remains the main driver of credit growth.

Figure 4. Structure of Business Credit Portfolio and the number of Businesses obtaining



Source: Albanian Association of Banks

Before the global financial crises, the business lending portfolio had been balanced in accordance to the size of the business, with SME financing making up 60% of the business lending (see Figure 4). Due to the credit supply restriction and increased uncertainty of economic development after the crises, bank financing shifted towards corporate business so much so that 64% of loans went to such enterprises in 2015. SMEs' access to finance was drastically reduced after the global financial crises. According to the 2015 Global Competitiveness Report (WEF 2014) SMEs' lack of access to finance was a problematic factor for doing business in Albania. In particular, there are no bank loans for start-ups in Albania. It is only recently that some start-up SME loans were offered with the support of international institutions such as USAID, the Italian government and EBRD. However, these loans are only offered to SMEs in special sectors of the economy. Even so, the loan amount provided is low and it is still too soon to evaluate the impact of these loans on the national economy.

Following the global financial crises, lending activity was characterized by the concentration of credit supply for a small number of business and in few banks in the system. Despite the increase in the number of businesses obtaining credit in the banking system in 2015, it is 8.6% lower than in 2011. This means that only 7% of all active businesses in Albania have access to bank loans. Thus, access to credit remains one of the main obstacles to business growth.

In recent years, banks have adopted prudential lending policies by strengthening their lending standards to business through non-price re-

lated terms. When compared to the pre-crises period, present-day lending standards have been particularly strengthened for businesses and investments. These lending standards have been strengthened through increase of collateral coverage, higher demands on the quality of collateral, as well as shortened credit maturity and commissions (Bank of Albania 2016c).

The 2015 Doing Business report by the World Bank attributes lower SME demand for bank credit to the high rate of interest on loans and the demand for collateral. Thus, SMEs and active businesses in Albania now face serious constraints in obtaining financing. Given these facts, it is no surprise that access to finance remains one of the main obstacles for SME growth in Albania.

The ratio of credit to value added for each sector fluctuates considerably, ranging from less than 3% for the agriculture sector to 81% for the service sector. The trade sector is the most financed sector of the economy. The highest correlation coefficient between credit and value added is for the construction and trade sector, and the lowest is for agriculture and industry. The allocation of credit according to economic sector is related not only with the structural features of each sector's economic activity (such as performance, informality, competitiveness), but also with the sectoral orientation of banking policy and the (in)effectiveness of decision taking in banks' lending policies. Albania remains one of the countries with the lowest levels of credit to GDP in the region (Suljoti and Note 2013). Increasing SMEs' access to finance remains one of the main challenges of the government's economic policies.

2. FACT SHEET ON SMEs AND ENVIRONMENT-RELATED ISSUES IN ALBANIA

SMEs and Environment Issues

Almost 95% of Albanian businesses are microenterprises; and 76% of them operate in the services, trade and tourism sectors, which have the lowest level of waste. While small businesses' environmental footprint may be individually low, their aggregate impact can sometimes exceed that of large businesses. Medium and large companies in the following sectors are the biggest polluters in Albania: fuel extraction, oil production, extraction of other minerals, leather manufacturing, and cement production. These polluting enterprises comprise 5% of the total number of businesses in Albania.

Industries producing alimentary and non-alimentary goods are dependent on the nature of their products, degree of technological advancement, professional skills of their employees, as well as investment received. As a result, their activities have serious environmental impact. This is because they dispose their waste on land and in water and air. Moreover, the different activities, production capacity and fuel used in the technological process also lead to different levels of environmental pollution.

Albanian law requires all companies to acquire environmental permits, which vary according to the industry in which they operate. While the permits are issued to the applicant within 10-30 days from the Albanian National Licensing Centre (NLC), which functions as a one-stop shop, the institutions monitoring the eco-friendly activity of SMEs are weak. Furthermore, there is no available data on companies using 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. To date, no Albanian company has ISO 50001 for energy management. MSMEs almost always lack environmental management certifications because there are no government incentives for them to acquire those standards.

Legislation Issues for SMEs related to Environmental Management

The transposition of the European acquis into Albanian national legislation on environmental protection is quite low. As per the 2015 EC Progress Report, 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 yet to be adopted. Preventive measures are not enforced and risk preparedness is not applied. Self-monitoring of emissions is unreliable. There is also no legal framework on chemical management (Albania Progress Report 2015). The overall implementation and enforcement of legislation remains weak, and more has to be done to strengthen administrative capacity and inter-institutional cooperation (Slushaj and Arapi 2012).

The legal framework for renewable energy has recently been adopted, while secondary legislation is still being drafted. The monitoring infrastructure is still in development due to lack of human and equipment capacity.

The Albanian Ministry of Environment has been tasked with the responsibility of drafting policies and legislation for environment protection and waste management. It is also responsible for inspections and control vis-à-vis the implementation of environmental law. Other authorities collaborating with the Ministry of Environment in regulating environmental protection include 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 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. As can be seen in Figure 5, Albania is the second country in Europe after Norway to enjoy almost 100% renewable electricity, due to its hydropower generation system (Agroweb 2015).

Albania has huge hydro-energetic potential, of which only 35.4% is used so far. The country has a total installed capacity of 1,466MW and produces an average of 5,283GWh of hydropower. Albania's total hydro renewable energy reserves have resulted in the installation of a 4,500MW power network, and its annual electric power production could reach up to 16TWh (AKBN 2013).

Over the years, competitive concessionary policies have led to the signing and approval of 164 concessionary agreements for the construction of up to 435 small, medium and large hydropower plants. These concessions were granted to domestic and foreign investors and are expected to secure a hydroelectric generation potential of 1,919MW, which in turn is projected to produce 4 billion kWh of electricity from renewable sources per year (AKBN 2015).

Non-hydro renewable energy. These energy sources are provided by the wind and sun. Albania falls far behind in the use of non-hydro renewable energy in the region, even though it is blessed with plenty of sun (approximately 270-300 days per year) as well as wind.

The legislation for the production of these kinds of renewable energy is missing. There are no wind energy parks in Albania. Solar energy is also only used by a few private individuals for family needs, as very few industries and public institutions use it.

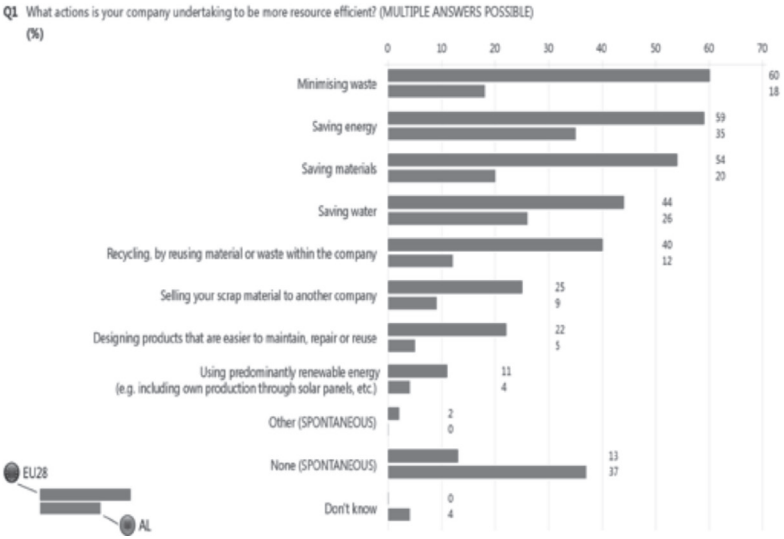
Figure 5. Map of HPC distribution

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 the Albania Flash barometer survey (EC 2015a), only 18% of companies in Albania actively minimize waste in contrast to 60% of EU companies; 35% save energy; 20% save raw material; 12% recycle and reuse material or waste within the company; 4% use renewable energy or solar energy. As Figure 6 shows, 37% of Albanian companies carry out these actions in a spontaneous way compared to 13% of EU companies.

Figure 6. Resource Efficiency in Albania, 2015



Recycling Industry

There is currently a global shift towards a more effective management of waste through the production of goods and services utilizing low energy consumption and more fuel savings, etc. The Albanian recycling industry has experienced many difficulties in the last decade. Companies lack the capacity to secure qualitative and required quantities of plastic waste in the internal market, while import of plastic material is currently banned. Due to the undeveloped recycling market, Albanian recycling companies are likely to experience vulnerability and uncertainty in the foreseeable future.

Although the recycling system in Albania has high potential for growth, this industry is still in its infancy. More effort and investment are required in this field. Before the recycling system in Albania can mature, there has to be effective operation and management, better clearance policy and support from the government, and improved education of the public, etc. The manufacture and retail sectors are not interested in minimizing the use of plastics or their recovery, as there is no financial fee per weight obligation to pay for (UNIDO-UNEP 2016).

Albania's weak recycling industry only collects 10-15% of plastic, iron, aluminium, paper and cardboard waste for recycling (Slushaj and Arapi

2012). The collection of metal waste such as copper, brass, bronze are exported because there is no copper processing industry in the country.

There are currently 60 private recycling companies in Albania collecting and processing different types of waste such as scrap metal, paper, plastic, textiles and used tyres. Additionally, more than 12,000 informal individual collectors gather waste from garbage for sale to recyclers (EEA 2013) However, there is no waste separation at the source, and individual collectors and companies consequently face difficulties in finding clean and separated waste. Urban waste and waste from the industrial sector form the bulk of Albania's recyclable waste.

Some sorting of glass bottles, scrap metal, paper and cardboard 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 Durrës. Aluminium cans are mostly exported to neighbouring countries for reprocessing, as a very small proportion of them are processed at a small private Albanian smelter (UNECE 2014).

According to the Report on Plastic Waste Management and Recycling in Albania (UNIDO-UNEP 2016), about 25-30% of the country's waste is recycled in plastics, paper and wood. This figure is low compared to other EU countries. The reasons for this low percentage lie in the chaotic collection of urban waste and the lack of waste separation at their source.

4. ASSESSMENT OF SMEs IN THE GREEN ECONOMY

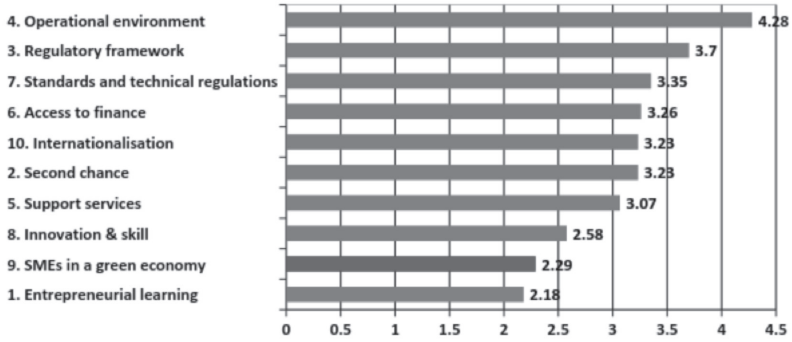
The SME sector is a major driver of economic growth and job creation in the Albanian economy. According to the SME Policy Report (OECD 2016), SMEs development in Albania is rated 3.12 out of a maximum of 5 points. This is a slight improvement from 2012 when Albania fared only slightly less than the regional average at 3.17 points. The report was based on ten dimensions derived from the ten principles of the EU Small Business Act.

Assessment of Albanian Government Policies on the Greening of SMEs

Principle 9 of the Small Business Act refers to the potential of SMEs to turn environmental challenges into opportunities. An analysis of Albania's progress in Dimension 9 (SMEs in green economy) reveals that there was an improvement in ranking by 0.47 points in 2016 compared to 2012 (2.29

in 2016 vs. 1.86 in 2012). However, Albania still lags far behind in this dimension when the other dimensions are examined (see Figure 7).

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



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

While Albania has already implemented general environmental strategies for economic development, none of them clearly targets SMEs. Furthermore, the environmental policies included in the respective SME strategies are not properly designed to meet their environmental goals. However, the Business and Investment Development Strategy 2014-2020 does emphasize the need to invest in environmental sustainability, specifically in the development of a recycling industry. Such deficiencies in the policies targeting the greening of SMEs are due to the lack of financial or regulatory incentives. Even though the Ministry of Environment is responsible for regulating and implementing general environmental policies, there is an evident mismatch between their environmental and SME development policies. Similarly, the national action plans that set general environmental objectives such as efficiency, emission levels and waste management fail to 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 lacks the necessary capacity to provide regulatory and financial incentives to help SMEs with environmental development. On the

other hand, Albania ensures SMEs are able to obtain environmental permits through the National Licensing Centre within 10-30 days.

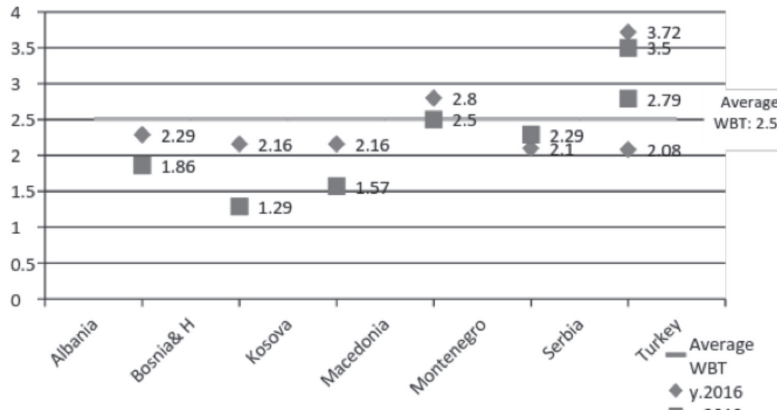
The planning and design of environmental policy in Albania has a low score of 1.27 out of 5. There is also no monitoring and evaluation of environmental policy (score of 1 out of 5). Albania does not provide regulatory incentives to reduce the inspection frequency of low-risk facilities; neither is there any financial support for the greening of SMEs.

SMEs in a Green Economy in the Western Balkan Countries and Turkey

According to SME policy index 2016, the economies of the Western Balkans and Turkey have made little progress in the greening of SMEs. This is due to the palpable disconnection between their environmental targets and SME development targets. SMEs find it hard to adopt environmental friendly approaches because they lack information and tools. Moreover, policymakers have limited resources from which regulatory and financial incentives may be offered to help SMEs with the greening of their enterprises.

Albania's environmental performance is far below the EU average (EC 2015b). No new environmental measures were introduced in 2014-2015. As a result, SMEs in Albania received a score of 2.29, which is lower than the Western Balkans and Turkey average of 2.51 (see Figure 8).

Figure 8. Assessment of SMEs in green economy in Western Balkan Countries & Turkey, 2015



Source: "The SME policy index 2016 in Western Balkan Countries & Turkey," Dimension 9: SME in Green Economy, OECD, 2016.

5. PROJECTS SUPPORTING THE GREEN INDUSTRY

There are very few projects supporting the greening of SMEs in Albania. These projects are listed below:

- **National projects:**

The IPARD Grant Scheme is co-funded by the EU (75%) and the Government of Albania (25%). It started in 2012. IPARD contributes grants to the sustainable development of the agricultural sector and rural areas. There are also some grants for green agri-processing.

ECAT assists local governmental and non-governmental organizations, 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), United Nations Environment Programme (UNEP) and Albanian government undertook an initiative, the National Cleaner Production Programme for Albania, to increase local business' range of eco-efficient products in selected sectors, but do not directly focus on the SME sector.

ProCredit bank and National Commercial Bank (BKT) ostensibly grant eco-loans with preferential interest rate, but there is no evidence of any enterprise utilizing it.

The UNDP Global Solar Water Heating Market Transformation and Strengthening Initiative 2010-2014 seeks to promote and recommend Solar Water Heating (SWH) as a promising means of reducing electricity and fuel wood consumption. If successful, it would reduce greenhouse gas emissions. This project also supports new legislation on renewable energy according to EU directives.

The innovation fund that began in 2012 and is still ongoing only covers 30-50% of approved activities or project costs of innovation audits. The maximum amount granted to one SME is EUR 3,000. The Albanian Investment Development Agency (AIDA) is the implementing agency.

- **EU Projects Supporting Green Industry**

Albania participates in a few EU community programmes. These programmes will be briefly discussed below.

Albania has been a part of the **Competitiveness and Innovation Framework Programme (CIP)** since 2007, but very few Albanian entities have applied and even less have been elected as winners in partnership with other entities of regional countries. These programmes also include some projects promoting eco-innovation. The **EU programme for the Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME)** running from 2014-2020 replaced CIP in 2013. Albania ratified an agreement to participate in COMSE in June 2015. Consequently, Albania is part of the Enterprise Europe Network (EEN). AIDA was selected as a winner in April 2015, thanks to Albania's participation in EEN.

Horizon 2020 (2014-2020) replaced the Seventh Framework Programme for Research and Technological Development (FP7), and offers grants for research and innovation.

In addition, Albania benefits from an **EU-EBRD funded programme supporting small businesses** in the improvement of their market performance, management effectiveness and skills, and strategic planning. This programme directly transfers relevant commercial and technical expertise from experienced managers in countries with already established market economies. The incorporation and/or improvement of sound environmental practices in entrepreneurial activities (such as optimal use of energy and materials, better manufacturing processes and production quality control) are also part of this programme.

6. SOME EXAMPLES OF GREEN SMEs

EDIPACK http://www.edipack.al/

Edipack started producing paperboard and cartons in 2003. It soon became Albania's largest packaging material company. It specializes in the collection, recovery and recycling of paper; and its final product is paperboard. As Edipack's activity is based on the philosophy of keeping the environment clean, it avoids cutting trees.

The company is highly sensitive towards environmental issues. The company uses recycled water in its manufacturing process.

In 2014, the company was certified with **ISO 9001:2008 and ISO 14001.**
Dekoll Ltd www.dekoll.eu

Dekoll Ltd www.dekoll.eu

Dekoll Ltd is a recently established company producing construction materials like tile adhesives, mortars, hydro isolation materials, primer, fillers, decorative coatings, auto leveller, plasters and paints. Dekoll is an investment of Brunes Ltd (www.brunes.al).

Dekoll 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.

It is 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. It is also the biggest recycler of polyethylene waste in Albania. Its 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 directly employed workers, as well as another 1,300 indirectly employed through the network of recycling collection materials. The company has invested in a strong network where used polyethylene (PE) materials are collected for recycling. These convenient collection points not only divert tons of PE scrap from landfills, but also reduce PE litter by reusing the recycled raw material. The company's aims

to set up local stations for the collection of PE waste directly from big customers.

It has had the **ISO 9001:2008** quality certificate since 2010; and the **ISO 14001** quality certificate for the environment since 2013. It was awarded **CSR** in 2007.

Agrotek Albania http://www.agr.al/en/farm/3/kompleksi-agrotek-farm
Fresh chickens known as "TikTik" have been reared in the Agrotek Farm Complex since 2012. They are fed with 100% natural food such as corn, wheat, soybeans, etc. that are free from hormones and antibiotics.

The highly hygienic slaughtering and packaging processes comply with the sanitary standards of the European Community.

The farm houses 120,000 chickens at capacity. Over 90% of production is distributed to the consumers as "fresh" (unfrozen) so as to preserve the nutritional value of the 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

SMEs' lack of proper access to finance, and firms' limited ability to fund potentially risky green investments and eco-innovations deter them from transitioning to green environmental practices.

Firms do not obtain environmental certification due to the lack of financial incentives such as grants, tax reductions for reusing and recycling waste, initial renewable investment, etc.

This is further compounded by the lack of regulatory incentives such as reduction in the number of state-led inspections of companies with environmental certification.

Environment Obstacles faced by SMEs

According the flash barometer survey, some environmental obstacles faced by SMEs are:

- SMEs are prevented from adopting eco-friendly practices due to the lack of information and tools on environmental issues.
- Because SMEs lack knowledge on the green industry and the benefits of resource efficiency, they do not see why their enterprises should be green.
- SMEs have limited capacity for greening due to lack of resources, time and expertise.
- SMEs' limited access to finance keeps them from developing environmentally friendly products and services.
- Small companies cannot afford the high costs of eco-friendly investment.
- Environmental, quality and energy management certifications are costly to obtain.
- The lack of financial and regulatory incentives aiding SMEs with the greening of their enterprises.
- The lack of soft loans for eco-friendly investments in resource efficiency and renewable energy.

Targets by 2020

Albania hopes to achieve the following targets by 2020:

Renewable energy: In accordance with EU guidelines, at least 38% of the energy offered to Albanian consumers would have to come from renewable sources by 2020. This requirement is stipulated by the EU, and aims to provide citizens with lower energy costs as well as a clean and pollution-free environment. Renewable energy may be tapped from hydro, wind, solar or other alternative power sources (Agroweb 2015).

Recycled waste: By 2020, Albania should be reusing and recycling at least 50% of all organic waste, 60% of paper/cardboard, 50% of metal, 22.5% of plastics and 60% of glass generated in 2014 (UNIDO-UNEP 2016).

8. RECOMMENDATIONS

Although, there are general environmental policies in Albania, more should be done to highlight the ways in which these environmental policies can target SMEs. The continuous efforts to raise awareness and facilitate the

information flow on environmental policies are positive steps towards the development of an environmentally friendly economy. The introduction of regulatory and financial incentives could incentivize SMEs to undertake investment for the greening of their activities.

Policymakers increasingly recognize the need to incorporate environmental provisions in SME policies, but their efforts are not sufficiently wide-reaching. Incentives for SMEs are limited by inadequate budgets and institutional capacity.

The following recommendations could help the greening of SMEs in Albania:

- The Albanian government should include policies on the green economy in its agenda.
- Web-based systems helping SMEs to obtain information on environmental issues and tools should be established.
- A new Green Industry Strategy or Action Plan 2016-2020 should be drafted according to the EU Green Action Plan 2020 and implemented.
- All EU legislation on environmental management and renewable energy should be transposed in Albania.
- A national management system for the treatment of all type of waste should be established. Human capacities should also be strengthened.
- A national monitoring system should be set up to measure and monitor environmental protection indicators.
- Financial and/or regulatory incentives promoting and implementing the necessary standards for renewable energy, resource efficiency and recycling of waste should be introduced. Some incentives that may be introduced are:

- Reduction in the number of state-led inspections in SMEs that have ISO 9001, ISO 14001, ISO 50001.
- Establish criteria for environmentally friendly practices. Use this criteria as the determining factor before companies are allowed to participate in bids and public-private partnerships (PPPs).
- Tax exemption and reduced interest loans to companies investing in greener technology.
- Removal of value added tax (VAT) on recyclable waste.
- Removal of national tax for plastic packaging in single use packaging made from recycled material. Building up the infrastructure of waste

collection in the city through PPPs.

- Design and introduce schemes supporting green entrepreneurship, green products and green jobs.
- As green growth cannot be achieved without innovation (UNECE 2014), financial subsidies should be given to businesses that actively use innovating environmentally friendly technologies.
- Introduce environmental education in the education system to encourage the adoption of eco-friendly approaches throughout society.
- The government should offer direct subsidies and free technical assistance to SMEs so as to increase their awareness of environmental issues and secure their initial engagement in green practices.

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3.2. PROMOTING GREEN PERFORMANCE OF SMEs IN ARMENIA

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A green economy is about a different way of doing things. It is about recognizing that our economies need to be guided by different goals, sustained by different activities, and deliver different results.	**We believe it is possible. We know it is necessary.**

ABSTRACT

The vast majority of SMEs lack information on environmental issues and financially attractive green business practices. They also tend to lack the in-house capacity to successfully address these issues. Governments, therefore, play a crucial role in facilitating access to environmental information and expertise, and can suggest incentives to encourage the adoption of greening activities.

Many EU and other OECD countries have addressed this challenge by implementing information-based tools as well as regulatory and financial incentives to support SMEs' improvement of their environmental performance and compliance with regulatory requirements.

This paper analyzes the Armenian SME sector and existing instruments supporting the implementation of environmentally friendly production practices.

In so doing, we will examine the main opportunities for and obstacles to improving the environmental performance of SMEs in Armenia, including the deployment of resource and energy efficient technologies and business practices.

Keywords: green economy, SMEs, environmental compliance, environmentally friendly production practices, Armenia

JEL Classification: L26, O12, Q56, Q57

1. SMEs AND GREEN ECONOMY IN ARMENIA BACKGROUND

In Armenia, as in other European countries, SMEs have great influence in the country's economic structure. They are the backbone of the economy as well as a major source of entrepreneurial innovation and skills. Currently, the Armenian SME sector contributes 25% to GDP. There are 74,366 SMEs in the country as of 31 December 2014, comprising 98% of all registered legal entities.[1] This means that the current number of SMEs in Armenia has doubled since 2002. SMEs contribute to 32.7% of total employment in Armenia (370,381 employees), 64% of which is concentrated in the capital city of Yerevan.

A number of institutional and policy reforms have been carried out to improve the business environment in Armenia. Progress has been made in the effective restructuring economy whereby the productive tradable sector is emphasized. As a result, economic growth has shifted from the non-tradable sector to the export-oriented tradable sector.

The Armenian government has pursued a proactive approach to supporting SME growth since 2000. This approach reduces the administrative burden on small businesses and increases their competitiveness. Armenia's Law on State Support to Small and Medium-sized Enterprises, dated 5 December 2000, defined SMEs in the country for the first time and laid the foundation for the government's SME support programmes.

Some of the key developments were the creation of an SME Support Council chaired by the Prime Minister and the establishment of an SME policy implementation agency (known as the Small and Medium Entrepreneurship Development National Center or SME DNC) in 2002.

The new Small and Medium Enterprise Development Strategy (2016-2018), adopted in October 2015, outlined the objectives for SME sector development in the next three years, elaborated on appropriate toolkits and defined best practice methods.

The strategic goal of SME development in Armenia is the nurturing of a competitive environment for small and medium business activity through promotion of enterprise development, dissemination of knowledge in en-

1 SMEs in figures, 2013-2014", Yerevan: SME DNC, 2015

trepreneurship, ensuring access to finance, simplifying the tax system, and improving the mechanisms for dialogue with the private sector as well as through promotion of innovation and sustainable development.

Annual SME state support programmes have been implemented since 2000, and are based on the fundamental principles of Armenian state economic policy. These SME state support schemes contribute to the country's economic development, especially in rural and remote areas. By concentrating on economic development in the rural areas, the government of the Republic of Armenia hopes to overcome regional disparities.

SME greening issues have also become a part of national policies and were embedded in the Small and Medium Enterprise Development Strategy (2016-2018). While green issues do form a part of current annual SME support programmes, specific institutional instruments promoting green practices and SME adoption of green technologies and management practices have not been formally introduced yet.

Despite the potential of green practices in improving the efficiency and competitiveness of Armenian businesses, there is a significant gap between the enterprises' compliance with environmental laws and adoption of greening measures.

2. MAIN CHALLENGES OF REGULATING GREEN PERFORMANCE OF SMEs

SMEs, particularly micro and small enterprises, are low-risk facilities in the field of environmental impact. Numerous SMEs, particularly micro and small ones, do not fall under the purview of environmental regulations. While their individual impact on the environment may be low, the large number of micro and small enterprises may collectively present a cumulative impact on the environment.

Green practices and efficiency are closely related. As green practices stem from business costs and drive innovation, they provide SMEs with significant business opportunities for growth and development in green technology innovation and production.

Increasing the environmental performance of SMEs has become a priority for EU countries. The Small Business Act for Europe (2008) was developed

to establish the "Think Small First" approach to policymaking and regulation so as to promote SME growth. One of its ten principles seeks to enable SMEs to turn environmental challenges into opportunities for improved competitiveness and sustainability.

There is a lack of specific institutions capable of aiding businesses and industries in understanding their environmental responsibilities, and complying with legislation and good practices. As a consequence, many enterprises do not yet realize the possible economic and financial benefits of good environmental practices.

In order to fill this gap, a number of international donor-funded programmes have been engaged to promote environmentally friendly production practices across the SME community in the country. For example, the United Nations Industrial Development Organization (UNIDO) has provided assistance in developing and implementing a cleaner production programme for the mining, chemical and food processing sectors. German International Cooperation (GIZ) has implemented several projects to promote environmental management, efficient use of resources and waste minimization in private enterprises, especially SMEs. These and other similar initiatives rely primarily on audits and training of volunteer companies. However, these fragmented efforts have not resulted in specific institutionalized instruments for the promotion of green practices and have not had any tangible impact on the environmental performance of Armenia's business community.

The main challenges of regulating SMEs are as follows:

- The diversity and complexity of SME activities, both within and across different sectors, will affect the type and degree of environmental problems faced by various businesses. This will, in turn, affect the ways in which these various business sectors are regulated.
- The substantial number of MSMEs and the lack of information affect these enterprises' compliance with environmental laws.
- Small businesses possess limited capacity (lack of resources, time and expertise) to understand and comply with regulatory requirements.
- Small business owners generally have low awareness as to the environmental impact of their entrepreneurial activities, the need to address these issues and comply with green regulations.

2. CURRENT IMPLEMENTATION OF GREEN PRACTICES

To identify the main opportunities and obstacles to improving the environmental performance of SMEs in Armenia, including the deployment of resource and energy efficient technologies and business practices, a survey of 416 SMEs was conducted in the first half of 2014.

The survey was conducted under the auspices of the pilot project, "Promoting better environmental performance of SMEs in Armenia", as part of the European Commission's "Greening Economies in the Eastern Neighbourhood" (EaP GREEN) initiative in partnership with the OECD, UNEP, UNIDO and UNECE. This project to enhance Armenian SMEs' environmental performance aimed to:

- Strengthen government policies in Armenia in order to promote better environmental performance (voluntary environmental compliance and green business practices) among SMEs.
- Promote government-to-business and business-to-business dialogue on the benefits of green practices as well as increase the role of business and trade associations in SME greening.

The project was launched in December 2013, following a preliminary review of Armenia's current SME-related environmental legal framework and existing environmentally friendly practice instruments.
The survey covered the following activity sectors:

- Agriculture, fisheries and forestry
- Mining and quarrying
- Food and non-food manufacturing
- Construction
- Hotels and restaurants

The statistical sample reflects the percentage of MSMEs in the country as it covers microenterprises (65.4%), small enterprises (25.2%) and medium-sized businesses (9.4%). The sample covered all regions (marzes) of Armenia, and mirrored the distribution of SMEs in the target sectors across the country.

According to the survey, 56.7% of SMEs declared that they were not subjected to any environmental requirements, and 22.6% complied only with general (often referred to as "duty of care") obligations. Though only about 20% of SMEs had an environment-related permit or licence, this figure is

higher in activity sectors with significant environmental impact (40% in mining and 25% in manufacturing). Less than 10% of SMEs report having several environmental permits (for air emissions, waste water discharges, waste disposal, etc.). Of the SMEs with environmentally related permits, 56.5% were medium-sized businesses (56.5%) and 11.7% were micro-enterprises.

There is an obvious lack of proactive dissemination of regulatory information to SMEs on the part of the Armenian government. The principal sources of information on environmental regulations are the website and telephone hotline of the Ministry of Nature Protection, but very few SMEs consult them. The Ministry's Information Analytical Centre elaborates and disseminates educational manuals, newsletters, digests and other information materials, but they are mainly disseminated to businesses at occasional training events. The Ministry sometimes organizes press conferences and publishes press releases on specific environmental issues, but they do not promote environmental compliance and good practices.

Very few Armenian SMEs contemplate going beyond environmental compliance. Only 4.1% of the total number of SMEs surveyed stated that going beyond compliance was their priority (12.8% of medium-sized businesses).

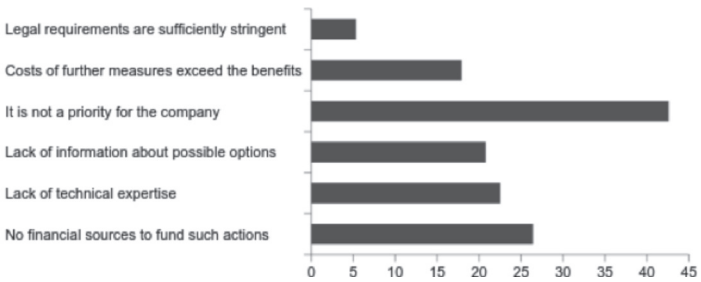

Figure 1. Reasons not to go beyond compliance

Less than 2% of the surveyed SMEs have a certified ISO 14001 environmental management system (EMS), and another 9% have adopted a less onerous national environmental management standard. Overall, 33% of medium-sized enterprises claim to have implemented an EMS. Businesses that have some kind of EMS mostly cite commercial reasons for adopting

it, namely, demand from suppliers and customers as well as efforts to improve the company's image in the eyes of clients, business partners or the general public.

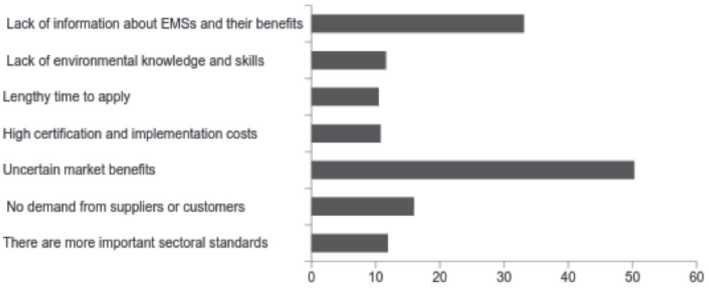

Figure 2. Reasons not to apply Environmental Management System (EMS)

Over half the Armenian SMEs surveyed have either undertaken resource efficiency measures to save water, energy or raw materials, or plan to do so in the future. About 10% of Armenian SMEs surveyed offer green products or services, with 2% claiming to have been awarded an ecolabel; another 9% are planning to do so in the next two years.

According to the SME survey, 88% of companies undertaking resource efficiency measures receive no technical or financial support. Less than 5% receive technical assistance from government authorities; 9-10% of these are small and medium-sized businesses, as microenterprises do not benefit from government support at all. Armenian SMEs of all sizes cite costs, poor access to finance, their own lack of capacity, and different bureaucratic barriers such as complex administrative procedures and obsolete technical requirements as obstacles to engaging in green practices.

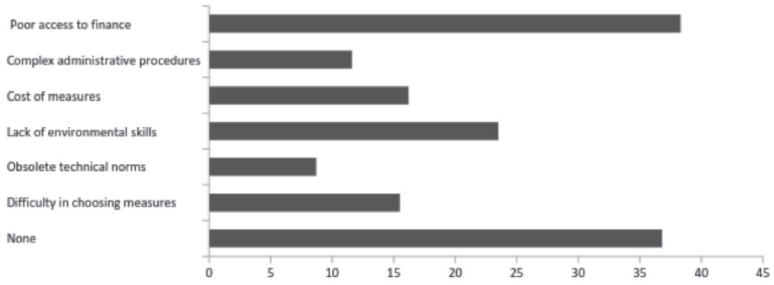

Figure 3. Main barriers to engaging in green practices

3. MECHANISMS AND TOOLS TO PROMOTE GREEN PRACTICES AMONG SMEs

There is a great variety of strategies and instruments to promote environmental compliance and green business practices, including:

- Information provision: advising individual businesses directly or disseminating guidance to a wide audience in the printed and, increasingly, electronic form.
- Promotion of good environmental management: offering regulatory incentives and financial and technical support for the establishment of environmental management systems, introducing sector-specific certifications and eco-labels as well as other environmental recognition awards.
- Market signals: good environmental performance can be driven by supply chain pressure from larger companies and by green public procurement.
- Financial incentives: grants, low interest loans and tax incentives for businesses willing to go beyond compliance and invest in greener technologies.

Based on the analysis of OECD countries' good practices, and on the recommendations provided to the Government of Armenia in the "Promoting better environmental performance of SMEs in Armenia (2013-2015)" pilot project, the following tools could be successfully applied to the Armenian SME community:

- **Raising awareness on compliance-related requirements**

The provision of compliance-related information to SMEs that are sub-

ject to environmental regulatory requirements can reduce the businesses' compliance costs by ensuring that they achieve and maintain compliance as efficiently as possible.

Most small businesses seek clear and consistent information on the minimum requirements for compliance. Interpretation of text-heavy guidance can be difficult for SME. To remedy that, problems should be stated simply and briefly, solutions should be given with an easy step-by-step guide, and details should be provided on where to go for more information. To avoid excessive or unnecessary costs for businesses, environmental guidance should also make a clear distinction between the minimum legal requirements and good practices.

The "regulatory watch" is the simplest method of disseminating regulatory information. This is a paid or free subscription service sending regular e-mail or mobile phone updates on relevant legislative developments and new applicable regulatory requirements. Such a service could be offered by the Ministry of Nature Protection or by national business associations such as the Chamber of Commerce and Industry. This "regulatory watch" would also ensure that subscribers receive up-to-date information from the government. Environmental guidance on compliance and good practices can also be delivered through the Ministry of Nature Protection's website or another specialized site co-funded by the government and one or more business associations.

However, designing and launching an online guidance tool is not enough, there needs to be an effective communication strategy to ensure that businesses continue to use and benefit from it. Web-based tools should be supplemented by other instruments capable of adding significant value. For example, industry magazines, newsletters and business or community events are helpful information delivery methods, particularly to small or rural businesses without access to the internet.

Government bodies should work with trade associations and business support organizations to elaborate and disseminate environment guidance. Guidance should be concise and clearly distinguish between legal environments and good practices in order to avoid over-complacence of small businesses.

- **Green practices as a business opportunities**

The small size of SMEs means that their managers have many different responsibilities. As a result, environmental issues are given less attention than core business decisions. SMEs are often unaware of the many financially attractive opportunities for environmental improvement. There is a widespread misperception that protecting the environment is technically complex, burdensome and costly. Even when they are aware of the potential of better environmental performance improving a firm's competitiveness, a lack of appropriate skills and expertise commonly prevents firms from acting upon win-win opportunities. It is difficult to persuade SMEs of the economic benefits of environmental improvements, as most of them have yet to integrate environmental issues into their business decisions.

The economic benefits of improved environmental performance (such as improved efficiency and competitiveness, new market opportunities, etc.) should be the main "selling point" of environmental outreach to SMEs.

Since SMEs' greatest concern is short-term financial profitability, business owners will be more receptive to the idea that environmental management would save them money, reduce costs and increase efficiency. Therefore, the financial benefits of environmental improvements should be pitched to small businesses. While doing so, it may be particularly useful to present examples of other similar companies receiving commercial benefits as a result of environmental management improvement.

Targeted, concise, user-friendly publications can be very useful in delivering the message that adhering to environmentally friendly practices (and thereby complying with the law) is a smart way of doing business. Workshops, training seminars and industry fairs (particularly those organized by trade organizations and other business groups) can also be effective in conveying information or generic advice as to the implementation of green practices.

- **Creating market demand for green practices**

It may be difficult to persuade SMEs to act upon environmental information, even when it is obviously in their financial interest. Other critical considerations include the need to strengthen market incentives for environmental improvements by directly (green public procurement) and

indirectly (green certifications and ecolabels) increasing the demand for improved environmental performance as well as green products and services.

Governments should develop and implement green public procurement policies to encourage potential SME suppliers to offer environmentally friendly goods and services.

Green public procurement: Government policy can play a significant role in creating demand for green products and services, and boosting the market when there is insufficient private consumer demand for them.
Green certifications and ecolabels: Ultimately, the primary goal of green certification or ecolabelling programmes is to increase the market share of their members. Although supply chain pressure in some sectors is a powerful driver for some SMEs to adopt an environmental management system (EMS), small businesses face serious obstacles including a lack of resources, knowledge and technical capacity. Due to these obstacles and the fact that most EMS-related costs are upfront with medium-term benefits and low public visibility, small firms are less inclined to adopt an EMS. Therefore, it is necessary to tailor the content and delivery of EMSs to the particularities of SMEs. For example, an EMS for a small business should focus on simple, accessible improvements in management practices. The small size of MSMEs means that they do not need a formal, administratively complex EMS. Simplified EMS should be developed and promoted by business associations, and they ought to be recognized by the environmental authorities. The environmental authorities should also encourage green practices by offering additional regulatory incentives (e.g. reduced inspection frequency) as well as financial ones (e.g. reduced administrative fines in the event of minor offences).

In order to make environmental management credentials more relevant to specific economic sectors, business associations should collaborate with the Ministry of Nature Protection to develop sectoral certification brands targeting SMEs. They should also draw up guidelines on ways through which businesses may "earn" the right to display appropriate signs (stickers, posters, etc.) to highlight their environmental practices to their customers. It is also important to communicate the recognition of the label or certification to a broad audience at a very early stage of the scheme's development.

Environmental recognition awards: Governments can use positive public relations incentives to promote environmentally friendly business behaviour. The main benefits of environmental awards can help companies gain recognition for their good environmental performance. To be truly effective, environmental awards need to be widely promoted in business and industry media.

- **Improving access to financing**

There are several financial mechanisms (grants, low interest loans and tax privileges) available to private companies, particularly SMEs, willing to go beyond compliance and invest in green technologies.

Grants and free consultancy services: Grants or direct subsidies can be provided to SMEs as a percentage (e.g. up to 50%) of consultancy costs for the identification and implementation of resource efficiency and other environmentally oriented measures.

Loans: The existing financing mechanisms, including the "green loans" of Inecobank and AraratBank, "renewable energy loans" of Ameriabank, etc., that use credit lines provided by international financing institutions are not sustainable in the long term. Public financial institutions may offer reduced interest loans for environmental investments by SMEs. Such loans are usually conditional on the planned measures going beyond regulatory requirements. They are also dependent on the use of the best available techniques and/or best environmental management practices, and these applications need to be certified by a competent environmental authority.

Institutional aspects of greening small businesses: Small businesses obtain environmental advice and guidance from a multitude of sources, including regulatory agencies, local authorities, special business support organizations, trade or professional associations, consultants, banks and accountants, other business owners and even personal networks. Thus, capacity building of these institutions is of crucial importance.

To promote green behaviour in small businesses, SMEs should be encouraged to work in partnership with business groups. This is because many SMEs do not respond to outreach activities conducted by a regulator out of suspicion and fear. Business and trade organizations are in a good position to provide regulators with practical support in designing regulatory

approaches, and developing and improving compliance assistance programmes to address sector-specific needs. Business organizations can also play a role in providing sector-specific technical assistance to companies initiating green practices.

4. CONCLUSIONS

Given the current situation of SMEs in Armenia, present development trends and the OECD countries' good practices, there is no doubt that SMEs would benefit from the greening of their business activities. The following suggestions are ways through which green performance may be promoted among Armenian SMEs:

- Green practices among SMEs should be coordinated at the national level as part of **state policies and programmes for SME development and support.** These programmes and policies should **use a comprehensive toolkit** and include available **specific funding**.
- Specific **institutions** should be established and/or existing business support agencies should introduce new **specific instruments** to promote green practices among SMEs in a systematic way.
- Provide **environmental advice and guidance** to promote green behaviour, help businesses understand their environmental responsibilities, comply with legislation and good practices, and realize the possible economic and financial benefits of good environmental practices. Economic benefits of improved environmental performance (e.g. increased efficiency and competitiveness, new market opportunities, etc.) should be the main "selling point" of environmental outreach to SMEs.
- Creation and promotion of **green business models** illustrating the financial benefits of environmental improvements.
- Publication of **sector-specific SME pocket guides**. These user-friendly publications can be very useful in outlining the entrepreneurial benefits of adhering to environmentally friendly practices.
- Establishment of **effective collaboration among key stakeholders**. This can be done by engaging relevant government bodies, environmental authorities, business support institutions and business associations in the promotion of SME greening.
- Launch a **specialized website/portal providing environmental guidance** on compliance and good practices. These websites and portals should also be linked to relevant government websites to demonstrate that green and good environmental practices are in line with state policies.

- Introduction of **green public procurement**. The government should gradually include environmental criteria in its purchasing decisions to emphasize the importance of adhering to good environmental practices.
- Introduction of **financial incentives** such as grants, subsidies, low interest loans, loan guarantees, etc. for the identification and implementation of resource efficiency and other environmentally oriented measures.
- Introduction of **tax incentives** for businesses willing to go beyond compliance and invest in greener technologies.
- Development of a **mentorship scheme for SMEs** to learn from the successful greening experience of large companies.
- Introduction of **simplified green certification scheme and environmental recognition awards**.

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3.3. SMEs AND GREEN ECONOMY IN AZERBAIJAN

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The Republic of Azerbaijan stepped up its attempts to diversify its economy after its independence in 1991. As part of its economic policy, Azerbaijan began efforts to organize its economic system according to different types of property, transition to the market economy and integrate into the global economy. Mr. Ilham Aliyev, President of the Republic of Azerbaijan, defined the tasks that ought to be undertaken to achieve these goals in his economic policy decrees. These economic decrees aim to develop Azerbaijan's non-oil sector so as to strengthen and efficiently tap into the economic potential of the country. By moving away from the oil-independent national economy, there would be efficient utilization of the potential of each and every region in the country, favourable conditions for the opening of numerous workplaces, reduced poverty and enhanced private business development. These improvements would in turn result in the increased scope, quality and target groups of social services throughout the country.

These goals were formulated in response to the economic situation of Azerbaijan in 2015. In 2015, Azerbaijani GDP grew by 1.1%, and the non-oil sector and private sector contributed to 69.3% and 81.2% of GDP respectively. The number of legal and individual entities grew by 5.7% and 9.9% to reach 100,325 and 579,906 respectively. The total economic investments in the country amounted to 20 billion dollars in 2015.

RECENT ECONOMIC REFORMS IN AZERBAIJAN

I will now briefly outline some of the recent reforms implemented in Azerbaijan. The government has prioritized the development of entrepreneurship and improvement of the business environment in its economic development strategy. Thus, comprehensive measures have been implemented to develop and expand entrepreneurship in the country. Accordingly, the government has strengthened its support of local entrepreneurship by creating mechanisms to protect the rights of entrepreneurs. This was achieved through the simplification of the electronic registration procedure for business entities and foreign trade operations. Presidential Decree No.119 on "Additional Measures for the Development of Entrepreneurship", dated 3

March 2014, added to the ease of doing business in Azerbaijan through changes to the legislation on construction permits, corporate governance, protection of minority investors, and resolution of insolvency.

In late 2015, further presidential decisions were implemented to improve entrepreneurship and the business environment in Azerbaijan. These decisions will be discussed at length below.

- The Law of the Republic of Azerbaijan No.1410/2015 IVQ, "On the suspension of inspections in the field of entrepreneurship", dated 20 October 2015, decreed that entrepreneurship inspections would be suspended for two years.
- In accordance with Presidential Decree No.655, "On the establishment of the Coordinating Council for Transit Goods Transportation", dated 21 October 2015, the Coordinating Council for Transit Goods Transportation was established so as to provide a one-stop shop for transit goods passing through the country via rail, ports and marine terminals. Pursuant to Presidential Decree No.650, "On transparency and the reduction of licensable business activities and simplification of procedures through special permits/licenses", dated 19 October 2015, the Ministry of Economy created the Azerbaijan Service and Assessment Network (ASAN) as a one-stop public service shop for the issuance of special business permits/licenses. ASAN issues special business permits/licenses to all enterprises, except in cases pertaining to national security. ASAN has been providing customer-centric public services to businesses in the country since 2 November 2015. Through ASAN, the procedures for the application of licenses have been simplified and more transparent. According to Presidential Decree No.713, dated 21 December 2016, the number of licensable activities (inclusive of four activities related to national security) was reduced from 59 to 37. Furthermore, all the licenses granted so far have automatically been recognized as permanent because they are termless. The licensing fees for the capital (Baku) and the regional areas have had a twofold and quadruple reduction respectively, the application processing time was reduced from 15 to 10 working days, and the procedures for license application have been simplified.
- The Law on Licenses and Permits, defining the legal, economic and organizational regulation of licenses and permits, was adopted on 20 April 2016. As the Law precisely identified the scope of business activities covered by the permits, and there has been a fourfold reduc-

tion in the number of defined entrepreneurial activities in the country. At present, there are 87 clearly identified types of business activities in Azerbaijan. The Law also enshrined ASAN as a one-stop public service shop for entrepreneurs in the country, thereby facilitating the ease of both doing business and applying for business licenses.

- The Azerbaijani government is in the midst of creating an electronic licensing (E-licensing) portal to issue licenses and permits in electronic form.
- Following the Presidential Decree "On the Amendment to the Tax Code of the Republic of Azerbaijan", dated 18 January 2016, a document on the rules for the issuance of investment promotion was approved on 19 January 2016. According to the revised tax code, legal and individual entities in possession of the investment promotion document are exempted from the 50% profit and income tax, as well as property tax, land tax, and VAT on imported technological equipment and devices for seven years. In addition, amendments to customs tariff law exempted legal and individual entities from import duties for seven years so long as they imported technology and equipment for the establishment of industrial and/or technological parks and related research and development, and had the investment promotion document. The Presidential Decree of 20 April 2016 also pinned the minimum sum allocated to investment-based economic activities to the scope of the investment project and administrative territorial units in which the investment project will be implemented.
- The draft Law on the Introduction of Changes to the Laws governing the State Registry of Real Estate is currently under discussion in the Azerbaijan National Assembly (Milli Majlis). One of the amendments proposed by this draft law is that the time taken to process the registration of property rights should be reduced from 20 to 10 working days.

In order to promote exports, the following measures have been implemented in Azerbaijan:

- Amendments to the legislation on the provision of support to the export refund of agricultural products are ongoing in accordance with the Presidential Order on Additional Measures for the Stimulation of Exports of Non-oil Products, dated 18 January 2016. These amendments seek to promote exports abroad, advance Azerbaijani research and marketing activities in foreign markets, promote products made

in Azerbaijan abroad, assist national companies in the acquisition of export-related certificates and patents, enhance the state budget's payment mechanisms on export-related research and development programmes and projects, and decrease the interest rates of loans granted to export-oriented production.

- The Presidential Decree on Additional Measures related to the Reforms in the Customs System, dated 4 March 2016, details the broadening of the range of electronic customs services, decreasing the number of documents required in the customs clearance process, reducing the procedures in the Green Corridor application process, the implementation of international best practices in the transportation of vehicles and goods across customs borders, and the introduction of online import customs declarations.
- The online electronic import customs declaration system for goods and vehicles was introduced on 4 April 2016 within the framework of the Azerbaijani customs representation institution in order to provide support to local entrepreneurs. This has made the customs system in Azerbaijan more efficient and transparent. The online import customs declaration system for goods and vehicles has also created a favourable business environment for entrepreneurs through the stimulation of foreign trade operations.

The following steps have been taken to protect the rights of entrepreneurs in Azerbaijan:

- Councils of Appeals were established under the President Administration as well as central and local executive bodies, in accordance with Presidential Decree No.761 and No.762, dated 3 February 2016. These Councils of Appeal aim to strengthen the protection of entrepreneurs' rights in the country. The Councils of Appeal are collegial bodies operating free of charge. They are in charge of examining repeated entrepreneurial complaints vis-à-vis the decisions and orders of the relevant executive bodies.

Due to the aforementioned reforms, Azerbaijan's overall ranking in the 2016 Doing Business Report improved from 80th place to 63rd out of 189 countries. Encouraged by these improvements to entrepreneurship in Azerbaijan, the government is looking to enhance the national economy by gradually transitioning to the green economy

GREEN ECONOMY POTENTIAL IN AZERBAIJAN

The Azerbaijani government is now dedicated to transitioning the country to a low-carbon, resource efficient and socially inclusive economy. To that end, the government intends to use the revenues from the oil-based economy to invest in employment-driven and resource efficient industries. This is because the government acknowledges the following advantages of the Green Economy:

- It ensures growth of income.
- It reduces environmental pollution.
- It enhances energy and resource efficiency.
- It prevents the loss of biodiversity and reduces the damage to the ecosystem.

The main areas with significant green potential in Azerbaijan are listed below:

- Energy – Greening in this sector will increase efficiency and renewable energy capacity, and enable the country to be less reliant on fossil fuels. The government can aid the greening of the energy sector through subsidy and incentive reforms in energy production.
- Agriculture – Greening in this sector can be achieved by promoting stronger supply chains, enhancing public-private partnerships with agro-businesses, supporting education and capacity building, and enforcing regulations on agricultural inputs and outputs.
- Transport – Greening in this sector can be achieved by increasing investment in public transit options, reducing regulatory oversight and promoting investment in clean vehicle technologies.

As human capital and inadequate access to finance remain barriers to the greening of the Azerbaijani economy, more has to be done to attract qualified experts to train local entrepreneurs on greening methodology and overcome the limited financing for green investments. Accordingly, the government of Azerbaijan is dedicated to the formulation and implementation of a national green economic policy.

AZERBAIJAN'S GREEN ECONOMIC POLICY

To demonstrate its commitment to the green economy, Azerbaijan has signed the final documents of the UN Conference on Environment and Development (UNCED). Moreover, the Azerbaijan government has endorsed the UNCED's green growth strategy ever since it became a member of the

United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) in 2005. The Azerbaijan government is currently undertaking a Green Economy Scoping Study (GESS) in close cooperation with the United Nations Environment Programme (UNEP) to ensure that its economic growth is both resource efficient environmentally sustainable.

Through these measures, Azerbaijan will transition from a "brown economy" based on fossil fuels to a more environmentally sustainable and resource efficient green economy. So doing will simultaneously ensure long-term economic growth, reduce greenhouse gas emissions, improve social conditions, reduce waste and create jobs.
As part of the country's green economic policy, the Azerbaijan National Assembly has enacted a Law on Special Economic Zones that:

- Promotes special green business areas where tax and customs allowances are applicable;
- Balances regional development and introduces innovations;
- Stipulates a privileged tax and customs regime for companies operating in these special economic zones.

AZERBAIJAN AND EAP GREEN

The "Greening Economies in the European Union's Eastern Neighbourhood" (EaP GREEN) programme was introduced in 2013 and implemented in the course of 48 months. It was a regional programme with a blend of regional-level and national-level actions targeting both public and private sectors. EaP GREEN aimed to help governments in the EU's Eastern Neighbourhood transition to a green economy by reforming policy instruments, ensuring the adoption of new environmentally friendly analytical tools, improving access to environmental finance, and supporting capacity development.
Activities implemented in Azerbaijan as part of EaP GREEN include:

- The improvement of national regulatory and legislative frameworks.
- National exercises for capacity building on strategic environmental assessment (SEA) and environmental impact assessment (EIA) procedures.

The pilot SEA initiative was implemented in February-December 2015. It came to include the presentation of an expert group SEA report held in Baku on 27-29 August 2015, as well as a final public consultation workshop held in Baku on 9 December 2015. In the course of this pilot SEA

initiative in Azerbaijan, 8-10 participants took part in training courses on strategic environmental assessment. Resource Efficiency and Cleaner Production Clubs for SMEs were also launched in two regions of Azerbaijan.

Tamiz Shahar JSC was established by Presidential Decree on 12 March 2009 to provide environmentally sound waste disposal services in Baku. It safely disposes of solid household wastes according to modern sanitary standards. As a state-owned joint stock company, Tamiz Shahar operates under the auspices of the Azerbaijani Ministry of Economy.

3.4. SMEs AND GREEN ECONOMY IN BULGARIA – ENERGY FOR SMES IN THE THIRD MILLENNIUM

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ABSTRACT

In most economies, small and medium-sized enterprises (SMEs) are seen as the drivers of growth and economic success. Thus, their role is of fundamental importance to the overall economic prosperity of any country. Bulgaria is no exception. Nearly 99% (over 310,000) of economic actors in Bulgaria are SMEs, and they contribute to 60% of its gross domestic product (GDP).

Economic activity is dependent on the ambition and motivation of the key actors. Businesses also need to utilize energy for production purposes and its daily processes; the energy expended in these processes is reflected in the enterprises' monthly bills. Accordingly, businesses need to carefully consider the energy costs incurred in daily production processes in order to remain competitive. This is also important to consumers because a business's operational costs will affect the prices of its goods and services. The energy used by businesses has to be affordable and reliable if it is to reduce operational costs and maintain business productivity.

Factors such as innovation and geopolitical energy sources can reduce a business's operational costs. Operational costs may be reduced through the environmentally friendly, innovative and efficient use of natural resources. When done correctly, the company would be able to minimize costs and contribute to a cleaner and greener society.

The European Union (EU) is consequently dedicated to the green economy to ensure that its citizens enjoy affordable and climate-friendly energy. As a result, EU climate and energy policy paradigms have been revised constantly since the early 2000s, and short, mid and long-term greening targets were set. Following the 2015 United Nations Climate Change

Conference in Paris (COP21), the European Union and its Member States agreed to adopt and actively implement greening activities. The EU then came up with climate and energy packages and frameworks so that all its Member States will meet key environmental targets by 2020, 2030 and 2050 respectively. These targets seek to utilize natural and other resources efficiently to create constant and sustainable economic development. When this is done successfully, the carbon footprint in the economies of the EU Member States will be reduced.

The 2020 Climate and Energy Package has three main goals, namely, reducing greenhouse gas emissions by 20% from 1990 levels, ensure that 20% of EU energy comes from renewable sources, and improve energy efficiency by 20%. When these targets are met, all EU countries should also have achieved a 10% share of renewable energy in their transport sector.

The EU's 2030 Climate and Energy Framework aims to achieve the following targets by 2030:
cut greenhouse gas emissions from 1990 levels by 40%; have at least 27% share for renewable energy consumption; and obtain at least 27% improvement in energy savings.

Keywords: green economy, SMEs, climate and energy policy

JEL Classification: L26, Q41, Q48

1. BULGARIA ADHERES TO EUROPE'S CLIMATE AND ENERGY POLICY

1.1. National Support Strategy for SMEs 2014-2020

The Bulgarian National Strategy on SME Promotion 2014-2020, also known as called the Small Business Act (SBA), is a political document with mid-term goals. Through the SBA, the government of the Republic of Bulgaria affirmed its dedication to implementing policies in support of small and medium-sized enterprises (SMEs) in the country and harmonizing these policies with EU ones.

The Bulgarian SBA is not unique, as its priorities are exactly the same as the EU's SBA. The SBA was originally a key EU policy document supporting SMEs in the region. The Bulgarian government drew up its SBA because

the European Commission (EC) recommended all Member States to apply the principles of the EU's SBA in their respective countries. Through its own SBA, Bulgaria seeks to harmonize its SME national policies with EU ones in 2014-2020.

The Bulgarian SBA is endorsed by the Bulgarian Law on SMEs (Article 5, paragraph 1) and will be carried out as part of the Ministry of Economy and Energy's annual programme (Article 5, paragraph 2, item 4). This annual programme examines the SBA Fact Sheets of the preceding year before proposing new policy measures. These measures are then financed by the relevant operational programmes of the Ministry of Economy and Energy.

1.2. Achieving Strategic Environmental Goals by 2020

Bulgarian SMEs do invest in the development of energy efficiency activities for the production of "green" products. The state encourages this form of greening investment by providing financial incentives and informing entrepreneurs on "green" technologies.

The Bulgarian SBA emphasizes the protection of the environment while meeting operational goals and achieving energy efficiency. The following criteria are used to ensure that greening development by SMEs in the country are environmentally friendly:

1. Innovations should have environmental benefits.
2. Increased number of SMEs carrying out resource efficiency measures.
3. Increased number of SMEs receiving public support for their resource efficiency measures.
4. Increased number of SMEs satisfied with the public support for their environmentally friendly efforts.
5. Increased number of SMEs offering "green" products and services.
6. Increased number of SMEs that are able to generate a turnover of 50% from "green" products and services.
7. Increased number of SMEs receiving public support for their "green" products and services.
8. Increased number of SMEs satisfied with the public support for their "green" products and services.

Table 1. Operational Goals of the Bulgarian SBA

Criteria	Goal	Change
1.	> 0.04%	At least an additional 60 SMEs (no microenterprises)
2.	> 93.00%	28,000 more SMEs
3.	> 9.00%	25,000 more SMEs
4.	> 56.00%	88,000 more SMEs
5.	> 26.00%	18,000 more SMEs
6.	> 22.00%	18,000 more SMEs
7.	> 8.00%	3,500 more SMEs
8.	> 62.00%	151,000 more SMEs

1.3 State Aid for SMEs and the Technological State of Play About SMEs in Bulgaria

SMEs in Bulgaria have free and competitive access to a fully electronic public procurement system. State aid for SMEs is also available. National legislation on entrepreneurial competitiveness explicitly promotes a more innovative and entrepreneurial business environment. The state supports SMEs in the following ways:

- Promoting technology transfer and improving cooperation networks between SMEs, universities, various educational institutions, regional authorities, research and development centres, science and technology parks, etc.
- Supporting SMEs' research and development activities through research services centres.
- Supporting SMEs with non-destructive production processes that create environmentally friendly products and services.
- Implement measures stimulating entrepreneurship and business start-ups.
- Implement measures promoting e-commerce, education and training, networking and cooperation, etc.
- Implement measures improving SMEs' access to and use of Information and Communications Technologies (ICTs).

The state also aims to enhance the presence of Bulgarian SMEs in the European Single Market through the introduction of new standards and improving awareness on the opportunities afforded by intellectual property. Accordingly, the Bulgarian government encourages businesses to protect themselves by using the services provided by the national patent authori-

ties and the European community. In so doing, Bulgarian SMEs are encouraged to obtain patents for their innovative production methods, goods and services, and they are able to register their designs and trademarks nationally and in the wider European community.

The presence of Bulgarian firms in the European Single Market may further be improved through participation in international exhibitions and fairs.

Information security is of key importance to SMEs in Bulgaria, and can be secured through the national administration and network organizations such as the Enterprise Europe Network (EEN).

Importance of Improved Competitiveness

To analyze the performance of Bulgarian SMEs, a comparison was made between Bulgarian SMEs from all sectors and six EU countries closest in population to Bulgaria. In so doing, the number of workers in Bulgaria and these six EU countries will be examined, and the correlation between labour productivity and employment will be studied.

Table 2. Share of the number of SMEs from the sectors of all SMEs

	Bulgaria	**EU 6 ***
High-tech manufacturing**:	1%	2%
Low-tech manufacturing:	10%	8%
Knowledge intensive services:	14%	23%
Less knowledge intensive services:	68%	51%
Other sectors:	7%	16%
Total:	**100%**	**100%**

*Sweden, Finland, Denmark, Austria, Hungary and Slovakia

**Eurostat's classification of firms' technological production processes was used. Therefore, high-tech manufacturing refers to both high and medium-high tech manufacturing and low-tech refers to medium-low and low tech manufacturing.

Although the number of knowledge intensive services in Bulgaria has been increasing in recent years, growth is slow to the point where new enterprises established during the global financial crises were mostly in the less knowledge intensive services. This is due to the lack of qualified staff capable of performing tasks with high demands. Labour productivity has grown in the production of computers, electronics, optics, the automotive industry, vehicle industry, etc. However, this growth is mainly due to redundant staff and rather than optimization and innovation in the production process.

The growth of wages per employee is in excess of BGN 1,400 per employee per year in SMEs for all sectors in 2008-2011. The most notable growth in wages occurred in the film industry (50%), information technology industry (20%) and air transport industry (25%).

Unlike the other nine Eastern European Members of the EU, Bulgaria currently has the lowest proportion of firms in high-tech manufacturing – less than 1%. Bulgaria had the second lowest share in knowledge intensive services, as 14% of its SMEs are in these sectors compared to Estonia's 32%. Bulgaria has the highest proportion of SMEs in sectors that are less knowledge intensive – about 70% of Bulgarian SMEs compared to Hungary's 55%. This proves that Bulgarian firms need to strengthen their competitiveness through innovation and more profitable approaches.

2. APPROACHES AND OPPORTUNITIES TOWARDS A GREENER ECONOMY

2.1. Innovation-driven investments in more efficient solutions and approaches

The main source of funding in support of SMEs for the past seven years came from the Bulgarian Ministry of Economy and Energy's Operational Programme for the Development of the Competitiveness of the Bulgarian Economy. Simplifying the application procedures is the priority in the new and ongoing programme period. Apart from funds from the Bulgarian Ministry of Economy and Energy's Operational Programme for the Development of the Competitiveness of the Bulgarian Economy, the Joint European Resources for Micro to Medium Enterprises (JEREMIE) is the largest financing scheme for SME technological innovation. JEREMIE offers a total of 515 contracts worth over BGN 370 million, and another 659 contracts worth BGN 65 million for the introduction of internationally recognized standards. However, these are insufficient for any significant impact on

the priorities of the Bulgarian SBA. Therefore, the Bulgarian Ministry of Economy and Energy should step up efforts in the 2014-2020 programming period by following the example of JEREMIE and creating business incubators and other innovation infrastructure in the country so as to positively impact post-public funding.

Innovation measures

When an SME has a strong innovative culture, it is likely to experience faster growth owing to a new or improved product and service, energy efficiency, better marketing, better management structure and so on.
As part of the targets of the Bulgarian SBA:

- Innovative new products and services have to be created in at least 46,000 more SMEs.
- 76,000 more SMEs must implement organizational or marketing innovation.
- 102,000 more SMEs should start training their staff.

SME innovation can be driven both by strengthening the role of the National Innovation Fund, and increasing the scale of the innovation voucher scheme. Furthermore, the Bulgarian Operational Programme "Innovation and Competitiveness" 2014-2020 should be separated into two different programmes: one for human resources, and another for innovation and entrepreneurship. This will ensure that policies, funds, schemes and grants for the creation of enterprises and entrepreneurship education are left under the proposed "Innovation and Entrepreneurship" Operational Programme.

Entrepreneurship education should be introduced in schools. Training firms should also be expanded in all schools, including the School of the Arts. It is not a silly thing to include Arts students who will one day be employed in the creative industries. This is because creative industries are some of the most knowledge intensive services. By including these students in entrepreneurship education and training, we will enable them to enter into knowledge intensive services when they graduate.

Green Technological Measures

Current Bulgarian statistics show that:

- 18,000 more SMEs need to generate at least 50% of their turnover from green products and technologies.
- 28,000 more SMEs need to be more efficient in using resources.

> When SMEs adopt green technology as part of energy efficiency measures, they are not only innovating technologically, but are also demonstrating their commitment to improving their companies' ecological orientation.

The Bulgarian SBA strives to institute reasonable administrative reforms and provide direct funding towards green technological measures in various sectors of the economy.

As laid down in the Law on SMEs, the Ministry of Economy and Energy will analyze the results of the previous year's Small Business Act before coming up with measures that ought to be taken in the current operational programme. This annual review of the various measures of the programme will help the relevant government bodies determine the effectiveness of their different policies and measures.

In order to improve performance, e-government was developed and fully implemented. This is an electronic service for entrepreneurs and facilitates the exchange of data between institutions. To encourage greening of enterprises, the government should ensure that existing laws and any amendments are simply stated. This will enable enterprises to easily understand that which is expected of them.

Likewise, the number of charges and fees on enterprises seeking to implement green technological measures should be reduced. The government should also consider creating a single point of contact where business owners can obtain all relevant information on laws, policies and greening. If done correctly, SME owners will not only come to learn about the entrepreneurial benefits of green technologies; they will also cease to be hindered by disproportionate fees and cumbersome bureaucratic procedures.

Administrative burden for growth

As Bulgaria is not far from the EU average in ease of doing business, it should strive to be among the top ten EU countries where the administrative burdens are eased for small businesses.

The government is in the midst of introducing the "SME test", a comprehensive assessment of the impact of future legislative and administrative SME initiatives that takes into account the different proposals for

legislative changes. When fully implemented, the test would accompany each draft legislative change and financial statement. It would summarize the proposed legislative change's impact on small businesses. If the test shows that the proposed measure would impede SME growth by putting additional administrative burden on small businesses, the measure will not be implemented.

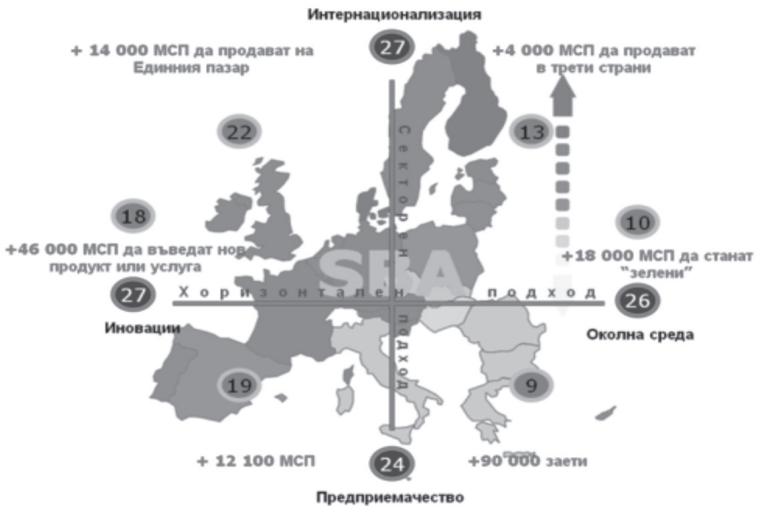
Before instituting any legislative changes, the government should make better use of public consultation. To do this, the government commissioned a research study on the 10 most severe administrative burdens encountered by businesses in terms of legislative norms, rules or procedures. The study also assessed the impact of these administrative burdens to determine if they could be altered or eliminated to benefit MSMEs. The results of this research are presented below.

2.2. Opportunities for SMEs under the Horizon 2020 Framework

Where does Bulgaria stand vis-à-vis the EU average?

It was determined that Bulgaria lags behind the EU average in entrepreneurship (24th in the EU), environmentalism (26th in the EU), internationalization (27th in the EU) and innovation (27th in the EU). Figure 1 illustrates this.

Figure 1



Measures fostering the creation of new businesses and promoting entrepreneurship

The government aims for there to be an additional 12,100 new SMEs and 90,000 new employees in the country. To meet these goals, it is actively promoting start-ups in the following sectors:
- Computers, optics and electronics
- Cars and other vehicles
- Metal products
- Machines
- Printing and recorded media industry
- Textiles
- Information Technology (IT)
- Films and Television productions, sound recording
- Information services
- Publishing
- Research and Development (R&D)

These sectors are presently undergoing restructuring so as to foster the development and establishment of new businesses. Research has shown that enterprise creation can be oriented according to the concentration of the workforce and SMEs in the respective districts of the country. This is due to regional specialization. The participation of SMEs in Horizon 2020 will also facilitate the clustering of these sectors.

At the moment, there is no critical mass of businesses in Bulgaria. As a result, there is a quantum leap in the production of relevant sectors. Enterprise creation can be stimulated through a combination of grants and measures disseminated via the network of entrepreneurial and business centres in the country. Providing entrepreneurship education to people with business ideas will also help to create a sustainable business that will remain in the market five years after the establishment of the start-up.

2.3. SMEs in Bulgaria

The economic activities of medium-high and medium-low technology industries are covered in C19 to C30 of CEA-2008 of the Statistical Classification of Economic Activities in the European Community (NACE), which encompasses enterprises without high-tech economic activities. These medium-high and medium-low technology industries also fall under C33 "Repair and installation of machinery and equipment" in NACE.

Green energy implementation is currently ongoing in several medium-high and medium-low technology SMEs.

These medium-high and medium-low technology industries employ over 184,000 people, of which over 110,000 (60%) are in SMEs. A high degree of specialization and concentration at the district level is typical, as 69% of workers in this group are characterized by a regional specialization coefficient above 1.2 (LQ> 1.2 – Figure 5).

The highest concentration of medium-high and medium-low tech manufacturing industries is in the central regions of the country, particularly in the districts of Plovdiv, Stara Zagora, Gabrovo and Veliko Tarnovo.

The following list and Figure 2 show regional specialization and enterprise density by sector:
C20: Chemical industry – Varna, Ruse and Plovdiv
C22: Rubber and plastics – Plovdiv and Gabrovo
C23: Non-metal products – Gabrovo, Vratsa and Shumen
C25: Metal products – Gabrovo, Stara Zagora and Plovdiv
C27: Electrical equipment – Gabrovo and Sofia
C28: Machines – Gabrovo and Stara Zagora
C29: Automobiles – Lovech, Yambol
C30: Other vehicles – Ruse and Varna

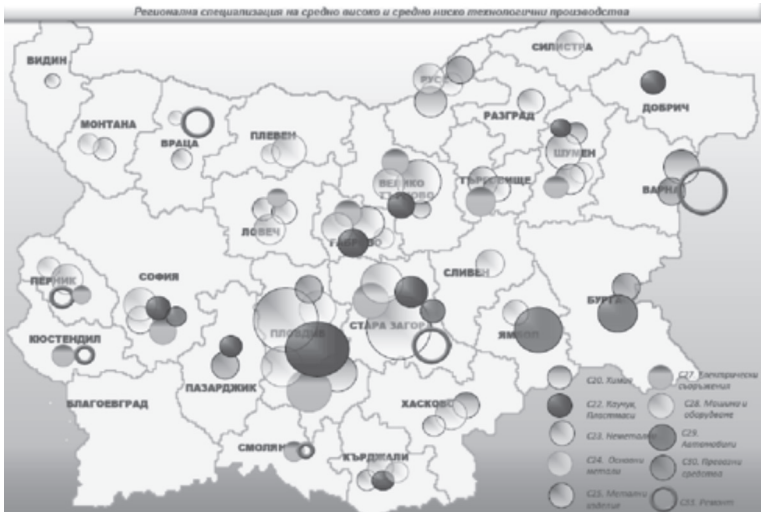


Figure 2

Low technology manufacturing

The economic activities of low technology industries are covered in C10 to C18 of CEA-2008 of the Statistical Classification of Economic Activi-

ties in the European Community (NACE). These low technology industries also fall under C31 economic activities "Manufacture of furniture" and C32 "Other manufacturing" in NACE.

These low technology industries employ over 307,000 people, of which over 232,000 (75.5%) are in SMEs. Low technology industries are characterized by an average level of specialization, as 56.7% of employees are in areas with pronounced regional specialization due to the relatively even distribution of manufacturing enterprises within the food industry.

The southwest, south-central, northern and central regions have the highest concentration of low technologies. The following list and Figure 3 show regional specialization and enterprise density by sector:
C10: Food – Plovdiv, Yambol and Sliven
C13: Textiles – Gabrovo and Sliven
C14: Clothing – Blagoevgrad, Ruse, Haskovo
C15: Leather and Shoes – Kyustendil, Blagoevgrad, Pazardzhik
C16: Wood – Smolyan and Lovech
C17: Paper – Sofia, Plovdiv, Pazardzhik and Veliko Tarnovo
C31: Furniture – Lovech, Pazardzhik, Ruse, Gabrovo

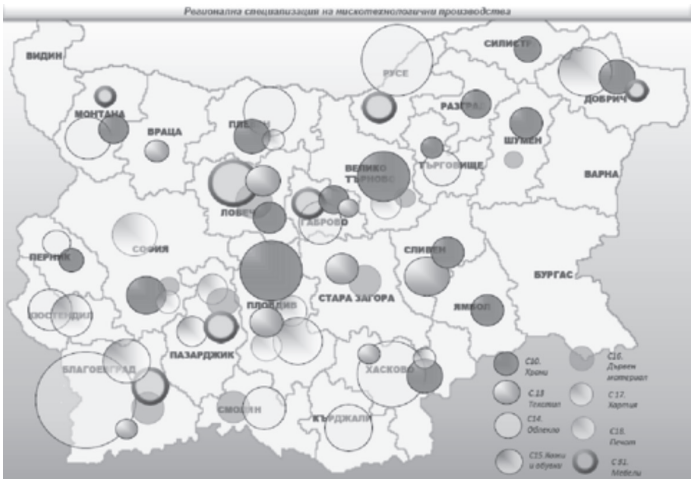


Figure 3

3. REGIONAL SPECIALIZATION MAPS

Figure 4

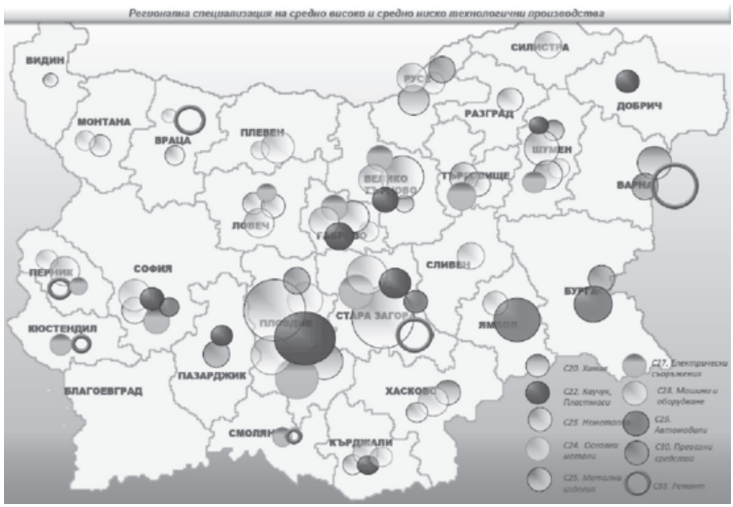


Figure 5

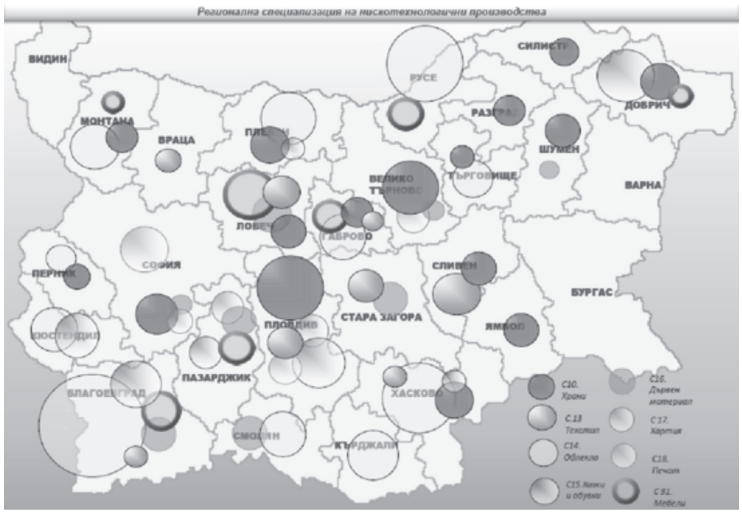


Figure 6

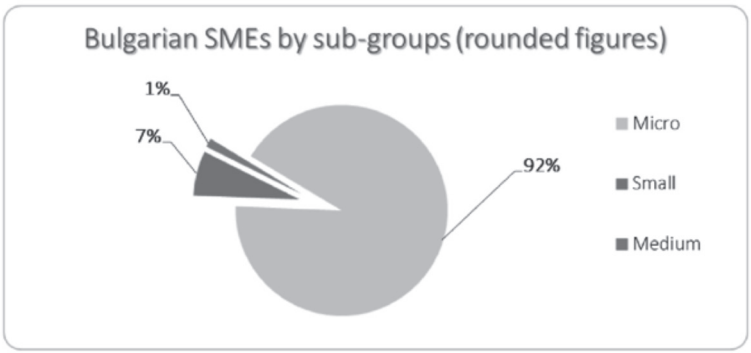


Figure 7

CONCLUSION

Regional specialization and enterprise density can provide the foundation for the formulation of more precise measures supporting the creation of energy efficient enterprises, the clustering of existing businesses, and the creation of technology parks and business incubators in the relevant sectors.

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3.5. GREEN ECONOMY IN GEORGIA

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ABSTRACT
As Georgia is endowed with rich natural resources, it stands to benefit highly from greening opportunities. Georgia has a high diversity of landscapes, ecological zones, habitats and unique cultures within its borders. As one of the world's top five countries in per capita water resources, Georgia is blessed with countless waterways of various sizes and types. Blessed with a rich natural abundance of fertile soil, clean water and favourable climate, Georgia has traditionally produced a wide diversity of crops native to temperate zones. Indeed, Georgia has been producing a wide variety of agricultural products for more than 3,000 years, ranging from wine to regional varieties of cereals and fruits. Given the country's bountiful natural resources, Georgia offers major potential for agricultural development. [1]

To better discuss greening opportunities in Georgia, this paper will analyze the following economic variables in the country: gross domestic product (GDP), inflation, foreign direct investments (FDIs), wages and employment. Specific programmes and actions implemented by the Georgian government for the promotion of SME development vis-à-vis greening opportunities will also be discussed. This research puts together current documents; overviews policies and strategies supporting the green economy; analyzes business activities, statistics, environmental issues, the country's advantages as well as the exigencies of quality management systems, before making recommendations as to the further development of entrepreneurial greening in Georgia. It will be seen that country is definitely moving towards greening through the different government programmes and initiatives emphasizing greening aspects.

The paper also illustrates the ways in which liberal economic reforms promoted economic stability in Georgia, and will further assist in the development of small and medium enterprises (SMEs). It will conclude by

highlighting the main directions for green business development and the further advantages of greening.

ECONOMIC SNAPSHOTS

Georgia has undertaken broad and comprehensive reforms in recent years. These reforms include economic ones, and encompass every aspect of people's lives. These reforms sought to create a favourable environment for doing business and foreign direct investment (FDI) via the liberalization of the economy, reduction of administrative barriers and tax burdens, streamlining public services, fighting against corruption, etc. Due to these reforms, Georgia achieved high rates of economic growth and significant FDI inflows. Georgia's economic policy was positively evaluated by different rating agencies and international financial institutions (IFIs), and the results are reflected in different indices and ratings evaluating economic freedom and policies. [4]

The Doing Business reports indicate that Georgia has greatly improved in the different areas measured in the course of the past twelve years. According to Doing Business 2016: Measuring Regulatory Quality and Efficiency, the 13th in a series of annual reports published by the International Finance Corporation (IFC) and the World Bank, Georgia made improvements in all 10 areas, including aggregate distance to frontier (DTF) score through 39 regulatory reforms. During this period, Georgia's output per capita increased by 66% and business density more than tripled. Many factors contributed to this economic improvement, and efforts by the government to make it easier for local entrepreneurs to do business may have been one of them.

During this 12-year period, Georgia eliminated the paid-in minimum capital requirement for starting a business, established a one-stop shop for construction permits, reduced the fees for getting a new electricity connection, eliminated notarization requirements for registering property, improved its credit information system by implementing a new law on personal data protection, introduced electronic systems for paying taxes, modernized its dispute resolution system for enforcing contracts and adopted an insolvency law introducing both reorganization and liquidation proceedings—to name just a few of the important changes.

Among the most notable reforms are those strengthening minority investor protections. In June 2007, Georgia amended its securities law to en-

hance approval and disclosure requirements for related-party transactions. In 2009, it introduced provisions allowing shareholders greater access to corporate information during a trial. Finally, Georgia introduced new requirements relating to the approval of related-party transactions in 2011.

According to Doing Business 2016, Georgia ranked 24th out of 189 countries (77.45 Doing Business 2016 DTF (% points)).

Georgia used online technology to improve contract enforcement. The introduction of an electronic filing system for commercial cases made it possible for attorneys to submit the initial summons online.

Georgian courts were rendered more efficient through the introduction of electronic systems, as litigants could now file initial complaints electronically. In addition to expediting the filing and service process, electronic filing systems in courts also increase transparency, limit opportunities for corruption and prevent the loss, destruction or concealment of court records.

Georgia also made dealing with construction permits easier by reducing the time needed for the issuing of building permits. Georgia made enforcing contracts easier by introducing an electronic filing system for court users. [19]

Gross Domestic Product

Georgia's gross domestic product (GDP) at current prices amounted to GEL 31,691.6 million[2] (USD 13,959.9, preliminary data) in 2015 (up 8.7% year-over-year), and the GDP real growth rate was 2.8%.

Gross domestic product (GDP) per capita at current prices amounted to GEL 8,533.7 (USD 3,759.0) in 2015.

The largest share of GDP in the sectoral structure is held by trade services (16.6%) and industry (16.5%); followed by transport and communication services (10.7%); public administration (9.3%); agriculture, forestry and fishing (9.2%); construction (8.0%); and real estate, renting and business activities (6.6%), etc.

2 Preliminary data

Significant real growth appeared in mining and quarrying (21%); construction (15.2%), financial intermediation (9.4%); hotels and restaurants (7.4%); other community, social and personal service activities (7.1%); real estate, renting and business activities (6.9%).

When the total output of production in tourism-related services in 2015 was compared to figures in 2014, it was observed that tourism-related services grew by GEL 442.7 million and constituted GEL 3,512.1 million. Restaurant services and other services of food and beverages have the biggest share (29.9%) in the total output of production in tourism-related services, followed by travel agency and tour operator services; tourist assistance services (26.5%), and other land transportation services; water transport services (excluding railway transportation and air transport services) composed 20%, etc. During the same period, output of agricultural products increased by 8.3%, the biggest share of which came from live animals and animal products (48.6%).

In the first quarter of 2016, Georgia's nominal GDP amounted to USD 7.4 billion, GDP per capita was GEL 1,975.9 (USD 811.4) and real GDP growth was 2.6%.

The share of GDP by sector in the first quarter of 2016 is as follows:

- Trade services – 15.9%,
- Industry – 15.7%,
- Transport and communication services – 11.6%,
- Agriculture, hunting and forestry, fishing – 9.7%,
- Public administration – 8.8%,
- Construction – 7.8%,
- Health and social work services – 6.2%,
- Real estate, renting and business activities 6.0%, etc. [5]

Significant real growth occurred in the following sectors:

- Mining and quarrying – 29%,
- Construction – 25.7%,
- Hotels and restaurants – 11.7%,
- Real estate, renting and business activities – 9.4%,
- Financial intermediation – 8.4%,
- Education – 2.7%. [5]

Inflation Rate

The annual rate of inflation in Georgia in December of 2015 was 4.9%. Annual consumer price index (CPI) rate declined by 4.2% in the transportation field, contributing -0.48% to the overall annual inflation rate. During this period, fuel and lubricant prices fell significantly by -12.1%. In December 2015, Georgia's monthly inflation rate was -0.6%.

Prices in the field of transportation decreased by 3.6% in December 2015, with prices for fuels and lubricants dropping by -7.6%. Alcoholic beverages and tobacco prices were 1.0% lower and contributed -0.05% to the overall index change. Tobacco prices fell by -1.7%. There was a 0.8% decrease in the price of furnishings, household equipment and maintenance. In December 2015, the average inflation rate (current 12-month average over the previous 12-month average) was 4%. [5]

Foreign Direct Investments

According to the preliminary data of the National Statistics Office of Georgia (GEOSTAT), foreign direct investment (FDI) in Georgia amounted to USD 1,351 million in 2015, increasing by 6% from the preliminary data of 2014 even though it was 23% less than the adjusted data of the same year. In 2014, FDI in Georgia was USD 1,758 million. The leading investor in Georgia is Azerbaijan, which invested USD 542 million in 2015. The largest share – 44% of total FDI (USD 594 million) – went to transport and communications.

In the first quarter of 2016, FDI in Georgia amounted to USD 376 million, increasing by 103% from the preliminary data of the first quarter of 2015. [5]

Unemployment and Labour Market

Unemployment rate decreased to 12% in 2015, which is 0.4% lower than the previous year. In 2008, the global economic crisis and events with Russia in August led to the unemployment rate to increase to 16.5%. In contrast, the unemployment rates were at 16.9% in 2009, 16.3% in 2010, 15.1% in 2011, 15.0% in 2012, 14.6% in 2013, and 12.4% in 2014. In 2015, there were 1.8 million employed persons in Georgia. [5]

Current unemployment is distinguished partly by structural unemployment and job mismatch. This is because the supply in the labour market does

not correspond to the existing demand. These problems are caused by new technologies and sectoral development, as well as low efficiency of the professional training system.

In recent years, Georgia launched several programmes facilitating professional skills' development. Some of these programmes are the Vocational Education Programme, and the Training Infrastructure Development Programme "Professional Education for Employment" (PPP format). There are also governmental programmes supporting entrepreneurship development.

A sufficiently qualified workforce in the private sector is essential for local and foreign direct investments (FDIs). Periodic assessment is needed for the changing sector-specific labour market demand. Currently, sector-specific supply and demand of human capital is unclear in Georgia. This lack of precise information could hamper private sector investments and proper decision-making with regard to building up the human capital needed by the labour market. [6]

In 2012, the Ministry of Economy and Sustainable Development of Georgia collaborated with German International Cooperation and GeoWel Research in a pilot survey of labour market needs in Georgia. The project covered the following sectors: tourism, apparel, information and communication technology (ICT), and food processing. The survey aimed to collect primary information, report on the current demands on the labour market, develop conclusions and recommendations with other governmental stakeholders for the benefit of investors and future vocational education and training (VET) graduates, identify problems, and elaborate relevant supportive policy.

To achieve these aims, the project consisted of the following key components:

- Investigating and analyzing existing data that can inform the Ministry of Economy and Sustainable Development of Georgia (MoESD) on labour market needs and provisions;
- Collecting and collating new labour market information;
- Combining existing and new information with an understanding of government economic development priorities in order to elaborate conclusions and recommendations, if needed, for addressing the job mismatch.

Four fast growing pilot sectors were selected for this project: tourism, apparel, ICT, and food processing. The MoESD designated an employee from its Economic Analysis and Policy Department to carry out research in each sector. The team of researchers also included representatives from the National Statistics Office of Georgia (GEOSTAT) and the Ministry of Education and Science of Georgia. GeoWel Research trained the research team in qualitative and quantitative methods. After the training process, the team collected information under the supervision of GeoWel Research. [6]

In 2010, GIZ Private Sector Development Programme Georgia, in collaboration with GeoWel, carried out a labour market matching project so as to provide an aggregated overview of VET supply and processes for labour market matching. [20] It also attempted to combine a range of existing sources to help identify sectors that the Ministry of Education and Science of Georgia could target for VET development.

Within the project, particular attention was given to the sector-specific demand of human capital and to specific recommendations as to actions the Ministry of Education and Science of Georgia and VET centres could take to better address the current labour mismatch in Georgia.

Several important findings can be emphasized, most notably, companies prefer potential employees to have relevant job experience than formal education in the field. This is true for all sectors, but is particularly true in apparel and food processing. Companies that prefer employees with higher educational qualifications are not necessarily looking for any particular set of skill, but believe that university graduates have good general knowledge and are more capable of solving everyday issues by finding relevant information. Although many companies across all sectors have been trying to find new employees within the past twelve months, only about half of them have succeeded. Companies have difficulties in finding qualified employees. Depending on the sector, companies seeking new employees use either the internet or personal acquaintances. Companies very rarely use educational institutions such as VET centres to find new employees. In all sectors, experience is usually more highly prized than training. However, when employers require applicants to have relevant job experience, they are generally suggesting that hands-on experience rather than theoretical knowledge is the key to success. This would massively privilege VET centres as bastions of practical training compared to the more theoretical

inclinations of universities. If VET is deemed to offer good skills training or the equivalent of experience, its graduates would be hugely popular across all the sectors considered in the study. Thus, VET centres should take this into consideration by emphasizing the development of better professional skills to ensure that their graduates can apply for jobs in all sectors. In all four sectors, companies complained about the lack of professionalism such as lack of discipline, inadequate sense of responsibility, and lack of seriousness and motivation. As these traits usually come with experience, VET centres should create simulations of real life situations so that students can acquire a sense of job responsibility. [6]

Employment Wages

Wages have been permanently increasing in both the public and private sectors in recent years. The same trend can be seen in the average monthly nominal salary of employees. In 2014, this indicator was GEL 818.0, 6% higher than the previous year. In 2014, the average monthly nominal salary of employees in the business sector was GEL 800.5 (up by 5.3% from 2013) and GEL 847.1 in the non-business sector (increased by 7% from 2013).

In the first quarter of 2016, the average monthly nominal salary of employees in Georgia was GEL 913, 7% higher than in the same period last year. In the first quarter of 2016, the average monthly nominal salary of employees in the non-business sector rose by 4.2% and constituted GEL 898.8, increasing from the average in the same quarter in 2015. The average monthly nominal salary of employees in the business sector increased to GEL 922.4 in the first quarter of 2016, which is 8.3% higher than the previous year. [5]

Subsistence Minimum

The overall well-being of the population also increased, as household incomes grew 3.2 times in 2004-2015 due to growing salaries and jobs creation. According to integrated studies of households and the labour force, the level of income had been on the upswing. In 2015, average monthly incomes of the total population (total of cash and non-cash inflows) was GEL 1,039.9 million, 3.8% higher than the previous year. In 2010, the subsistence minimum was GEL 134.3 for a male of working age, GEL 119.0 for the average consumer, and GEL 225.3 for the average family. In May 2016, the subsistence minimum was GEL 160.6 for a male of working age,

GEL 142.3 for the average consumer, and GEL 269.4 for the average family. [5]

CHARACTERISTICS OF THE SME SECTOR

SME Definition

There are two definitions for small and medium-sized enterprises (SMEs) in Georgia. One definition in provided by the Law of Georgia on the Georgian National Investment Agency; the other is provided by the tax code for taxing purposes.

According to the Law of Georgia on the Georgian National Investment Agency, an SME is a small enterprise that has no more than 20 employees on average and an annual turnover not exceeding GEL 500,000; and a medium enterprise has no more than 100 employees on average and an annual turnover not more than GEL 1,500,000 GEL. [7]

The new tax code, which came in force in January 2011, provides simplified procedures for micro and small businesses. According to the new tax code, micro and small businesses are covered by special tax regimes.

The status of microenterprise is granted to a physical person who is conducting economic activity independently without the use of hired persons and whose total annual income is not more than GEL 30,000. The Ministry of Finance of Georgia is responsible for granting and abolishing the status of microenterprise. The tax organ is responsible for issuing a certificate for this status.

A physical person who is deemed to be a microenterprise is free from income tax and current taxes.

The **status of small business** is awarded to a physical person, individual or sole entrepreneur whose annual total income from economic activity does not exceed GEL 100,000.

A small business is only subject to one single tax. The tax rate for small business is 3% or 5% of income. Georgia has removed the bookkeeping requirement for small businesses, in conformity with international standards. When small businesses are subject to 5% tax, they are only obliged to run only a simple "purchases and sales journal" and cash registers.

When small businesses are subject to 3% tax rate, documentation must prove that 60% of their income falls on expenditures and consumption. [8]

SME Fact Sheet

Preliminary data indicates that there are 90,428 enterprises in the country. Of these, 87% (78,981) are small enterprises and 8% are medium enterprises. Most businesses in Georgia are small and medium enterprises. In 2015, the number of enterprises increased by 28% from the previous year and was thrice that of 2006. The number of SMEs in Georgia increased by 29% in 2015 from 2014 and was thrice that of 2006.

In 2015, 39% of all employed persons in the country were SME workers. Of these, 16% were in medium enterprises and 23% in small ones. In 2015, Georgian SMEs' share of employees decreased by 4.8% from the previous year and by 7% from 2006.

The employment distribution of the business sector by economic activity is as follows in 2015:

- Wholesale and retail trade; repair of motor vehicles, and personal and household goods – 24%,
- Industry – 19%,
- Construction – 11%,
- Health and Social Work – 11%,
- Transport and Communications – 10%,
- Real estate, renting and business activities – 9%,
- Others – 16%.

66% of employees in business sector in 2015 are employed in the capital of country, Tbilisi; 9% in the Autonomous Republic of Adjara; 7% in Imereti; 6% in Kvemo Kartli, etc.

SME turnover in 2015 was USD 9,640.8 million, 6.7% higher than in 2014 and quadruple that of 2006. SME turnover in 2015 was 18.2% of total turnover of all enterprises in Georgia. In 2015, the ratio of small enterprises in total turnover was 9.4% and the ratio for medium enterprises was 8.8%. SME turnover in the first quarter of 2016 made up GEL 2,195.4 million, 15.4% higher than the first quarter of 2015. SME turnover comprised 17.3% of total turnover of all enterprises in the first quarter of 2016; of these, small enterprises' turnover was 9.7% of total turnover, and turnover of medium enterprises was 7.6%.

SME output in 2015 was USD 5,205.9 million, 1% higher than in 2014 and four times that of 2006. In 2015, SMEs contributed to 19.3% of total output, with small enterprises making up 9.9% of output and medium enterprises 9.4%. SME output in the first quarter of 2016 was GEL 1,251.6 million, 22.8% higher than the first quarter of 2015. In the first quarter of 2016, SME output was 19.4% of total output, with small and medium enterprises making up 10.1% and 9.3% respectively.

In the first quarter of 2016, Georgia's business sector had a turnover of GEL 12.7 billion, 15% higher than the first quarter of the previous year.

The production value of the business sector increased by 15% that of the first quarter of 2015.

When compared to the first quarter of 2015, the number of persons employed in the Georgian business sector rose by 6% in the first quarter of 2016 to reach 577.6 thousand people. [5]

Georgia has improved the business environment for all enterprises (including SMEs) by simplifying administrative regulations, reducing the tax burden, fighting corruption, facilitating free trade, promoting privatization campaigns and initiating a policy partnership platform to build a national lifelong entrepreneurial learning concept. Its anti-corruption measures are recognized as one of the most successful parts of its reform policy.

The SME Policy Index: Eastern Partners Countries 2016 – Assessing the Implementation of the Small Business Act for Europe offers policymakers and other stakeholders in the EaP countries a framework to assess the progress, design, implementation and effectiveness of their SME policies. This publication was a joint collaboration between the OECD; the European Commission's Directorate-General (DG) for Internal Market, Industry, Entrepreneurship and SMEs; the European Training Foundation; the European Bank for Reconstruction and Development; in partnership with the governments of the six EaP countries; and in consultation with experts, stakeholders, and representatives of the SME sector.

In the OECD publication, SME Policy Index: Eastern Partner Countries 2016, Georgia's SME policy index was compared to those of the Eastern Partner (EaP) countries of Armenia, Azerbaijan, Belarus, Moldova and

Ukraine, and evaluated according to the ten principles of the Small Business Act (SBA) for Europe. Georgia received the highest scores amongst the EaP countries in 7 out of 12 Dimensions. According to the SME Policy Index, Georgia has underperformed in the Dimensions of innovation policy for SMEs, and Bankruptcy and Second Chance.

Georgia's SME Policy Index scores reflect the continued improvement of the institutional and operational environment for SMEs, particularly in Dimensions 3 (regulatory framework for SME policymaking) and 4 (operational environment for SMEs). Georgia continues to be the region's best performer in these Dimensions. Significant progress has been made in the indicators for business support infrastructure, access to finance, technical barriers to trade, SME internationalization, innovation, as well as in Dimensions 5a (support services for SMEs and start-ups), 6 (access to finance for SMEs), 7 (standards and technical regulations) and 10 (internationalization of SMEs). Areas of improvement include SME greening (Dimension 9). Progress has also been made in human capital Dimensions, specifically Dimensions 1 (entrepreneurial learning and women's entrepreneurship) and 8a (enterprise skills). The EU-Georgia Association Agreement and Deep and Comprehensive Free Trade Area (DCFTA) signed in June 2014 represent both an opportunity and a challenge for Georgian SMEs. In addition to boosting exports and FDIs, the agreement could catalyze institutional and regulatory reform, and help align Georgian standards with those of the EU, etc.

The green transformation of SMEs is a significant business opportunity, a source of innovation and competitive advantage, and a driver of green growth. The implementation of a strategic and comprehensive policy framework recognizing the role and needs of SMEs is the first step in achieving this. By incorporating regulatory and financial incentives, SMEs can be encouraged to go green and benefit from green growth opportunities. When the EaP countries' efforts in Dimension 9 (efforts to green SMEs) were analyzed and compared to statistics in 2012, it was observed that recognition of the benefits of SME greening has been growing, albeit unevenly across the region. Georgia has established SME agencies to design initiatives to promote resource efficiency and green growth models among SMEs. Information and financial support for SMEs to invest in energy efficiency measures and renewable energy have also been growing.

Some information-based instruments have been put in place to recognize green business practices. For example, the Georgian Green Business Award was announced by the Ministry of Environment and Natural Resources Protection in October 2013. The award is given in the following categories: green company, green production, and green building. Through this award, the Georgian government seeks to motivate entrepreneurs to undertake environmental protection and social responsibility actions. Financial incentives in Georgia are developed annually, and are limited to certain tax privileges. Access to finance in the country is below market interest rates. There is a big gap in providing SMEs with sector-specific guidance on environmental compliance and green business practices.

As a strong reformer in the region, Georgia has made significant improvements to its institutional framework for SME policy since the 2012 assessment. Despite external pressures, the country maintains a decent macroeconomic environment as well as a favourable business environment with simplified regulations and business procedures. The ease of doing business has been further strengthened with the expansion of e-government services and additional improvements in business registration. Since 2012, the government went beyond horizontal reforms to broaden its approach to SME development by introducing targeted support measures. In particular, two new institutions, Enterprise Georgia and Georgia's Innovation and Technology Agency (GITA), have been created to provide financial and technical assistance for entrepreneurship, innovation and export promotion. Enterprise Georgia is just beginning to design activities to promote resource efficiency and other green practices among SMEs. In addition, multi-stakeholder consultations have been held to draft a comprehensive SME development strategy and action plan, as well as an innovation strategy. These should improve coordination across government agencies and other actors.

The Ministry of Economy and Sustainable Development has provided private companies with reliable and actionable industry data and analysis, and made them aware of opportunities for implementing sustainable business practices. One of the main functions of the ministry's Sustainable Development Department is to raise private sector awareness of green business opportunities. A special website has been established for this purpose under the ministry's Green Growth initiative. It also provides information on environmentally friendly investment projects in hydro-power generation, tourism and agriculture. [2]

According to the World Bank's 2013 study, Fostering Entrepreneurship in Georgia, Georgian innovative firms create 30% more jobs, and are much more competitive in the domestic and global markets than non-innovative firms.

Despite the improvement of the general business environment, Georgia still faces the same SME development challenges as many developing countries. Notwithstanding the fact that SMEs constitute the largest share of operating enterprises, their contribution to GDP is still very low and their performance remains weak. [4] In Georgia, however, the share of small and medium businesses in GDP remains small at less than 20% of GDP.

Financial systems in Georgia are not conducive to business development. Companies cite high interest rates and risk averse lending policies (requiring high levels of collateral) as major hindrances to expansion. In addition, risk capital is lacking. As a result of lack of borrowing opportunities, SMEs must rely on owners' capital or on retained earnings for investments, which greatly impedes their growth. SMEs and start-ups cite difficulties in access to finance, deficient knowledge and technology transfer, limited skills, etc., as impediments to growth and greening efforts. [9]

SMEs AND ENVIRONMENTAL ISSUES

Reducing the environmental impact of small and medium-sized enterprises in both manufacturing and services is a key success factor in greening the economy. Improved environmental performance also affords SMEs with significant business opportunities as important suppliers of goods and services. However, the willingness and capability of SMEs to adopt sustainable practices and seize green business opportunities are generally dampened by size-related resource constraints, skill deficit and knowledge limitations. SMEs are often unaware of the many financially attractive opportunities for environmental improvement. There is a widespread misperception that protecting the environment is technically complex, burdensome and costly. Even when they are aware of the potential of better environmental performance to improve a firm's competitiveness, a lack of appropriate skills and expertise commonly prevents firms from acting upon win-win opportunities. At the same time, the lack of resources often leads SMEs to be risk averse and less willing to invest in new technologies, partly because of the uncertainly about the payback period.

The Environmental Policy Toolkit for SME Greening seeks to help governments in the Eastern Partnership (EaP) countries in the EU (including Georgia) to design and implement key instruments to promote environmental compliance and green business practices among SMEs using the existing good practices in EU and other OECD countries. It has been developed within the framework of the initiative "Greening Economies in the Eastern Neighbourhood" (EaP GREEN), funded primarily by the European Commission (EC) and implemented by OECD in partnership with UNEP, UNIDO and UNECE. Besides key government stakeholders (such as ministries of environment and economy), the target audience of this document includes business associations as well as non-governmental and academic institutions in EaP countries. The Toolkit focuses predominantly on environmental policy instruments to promote green behaviour of SMEs. It covers three categories of instruments: regulatory simplification and incentives, information-based tools (which comprise both providing advice and guidance to businesses as well as providing their customers and the public at large with information about their green practices), and financial and economic incentives. These instruments should be complemented by appropriate industrial development, regional development and science and technology policies that lie outside the scope of the Environmental Policy Toolkit. The Toolkit draws on past OECD analysis on SME-related policies, the extensive work that the EC has done to implement the 2008 Small Business Act for Europe, as well as other relevant literature.

The "Greening Economies in the European Union's Eastern Neighbourhood" (EaP GREEN) programme aims to support the six Eastern Partnership countries in their move towards a green economy by decoupling economic growth from environmental degradation and resource depletion. Georgia is among the six EaP countries in the programme. The programme is structured around three components: (1) governance and financing tools for sustainable consumption and production (SCP) and the green economy; (2) strategic environmental assessment and environmental impact assessment accompanying SCP policy implementation; and (3) demonstration projects. Governments and the private sector are the key target groups of EaP GREEN. [10]

QUALITY MANAGEMENT SYSTEMS

OECD's pilot project "Promoting better environmental performance of SMEs in Georgia", which is supported by the German government as

part of its International Climate Initiative, had the following objectives: strengthen government policies in Georgia to promote better environmental performance (voluntary environmental compliance and adoption of green business practices) of SMEs; and promote government-to-business and business-to-business dialogue on the benefits of green practices so as to increase the role of business/trade associations in SME greening.

The project was launched in March 2015, following a preliminary review of Georgia's current environmental legal framework affecting SMEs and existing instruments supporting the implementation of environmentally friendly production practices that was conducted in 2013.

The pilot project's first substantive element was to carry out an SME survey to identify the main opportunities for, and obstacles to, improving the environmental performance of SMEs in Georgia, including the deployment of resource and energy efficient technologies and business practices. The National Statistics Office of Georgia (GEOSTAT) conducted a survey of 400 SMEs across the country in May-July 2015. The activity sectors covered in the survey were selected according to the number of SMEs in each of these sectors in Georgia. Consequently, the following activity sectors were covered in the SME survey:

- Agriculture, fisheries and forestry
- Mining and quarrying
- Food and non-food manufacturing
- Construction
- Hotels and restaurants

The stakeholder dialogue on policy measures to promote SME greening continued at the second project workshop in September 2015, and involved key government authorities (including the Ministry of Economy and Sustainable Development, Ministry of Environment and Natural Resources Protection, Ministries of Agriculture and Energy, GEOSTAT), business associations, non-governmental organizations (NGOs) and international organizations. A methodological guidance on the design and implementation of green certification schemes in the hospitality sector in Georgia was developed as an in-depth activity within the project.

As the survey used the random stratified sampling with respect to the size of enterprises and their economic activity, the size and sector-related

distribution of the sample deviated slightly from the actual structure of the SME community in Georgia. According to the survey results, Georgian SMEs engaged in green practices do so in three different ways:

- By taking resource efficiency measures
- By producing green goods and services
- By adopting an environmental management system (EMS)

The SME survey provides insight into the types of actions undertaken by SMEs and the reasons behind them. Almost none (0.3%) of the surveyed SMEs have a certified ISO 14001 EMS, while 7% have adopted a less onerous national environmental management standard. Many of those businesses quote commercial reasons for doing so; these include efforts to improve the company's image in the eyes of clients, business partners or the general public (60.8%) as well as demand from suppliers and customers (25.4%). [11]

According to the Georgian Employers' Association, Georgian SMEs have adopted several ISO standards, among them: ISO 9001, ISO 22000, ISO 18001, ISO 14001 and ISO 50001.

LEGISLATIVE FRAMEWORK

Georgia stands out in Europe and Central Asia for its big strides towards better and more efficient business regulation in recent last years, according to Doing Business 2016.

After gaining independence in 1991, Georgia implemented extensive reforms. Transitioning from the county's Soviet socialist economic system to the free market economy required a lot of hard work and energy. Many economic ideas and theories were discussed as a result. However, the adoption of a free market economy necessitated an overhauling of the public governance system as well as people's mentality. Most reforms implemented since Georgia's independence were successful. The government of Georgia cut taxes and reduced business regulation to create an attractive business environment and enhance foreign direct investment. This ultimately helped to create jobs, stimulate entrepreneurial activity in various fields of the economy, and increase the welfare of the population. Promoting the development of private sector is one of the main goals of country's economic policy. Due to the liberal reforms implemented by the government of Georgia, enhanced relations with partner countries and

new bilateral treaties, Georgian foreign trade diversified. Georgia remains strongly committed to the World Trade Organization (WTO) as the primary basis for its trade policy. Georgia firmly believes that trade liberalization is the best way to meet the challenges of an increasingly globalized world economy.

Recent reforms contributed to the simplification of the tax administration, optimization of sanctions, elimination of ambiguous provisions in the Tax Code, and facilitation of customs practices. A series of structural reforms were implemented to further liberalize the business environment and facilitate the inflow of foreign direct investments to Georgia. [12]

The regulatory reforms in Georgia simplified the administrative procedures for all enterprises, including SMEs. In accordance with Georgian legislation, no tariff duty is applied to exports or re-exports from Georgia. Exports are exempted from value added tax (VAT) as well. Georgia does not use minimum export prices and export subsidies. There are no non-tariff restrictions (prohibitions, licensing) in international trade in the Georgian legislation, except in cases pertaining to health, security, safety and environmental issues. The share of goods subject to non-tariff restrictions constitutes about 1% of the whole nomenclature. Due to the reforms carried out by the government of Georgia, the barriers to foreign trade decreased tremendously, resulting in increased volumes of export and import flows.

As mentioned above, the Georgian government has implemented broad and comprehensive reforms in every aspect of the country's life in recent years. Reforms implemented include the simplification of licensing procedures. The number of licenses and permits required in Georgia are at the bare minimum, and rules for obtaining them are simple.

The number of licenses and permits was reduced by approximately 90%. Recently, licenses and permits are only required for the production of high risk goods and services, as well as for the usage of natural resources and some specific activities. The procedures of issuing licenses and permits were significantly simplified due to the introduction of the "One-Stop Shop" and "Silence is Consent" principle.

The Law of Georgia on Licenses and Permits (2005) regulates activities posing certain threats to human life and health, and addresses specific

state or public interests, including the usage of the state resources. Introduction of this law has greatly reduced the number of licenses/permits in country, and streamlined the procedures.

Two laws are related to the procedures for assessing environmental impact of particular activities. The Law of Georgia on Environmental Impact Permits (2007) determines the list of activities and projects subject to ecological examination and requiring environmental assessment. It also stipulates procedures for public participation in the issuance of an environmental impact permit by the Ministry of Environment. The Law of Georgia on Ecological Expertise (2007) regulates the procedures for ecological expertise vis-à-vis the activities listed by the Law on Environmental Impact Permits. [13]

The liberalization of the tax code in Georgia promoted the development of the private sector and enhanced sustainable economic growth by significantly reducing the number of taxes and rates. In 2004, there were 22 different taxes in Georgia. The number of taxes and tax rates has been gradually decreased. As of 2014, only 6 of the original 22 taxes remain:

- Value added tax (0% and 18%)
- Personal income tax (20% flat)
- Corporate Income Tax (15%)
- Import tax (0%, 5% and 12%) – only for agricultural products and construction materials
- Excise (depends on the type of good)
- Property tax (up to 1%)

Only 5 of these 6 taxes (personal income tax, corporate income tax, value added tax, excise tax, and import tax) are state-wide. Property tax is a local tax. There are no capital gains, inheritance, wealth, property transfer, social, branch remittance, or other taxes imposed in Georgia. The DCFTA, which was provisionally applied from 1 September 2014, ensured that trade between EU Member Countries and Georgia is duty free.

The new Tax Code of Georgia, which has been in effect since January 2011, further simplified procedures of doing business, and offered special incentives to MSMEs as additional inducements for business development and overall economic growth.

A taxpayer may register for e-services within one working day of submitting the application. A taxpayer may deregister from e-services in favour of paper forms again. Registration and deregistration for e-services can also be conducted online via a Skype video call with a tax officer. A taxpayer may perform tax payments via the online payment system. [8]

Several important laws have recently undergone significant changes; these include: the Law on the System of Protected Areas (1996), Law on Wildlife (1996), Law on Water (1997), Law on Nuclear and Radiation Protection (1998), Forest Code (1999), and Law on Ambient Air Protection (1999).

The Law of Georgia on Fees for the Use of Natural Resources entered into force in 2005, and provides an overview and definition of the terms and fees relating to the rational exploitation of state-owned natural resources such as mines, forests, water and wildlife. The government has stated on several occasions that natural resources should be managed by the private sector, not the state. The Ministry of Energy and Natural Resources is presently responsible for auctioning the rights of most state-owned natural resources to private enterprises.

The Law of Georgia on Standardization that sets the foundation for production standards in the country has been harmonized with the standardization criteria of the European Union (EU). The Georgian National Agency for Standards, Technical Regulations and Metrology of the Ministry of Economic Development has published a list containing the ISO and the European Committee for Standardization (CEN) criteria with a view to their introduction in the country.

Ambient quality standards are issued by the Ministry of Labour, Health and Social Affairs of Georgia. The Ministry also issues Technical Regulations on Maximum Allowable Emissions and Maximum Allowable Discharges regarding air and waste water, which are used as the basis for the issuance of environmental impact permits or for direct monitoring of industrial pollution. The Nuclear and Radiation Safety Service of the Ministry of Energy and Natural Resources is a regulatory agency that has adopted its existing standards in 2000. [13]

GOVERNMENTAL POLICY SUPPORTING SMEs TOWARDS THE GREEN ECONOMY

Governments play an important role in providing high quality framework conditions by removing bottlenecks in the general business environment that impede able entrepreneurs with good ideas from starting a new venture and creating jobs. These conditions include institutions that function well, competitive markets for inputs and outputs, a predictable system of taxation, and bankruptcy legislation capable of facilitating resource reallocation while protecting creditors. The government of Georgia has cut taxes and reduced business regulation to create an attractive business environment and enhance foreign direct investment inflow. Georgia has improved in most of the areas measured by Doing Business over the past 12 years, according to Doing Business 2016. The government of Georgia (GoG) recognizes the importance and role of SMEs in economic development, and is committed to the further improvement of the business environment to enable SMEs to develop and grow.

The government has broadened its approach to SME development in recent years to go beyond horizontal reforms. It achieved this by introducing targeted support measures. The government implemented reforms in a range of areas to support a liberal, favourable business environment with simplified regulations and business procedures. The government has reduced bureaucracy, improved tax policies, fought corruption, and liberalized labour regulations. Reforms in tax law, customs law, employment law, and legislation governing licensing have made it much easier to start and run a business.

The government of Georgia implemented a range of deep and comprehensive reforms in different areas (public administration, law, justice, taxation, trade, permits, licenses, etc), and invested in the development of infrastructure (roads, railways, air transport, water management, etc.). Due to these efforts, Georgia has had dramatic economic growth. To ensure further development, Georgia has elaborated further actions and priorities.

Together with the government, different international organizations are working to elaborate on the country's Green Growth Strategy, which will support business and Georgia as a whole.

Support of private sector development in general, and particularly SMEs, is one of the main aims of the GoG's economic policy. Consequently, it is

one of the priorities of the Socio-Economic Development Strategy of Georgia "Georgia 2020" (June, 2014), as well as the Programme for a Strong, Democratic and United Georgia (July, 2014).

The GoG attaches particular importance to the enhancement of private sector competitiveness, especially the enhancement of SME competitiveness. It has to do this because it is one of the terms of the EU-Georgia Association Agreement and DCFTA signed in June 2014 and ratified by the Georgian Parliament in July 2014. The DCFTA was provisionally applied on 1 September 2014. The DCFTA provides Georgia with a unique opportunity to achieve deeper integration with the EU market and increase FDI. Adaptation to and implementation of DCFTA requirements is essential if Georgia is to enable businesses to gain maximum benefit from the DCFTA. The GoG can do this by maximising the country's export potential. The GoG is dedicated to implementing its reform agenda under its DCFTA commitments.

A clear strategy is essential to facilitate SME development and enhance competitiveness.

The GoG seeks to enhance SME competitiveness with the **SME Development Strategy 2016-2020** that is based on the "Think Small First" principle. This SME Development Strategy will create a solid base for inclusive and sustainable economic growth. The strategy has set several targets to be achieved by 2020.

The SME Development Strategy 2016-2020 was elaborated by the Ministry of Economy and Sustainable Development of Georgia in close cooperation with OECD and GIZ support. The SME Development Strategy for Georgia aims to create a favourable environment for SMEs so as to enhance their competitiveness and innovation capacities, generate income and jobs, and engender inclusive and sustainable economic growth. To this end, barriers hindering SME development were identified and relevant policy measures are in development.

The SME Development Strategy of Georgia 2016-2020 also prioritizes the promotion of green practices among SMEs. In order to promote green practices among SMEs, training programmes emphasizing resource efficiency and clean production were developed. These training programmes will serve as support mechanisms for the improvement of SME skills as

well as training on environmental performance. The GoG will support the effective implementation of environmental managers' courses in order to develop capacities of companies eager to undertake environmentally friendly management. [4]

The Georgian Ministry of Environment and Natural Resources Protection set up an Environmental Information and Education Centre in 2010 to provide compliance advisory services to companies and individuals. The **Green Business Support Strategy for Georgian Private Business Organizations** was developed in 2011 by the Georgian Entrepreneurs Confederation with support from the German government. It recommended establishing an information centre for green business, promoting environmental management systems, disseminating best practices, developing appropriate financing instruments, etc. The Georgian Green Business Award was announced by the Ministry of Environment and Natural Resources Protection in October 2013. The award seeks to raise the motivation of entrepreneurs in environment protection and social responsibility issues. Awards are given out in the categories for the best green company, best green product, and best greening achievement.

Various information and training programmes for small businesses have been implemented by the ministries of economy in several EaP countries. The Georgian Ministry of Economy and Sustainable Development has been providing private companies with reliable and actionable industry data and analysis so as to bring their attention to opportunities related to the implementation of sustainable business practices. [10]

Two national documents – the Socio-Economic Development Strategy of Georgia "Georgia 2020" (2014) and the Programme for a Strong, Democratic and United Georgia (2014) – set out the general framework for Georgia's future development. Economic policy is also included in these two documents. In fact, the importance of the creation of a strong private sector, with special emphasis on SMEs, is underlined in both documents.

The main priorities of Georgia's economic policy until 2020 are set out in **Georgia 2020**, which was adopted in June 2014. The GoG's economic policy vision is built on the following principles: rapid and effective economic growth based on a competitive private sector; economic policy oriented at inclusive growth; and rational use of natural resources.

Georgia 2020 stresses that the main directions of Georgia's future economic policy will be guided by actions and policy measures under the EU-Georgia Association Agreement and DCFTA.

Georgia 2020 emphasizes effective, transparent and optimal government for the maintenance of the freedom of the private sector. Georgia 2020 identifies the main factors hindering inclusive economic growth and sets out horizontal measures for the achievement of inclusive growth. Enhancement of private sector competitiveness is the main priority for the GoG, since the private sector is the key driver of inclusive economic growth. Within this priority, special attention is paid to strengthening the SME sector.

Georgia 2020 sets three main priority actions and relevant policy measures: increase private sector competitiveness, develop competitive human capital, and increase access to finance.

The Governmental Programme for a Strong, Democratic and United Georgia sets a number of priorities in different directions, including economic policy. Overcoming unemployment and poverty are among the main goals to be achieved in the near future. In this regard, special attention is given to the development of the SME sector. The GoG will further work to develop entrepreneurship and enhance competitiveness of SMEs in order to increase their role and share in the economy. The importance of entrepreneurship support through the development of SMEs and start-ups via provision of capacity building and entrepreneurial learning, improvement access to finance, strengthening export potential, access to innovation and new technologies, and so on is underlined in the Programme.

There are also several policy documents underlining the importance of SME development. These are:

Regional Development Strategy of Georgia for 2010-2017 (2010), which pays special attention to supporting SME development and start-ups in the regions of Georgia through trainings, improvement of access to finance and innovations, development of different SME supportive institutions, mechanisms and tools, SMEs internationalization and establishment of cooperation with international trade partners.

Agriculture Development Strategy of Georgia for 2015-2020 (2015) supports businesses, especially SMEs and start-ups, operating in agribusiness. It also provides support for the development of small and medium farming industries. It seeks to enhance the competitiveness of enterprises operating in agriculture via the delivery of information on market demands, support in adapting to DCFTA requirements, specific trainings, support for exports, etc.

Action Plan for Implementation of DCFTA for 2014-2017 (2014) includes special measures for SME support such as the preparation of Georgian businesses for the implementation of national legislation aligned to the framework of the DCFTA, and supporting SMEs through various financial and non-financial tools (e.g. access to finance, export promotion, products' development, consultations, etc.).

Vocational Education Reform Strategy for 2013-2020 (2013) aims to develop labour market oriented human resources, improve access to vocational education, promote high level qualifications for the development of competitive human capital, etc. To ensure effective implementation of this strategy, special attention is given to the involvement of social partners, including the business sector, at all levels in the decision-making process in order to develop labour market oriented human capital. [4]

The Ministry of Economy and Sustainable Development of Georgia launched **Micro and Small Business Support**, a new state programme in October 2014.

This programme aims to develop and promote MSMEs in the country, support business entities and entrepreneurs, as well as develop regional markets and increase incomes. The programme is designed to provide proportional financing to MSMEs in the regional areas of Georgia.

This programme will also ensure that modern business practices are implemented in Georgia's rural regions.

Throughout its 26-month duration, this programme will be funded by state budget and implemented by local non-governmental and financial organizations. The project is aimed at four targeted communities across the country, with the total budget of the project distributed proportionally according to the population of each region.

This programme will increase the competitiveness of regional businesses, launch modern business practices in the regions, ensure regional diversification of production, as well as enhance other direct and indirect benefits of economic activity, growth and development.

The programme will benefit MSMEs located in areas that are not the capital of Georgia, as its financing assistance will go to the rural population (3,315,300 people).

The programme will issue participatory funding to all start-ups and existing business entities (except legal entities), group of business entities, entrepreneurs (maximum of three business units that are not legal entities) and small business partnerships in the rural regions of Georgia. The maximum amount of funding is GEL 5,000 to an entrepreneur, and GEL 15,000 to a group of entrepreneurs. The share of entrepreneurs and business entities participating in this programme is determined by the amount of not less than 20% of the funding. The programme includes technical assistance, training, internships and individual consultations.

The state programme, **Produce in Georgia**, aims to develop entrepreneurship, support entrepreneurs, develop industry, promote the creation of new enterprises/new factories. In so doing, it will enhance the private sector's competitiveness and export potential growth in finance, real estate, as well as access to modern technology and technical assistance. The three components of the programme are: access to finances, access to infrastructure (real estate), and access to consultation services. Total budget for the programme is GEL 46 million, of which GEL 30 million is allocated to agricultural production and GEL 16 million to industry production.

This programme is an opportunity for start-ups to fulfil their plans and create new factories in the field of agriculture or industry.

The Produce in Georgia programme started in June 2014. The Ministry of Economy and Sustainable Development and the Ministry of Agriculture of Georgia are its coordinators. The following institutions are also involved in the programme: the Entrepreneurship Development Agency, the National Agency for State Property Management, the Technology and Innovation Agency of Georgia, and the Agricultural Projects Management Agency.

The memorandum of mutual understanding between the government ministries and commercial banks involved in Produce in Georgia was signed at the Ministry of Economy and Sustainable Development of Georgia.

The GoG negotiated with all commercial banks in Georgia to encourage their participation in this state programme. The banks involved in this programme are as follows: Bank of Georgia, TBC bank, VTB bank Georgia, Bank Republic, BasisBank, International Bank of Azerbaijan-Georgia, Kor Standard Bank, CARTU Bank, Investbank, Halyk Bank Georgia, Liberty Bank, ProCredit Bank, PrivatBank, Progress Bank.

The memorandum of mutual understanding between the government ministries and commercial banks includes issues related to access to finance as outlined in the framework of the state programme, Produce in Georgia. Banks will allocate credit to entrepreneurs within the framework of programme. The state will co-sponsor 10% of the interest rate for 24 months. Banks participating in the programme are to provide credit that is at least USD 150,000 and no more than USD 2 million.

The **Enterprise Development Agency** was established in February 2014 to promote and support start-ups, MSMEs and the export potential of the country. The Enterprise Development Agency is a legal entity of public law within the Ministry of Economy and Sustainable Development of Georgia. The Enterprise Development Agency promotes enterprises and export development via the improvement of financial and enterprise skills. The Enterprise Development Agency offers consultation, educational and technical assistance to entrepreneurs (both legal and physical persons), prepares industry and export related surveys, provides information to export-oriented legal and physical persons, and cooperates with international and donor organizations.

The Georgian Innovation and Technology Agency (GITA) is the native resolution of the GoG and Ministry of Economy and Sustainable Development. GITA comes under state control and is a sub-entity of public law. GITA coordinates and mediates in the development of innovation and technology in the country. GITA ensures that steps are taken to achieve the country's economic goals, and uses economic welfare to contribute to innovation and technological development.

As innovation and creativity are necessary for the sustainable growth and development of the country, GITA was established on 19 February 2014. It participates in enhancing private and public sector knowledge, advocating the innovation and commercialization of research results, and promoting innovative entrepreneurship. The Agency contributes to the introduction and use of information and communication technologies as well as innovations in various fields to improve their efficiency. GITA will actively promote ICT and innovation in the financial and business industries to increase their competitiveness. GITA is also committed to ensuring that entrepreneurs and start-ups are able to secure financing incentives for innovative projects. GITA is actively involved in technology parks, innovation centres, innovation labs, and accelerator and business incubators for research and development. GITA's main objectives are the provision of high speed internet access in Georgia, e-commerce, reducing distance to work, utilization of computerization, computerization of speeding, and developing other electronic services.

GITA is also open to international relations. All its targeted innovation and technology programmes and projects, including ICT-related ones were planned in cooperation with international organizations and donors. [14]

GITA is the main coordinator and mediator in the process of building a national innovation ecosystem. GITA aims to create a national innovation ecosystem and coordinate its development process. It will do this by stimulating innovation, modern technologies and R&D; facilitating the commercialization and use of R&D; supporting the growth of innovative start-ups and their competitiveness; facilitating cooperation between the representatives of scientists and businesses; covering the whole country with high speed internet connection and computerization skills, etc. GITA's main functions are to contribute to building capacity and development of skills, enhance the competitiveness of SMEs through innovative approaches and technology solutions; provide the infrastructure for innovation and R&D; facilitate and finance knowledge-based initiatives, innovative projects and products; implement programmes that will stimulate R&D in the business sector; cover whole country with high-speed internet connection and computerization access, etc.

Before the institutional strengthening of Enterprise Georgia and GITA can take place, the GoG must first address SMEs' needs and provide target-ori-

ented services. As Enterprise Georgia is expected to provide consultancy and technical assistance to SMEs and assist in their adaptation to these requirements in accordance to DCFTA requirements, the GoG must build the capacity of Enterprise Georgia vis-à-vis DCFTA and other related issues.

There are a number of organizations assisting Georgian SMEs; the most notable of which is the **Georgian Chamber of Commerce and Industry (GCCI)**. GCCI is an independent public agency. GCCI's main function is the provision of information and consultancy to businesses, supporting the improvement of business skills and business planning, promoting export, supporting the internationalization of enterprises, etc. GCCI membership is voluntary. Currently, GCCI has 1,007 members, more than 90% of which are SMEs. Membership fee varies from GEL 0 to GEL 10,000, depending on the services provided. SMEs do not pay any membership fees. GCCI has five regional offices located in the rural regions of Georgia.

The **Georgian Employers' Association (GEA)** is an independent non-profit organization unifying more than 1,000 SMEs. GEA provides consultancy services to SMEs and carries out different programmes related to entrepreneurial learning and business skills development.

The **Georgian Small and Medium Enterprises Association (GSMEA)** is an independent organization protecting the interests of small and medium enterprises. It cooperates actively with SMEs dedicated to developing business skills and provides consultancy, etc. GSMEA presently has 106 members. [4]

GREEN BUSINESS PRACTICES

Green growth in Georgia entails opening its rich natural capital to new business opportunities driving economic growth and development, while simultaneously ensuring that these assets continue to provide the resources and environmental services on which our well-being relies. The Green Growth Initiative seeks to bring about sustainable economic development in Georgia by promoting economic growth, combating poverty and helping to conserve global public goods through the preservation of biodiversity and fighting climate change. As a strong supporter of the UN initiative to promote a green economy and green growth, Georgia is rapidly headed towards a new era in economic development whereby it is possible for profitable businesses, environmental protection and social benefits to co-exist with one another. [1]

The features of two green businesses in Georgia will be described below.

The **Gori Feeding Cannery Kula** was established in 2009. It has two brands. The first – **Kula** – produces ecologically clean fruit and vegetable juice. The other – **Kula baby** – produces natural juices for children.

Wood Service Ltd was found in 1999 in Tbilisi and operates in the construction market. Wood Service's main goal is to launch innovative and leading construction technologies based on sustainable development principles in a Georgian market. Due to the company's innovative approach, its activities are based on sustainability principles and green technologies. In 2006, Wood Service launched the new technology of treating timber with vacuum pressure. This technology was completely new in Georgia. Due to the preservation abilities of timber following vacuum pressure treatment, the company was able to implement many environmentally significant large-scale projects such as national parks, protected territories, etc. In 2007, Wood Service became Georgia's official representative in the Caucasus region of MiTek Industries – the world's leading provider of steel connector products, design engineering software and ancillary services for the global building components market. [15]

The UNIDO Regional Resources Efficient and Cleaner Production (RECP) Demonstration Project is a part of the regional programme of EaP GREEN. EaP GREEN stands for Greening Economies in the European Union's Eastern Partnership Countries. The EaP countries are Armenia, Azerbaijan, Belarus, Georgia, Moldova and Ukraine. RECP is a 4-year action spanning 2013-2016. It is jointly implemented by a consortium comprising OECD (lead partner), UNECE, UNEP and UNIDO.

RECP is funded by the EU. It is jointly implemented by UNIDO, OECD, UNEP and UNECE. It aims to support all 6 EaP countries in the following ways: the creation of human and institutional capacities for RECP; the demonstration, dissemination and replication of RECP in priority sectors such as chemicals, food and construction materials; and the transfer of and investment in RECP technologies. RECP aims to improve resource productivity and environmental performance of enterprises and other organizations so as to put the green economy into practice.

RECP member companies' award ceremonies have been organized in different cities of Georgia. Its meetings are attended by SMEs from the dif-

ferent municipalities, representatives of the local government as well local media and informational sources such as television crew and journalists. The following companies are members of RECP: LLC Aisi (food processing), LLC Kristali (food processing), LLC Ofazi (food processing), Ind. Entr. Lazariashvili (food processing), LLC Teqnovini (construction materials), Ind. Entr. Tukhashvili (food processing), LLC Gemo (food processing), LLC Nektari (food processing), LLC Alfapeti (food), LLC Rustavi Azot (chemical), LLC Gzatkecili + (construction materials), LLC MnChemical Georgia (chemical), LLC New Delta (construction materials), LLC Progresi (food), LLC Tetri Kudi (food), LLC Progresi Bakery (food), etc.

The RECP Domestication Component organizes meetings and sequential forums on resource efficient and cleaner production. These meetings and forums present RECP's action plans to participant companies that are devoted to ambient air protection and the prevention of air pollution from the industrial sector.

There were also presentations on the opportunities afforded by the reduction of air emissions by industrial companies. These presentations, meetings and forums emphasized the ways in which the implementation of RECP action plans will help companies to save energy, water and materials use; increase productivity; reduce negative impact on environment; enhance workers' health and safety; increase profit, and comply with regulatory requirements. RECP representatives will continue to collaborate with participant member companies so as to monitor the implementation of RECP action plans and the results achieved. [16]

Georgia owns interesting assets for the development of a Green Tourism industry. With rich natural resources, vibrant historical heritage and special agricultural traditions such as wine making, tourism is certainly an area in which green businesses can thrive. Georgia's wild and untouched regions provide good opportunities for adventure tourism, water sports, mountain sports, and all other types of low impact tours based on appreciation of the natural environment such as bird watching, nature trekking and river rafting. Georgia is a biodiversity hotspot and offers opportunities for eco-tourism, including ecologically adapted exploration of protected areas, which make up 7% of the nation's total territory. In fact, Georgia has an established network of 50 protected areas that are preserved according to international standards. Georgia's rich 300-year-old cultural heritage,

12,000 monuments, proliferation of water springs and excellent cuisine also mean that gastronomic tourism as well as spa and health tourism have the potential to prosper. Green tourism facilities exist to reduce their environmental footprint, whilst improving the profitability of installations. These facilities can also afford other business opportunities to enterprises in the tourism industry. Several green technologies have been developed recently to optimize the use of resources and minimize consumption. The implementation of these green technologies has resulted in important savings and decreased production costs. Other business sectors like the manufacturing industry and agriculture can also stand to benefit from the introduction of green or energy efficient technologies. Several studies have underlined the rich geothermic potential of Georgia. For instance, greenhouses could be used as a source of heat for agriculture production. These same greenhouses could also be used to provide production opportunities during off-season periods when imports supply the domestic market, thereby contributing to the reduction of the trade deficit challenge.

Green and sustainable agriculture practices can also foster improved access to markets and exports, due to the compliance with private voluntary environmental labels and standards flourishing all over the planet. In following international environmental standards and labelling their products accordingly, Georgian farmers will be encouraged to minimize their negative environmental impact and be more socially aware. Enterprises in the agricultural industry such as Kula have shown that going green does yield substantial business opportunities.

The Ministry of Economy and Sustainable Development is the GoG's focal point in the World Bank's policy framework for green transportation in Georgia. The **policy framework for green transportation in Georgia** aims to reform and build infrastructure for green transportation sustainability through the reduction of fossil fuel imports. To that end, this policy framework seeks to introduce the large-scale utilization of domestic energy sources for public and private transportation so as to improve the balance of trade and energy security, and make more efficient use of the country's hydropower potential for economic growth. Several subsectors of the transportation sector (mostly notably the freight transport and collective intercity transport) are currently undergoing studies for this purpose.

The government of Georgia also launched a web portal (www.greengeorgia.ge) in cooperation with Deutsche Gesellschaft für Internationale

Zusammenarbeit (GIZ) GmbH. This web portal provides continuously updated information about the country's achievements and potential in sustainable economic development. Launched as part of the framework to build up investment promotion services in the green sector, the web portal will serve as the GoG's main platform for information exchange and international positioning in the sector.

In Sighnagi, Kvareli, Telavi, Tusheti and Sagarejo in the region of Kakheti, the World Bank and Ministry of Economy and Sustainable Development have jointly launched a regional development programme encompassing infrastructure development, rehabilitation of cultural heritage sites and the development of a free tourism zone in the buffer zone of adjacent protected area. Like the GIZ-led project targeting the Ateni Valley in the Shida Kartli region, sustainable tourism is driving philosophy behind this Kakheti regional development programme. [17]

Gori Municipality, in the region of Shida Kartli, is only an hour's drive from Tbilisi and is the location of the Ateni Gorge. Gori Municipality is presently cooperating with the Ministry of the Economy and Sustainable Development, Georgian National Tourism Agency, Georgian National Investment Agency and GIZ to develop the scenic Ateni Valley into an eco-friendly tourism destination. Local working groups are looking into eco-friendly opportunities of developing the area's cultural heritage as well as spa and wellness tourism through good environmental management. Due to its rich natural resources and beauty, the Ateni Valley could become a showcase for the Green Growth Initiative by combining elements of eco-friendly tourism, sustainable agriculture and renewable energies.

CONCLUSIONS AND RECOMMENDATIONS

"Green economy" and "green growth" are increasingly becoming mainstream concepts, marking the recognition of environment protection as a driver for global and national economic development, and acknowledging that such forms of environment protection are compatible with the broad requirements for sustainability. Clear goals and targets are needed in the transition, as these goals will contribute to the development of a well-balanced mix of policy and financing mechanisms.

The concept of "green business" is linked to the green economy and green growth. Green business responds to the need to transform energy and

resource intensive production process into an efficient, more or less closed cycle of material flow for the sustainable achievement of business targets. [13]

Greening economies are needed to combat the ways in which current models of growth have eroded the natural assets of our environment and undermined the integrity of the ecosystems on which economic activity depends. Failure to adequately manage natural capital will result in increasing costs of substituting the services it provides. Moreover, current models of growth will impact economic development in unpredictable ways as changes in the ecosystems and their capacity to support growth do not follow a linear, foreseeable trajectory.

Situated in the Caucasus region, Georgia is a country with rich biodiversity and important natural resources. Forests cover almost 40% of the land area, and are among the richest reservoirs of plant and animal life on earth. Over 80% of the country's electricity is produced by hydropower. The country's fertile soils are important assets in agriculture.

However, Georgia is still facing many environmental problems affecting its economic growth and the well-being of its inhabitants. Traffic and industrial production contribute to serious air pollution in the major cities. The Kura River and the Black Sea suffer from pollution by industrial and municipal discharges and agriculture runoff. Municipal waste is disposed in poorly managed landfills. Degradation of land and forests has led to soil erosion, and negatively affects agricultural productivity and livelihood opportunities in rural areas. [18]

Positive steps towards greening have taken place in recent years. Different organizations are working to support the green economy of Georgia. Georgian SMEs are involved in the process too. Newly established awards serve to raise the motivation of Georgian companies in establishing better environments for greening. Green business also forms a part of the government of Georgia's SME Development Strategy and Action Plan 2016-2020. The government of Georgia has called on SME support in its pro-greening economic policy. Greening and sustainable SME economic growth and development are just two of the main priorities in the Socio-Economic Development Strategy of Georgia "Georgia 2020" (June 2014) and in the Programme for a Strong, Democratic and United Georgia (July 2014).

Different international organizations and institutions are researching the green opportunities of Georgia. So far, these research studies have identified specific fast growing sectors and provided recommendations that are supportive of Georgian SMEs ready and willing to go green as a part of their further development.

The Ministry of Economy and Sustainable Development of Georgia is working together with German International Cooperation (GIZ) on a Green Growth Policy Paper that will become a very important document for the further development of green business in the country. Very important steps towards greening have already been made in dialogues within and among the government, SME representatives, SME experts, international organizations, interested parties, non-governmental organizations, etc. These dialogues are generally agreed on the importance of setting common ecological goals, devising concrete steps for eco-friendly economic development, improving the circumstances of SMEs and industries so that they are more willing to go green, and securing public and private sector collaboration.

As green businesses move towards green growth, Georgian companies should be educated on the ways in which greening will cut their business costs, save energy and use less natural resources. Recommendations should be made to small business owners to focus on environmental responsibility. This will introduce the concepts of sustainability and green marketing to their business strategies and enhance their brand images.

Greening is beneficial for both the public and private sector in, as it will result in a healthy society, improved environment for employees and employers, reduce waste, aid in the future development of businesses, and set goals for the achievement of a greener world.

Since going green is beneficial to Georgia and the whole world, studies investigating the current ecological, economic and industrial realities should be conducted so as to ensure that the necessary greening business programmes are elaborated. Green businesses are very important for economic growth, as they improve productivity and benefit humanity. SMEs are important driving forces for further economic growth and employment in the country. In Georgia, the SME sector makes up a significant part of the number of enterprises in the country and is a provider of many a self-

sustainable income. SME greening is also part of governmental priority actions in Georgia. Green business is essential for the country's further development.

Georgia's rich natural resources mean that the country has the unique opportunity to reinforce its green policies by strengthening its SME sector.

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3.6. GO GREEN IN GREECE

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ABSTRACT
Greece, buckling under the pressures of the deep economic and social crisis, is in the process of going greener. Several public and private initiatives have been implemented to create a more environmentally friendly ecosystem. Green sectors such as renewable energy sources and organic agriculture present increasing opportunities. Greek SMEs are now making increased efforts to adopt environmental practices. However, the majority of SMEs are still in the early environmental consciousness phase, and are mainly undertaking isolated and peripheral actions. Greek SMEs do not seem to realize the competitive and cost saving benefits of integrating environmental aspects into their operations. This study will discuss the ways in which Greece meets the green economy requirements, as well as analyze the Greek SME sector and the current initiatives for going green. Finally, general thoughts relevant to policy recommendations will presented as conclusions.

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 enjoyed by the country after it joined the EU and the single European currency in 2001 gave way to a severe financial crisis. In 2009, the government debt was 130% of GDP and the government deficit had reached a record high of 15.6% of GDP. These rapidly accelerating figures were unsustainable and quickly resulted in Greece being shut out from borrowing in the financial markets. In 2010, the so-called troika, formed by the European Commission (EC), the European Central Bank and the International Monetary Fund (IMF), started handing Greece loans in exchange for spending cuts and tax hikes. Although this initially provided some positive results, the rapid implementation of structural and institutional reforms for

the recovery of the economy did not occur. By 2014, Greek GDP had fallen to EUR 177 billion from EUR 242 billion in 2008, decreasing by 27%. [1] The GDP per capita decreased to EUR 18,400 in 2014 from EUR 24,100 in 2008. At the same time, government debt escalated to EUR 317 billion in 2014, accounting for 178% of GDP. [1] The relative unemployment index reached a record high of approximately 25% in 2015. Although the 2015 unemployment rate is lower than the 27.3% rate of 2013, Greece now had the highest unemployment rate among all the European countries. The high unemployment rates coupled with the reduction of household income and increased taxes resulted in a serious social crisis. Life satisfaction dropped and poverty rose sharply, with youths at risk of poverty or social exclusion being the most significantly affected. [2]

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 July 2015 so as to prevent euros flowing out of Greek banks. Although the imposition of capital controls saw the majority of economic sectors suffering their worst ever period in the single currency, the Greek economy managed to reduce its trade deficit in 2015. This was mainly due to a reduction of imports by 14.8% compared to 2014, and an increase of exports (excluding oil products) by 9.2%. [3]

Despite the crisis and the serious political problems faced by the Greek government, there are some optimistic signs in 2016 that may indicate the economy is slowly turning around. Apart from the implementation of several reforms and improved export rate, there are also rapid changes in the mentality and attitude of the 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 as well as an increase of venture capital investment emphasizing high-tech ventures, mostly ICT. New ventures emerging in the absence of career alternatives are fast becoming a key lever for growth restoration and job creation. [4]

In 2016, Greece demonstrated an improvement in "ease of doing business" and ranked 60th out of 189 economies, improving from its performance in 2014 when it was ranked 72nd. [5] Greece also became more competitive in 2015-16, climbing to 81st place out of 140 economies. [6]

THE GREEK SME SECTOR

In accordance to the European Commission's 2003 recommendation, Greece defines small and medium-sized enterprises (SMEs) as businesses that:

- Employ less than 250 employees,
- Have an annual turnover not exceeding EUR 50 million or with annual total balance sheet not exceeding EUR 43 million,
- Fulfil the autonomy criterion, i.e. 25% or more of the capital or voting rights does not belong to one or more enterprises that do not fall under the SME or microenterprise definition (depending on the case).

More specifically, Greek SMEs are defined as follows:

a) Very small or microenterprises employing fewer than 10 persons.
b) Small enterprises employing fewer than 50 persons, and having either an annual turnover not exceeding EUR 10 million, or an annual total balance sheet not exceeding EUR 10 million.
c) Medium-sized enterprises employing fewer than 250 persons, and having either 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] there are 692,686 enterprises in Greece. 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 ENTERPISES			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:

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

SMEs contribute 86.9% to employment. 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, producing approximately 40% of value added and providing 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 that between 2011 and 2013. However, deregistration within the same period also fell, accounting for a 1,813 net increase of businesses. The economic risks for businesses remained very high in 2015, with microenterprises being the worst hit [7].

The shrinkage of economic activity affected most sectors of the Greek economy, with few exceptions. According to an ICAP 2014 report, 71 out of 87 sectors of the economy presented annual losses at a smaller or higher degree over a period of 5 years. [8] 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.

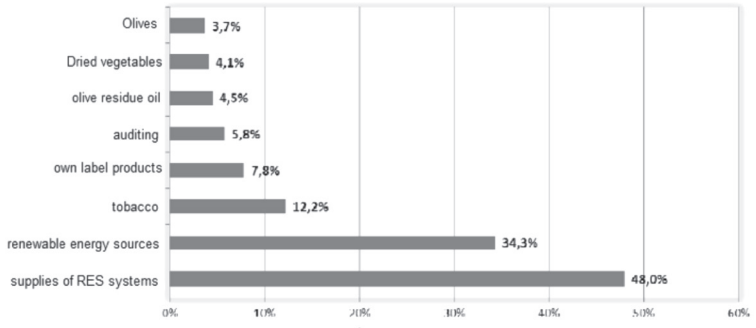

Figure 1. Greek sectors with the highest growth over the last 5 years period
Source: ICAP, 2014 [8]

Although RES-related sectors performed positively, this was largely due to the favourable institutional frame (high energy compensation values) and 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 participating in environmental policymaking 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). In addition to these national bodies, several regional authorities and municipalities are participants as well.

The national regulatory framework for the green economy is based on the European institutional framework and relevant international guidelines. It regulates issues related to environmental responsibility and corporate social responsibility (CSR) as well as businesses' relationships to society and public-private partnerships. Although the regulatory framework is still fragmented, several actions have been taken recently towards its integra-

tion. These actions culminated in the National Action Plan for Corporate Social Responsibility, for which public consultation was completed in September 2014.

Some critical points of the Greek regulatory framework are as follows: [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, and integrate 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 'polluter pays' principle.
- 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. Within the framework of the National Action Plan, there are a number of national policies, plans and programmes of the National Strategic Reference Framework (NSRF) 2014-2020, which relate directly or indirectly to environmental responsibility. Among them are policies related to waste management (such as the end-of-life for cars and boats, used tyres, used batteries and accumulators, the rejection of electrical and electronic equipment, building materials, demolition and excavation, and industrial oils) and several NSFR programmes, which provide in-

centives in support of greening the economy. Examples of such programmes 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 render their production and supply chain processes more environmentally friendly.
- 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 undertaking 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 highlights the potential role of Athens / Attica at the national and European level.

Several non-governmental environmental organizations also participate in policymaking and the enhancement of environmental performance. Some examples of these participatory organizations are "Ecology...vision and action", Environmental Centre ARCTUROS (Arcturos), Hellenic Centre for Marine Research (HCMR), Clean Up Greece, Hellenic Ornithological Society, Hellenic Wildlife Hospital, Centre for Renewable Energy Sources and Saving, Forest Research Institute of Athens, Hellenic Wind Energy Association, Environment and Environmental Training. Finally, there are several social enterprises with environmental aims operating within the framework of the new Law 4019/2011 on social economy and social entrepreneurship.

GREEN SECTORS

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

Renewable Energy Sources (RES) Sector

RES are gaining more ground in satisfying the country's energy needs. The total power installed through RES's interconnected system grew at

an average annual rate of 22.5% in 2002-2015. However, the annual growth rate decreased dramatically from 42.5% in 2012-2013 to 4% in 2014 and 2.7% in 2015. [10] In 2016, total RES installed was 4.676MW, which represented a record high of 25.73% to the total installed power in the interconnected system (Figure 2). To a large extent, the amount of energy produced by RES is shaped at the government level, with the end customer being the incumbent operator (Public Power Corporation) and not the end user.

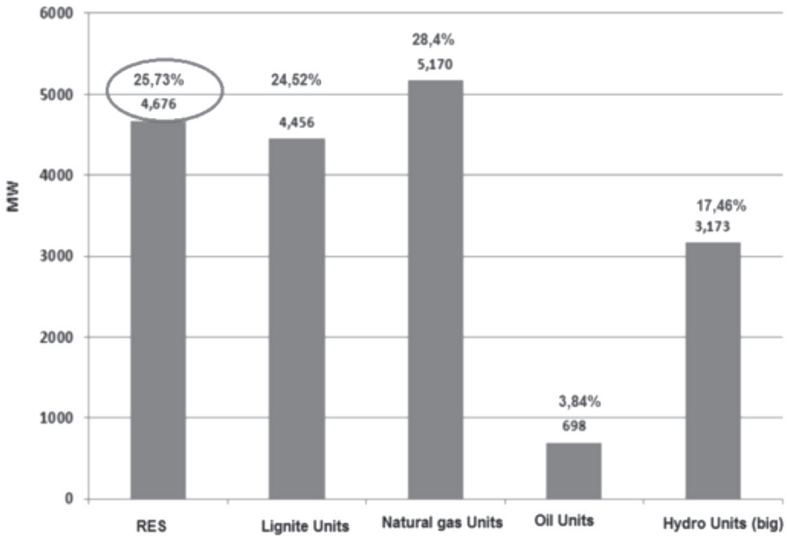

Figure 2. Installed power in the interconnected system by fuel
Source: Hellenic Electricity Market Operator (LAGIE), 2016 [11]

While the installed power from wind energy units formed the highest percentage of RES at the end of 2012, the photovoltaic systems were in the leading position in 2013. As of 2015, the contribution of photovoltaic systems in the installed RES capacity rose to 52.1%, whereas wind energy parks made up 42.3%. Small hydropower plants made up 4.5%, while the contribution of biomass-biogas plants was much lower (Figure 3).

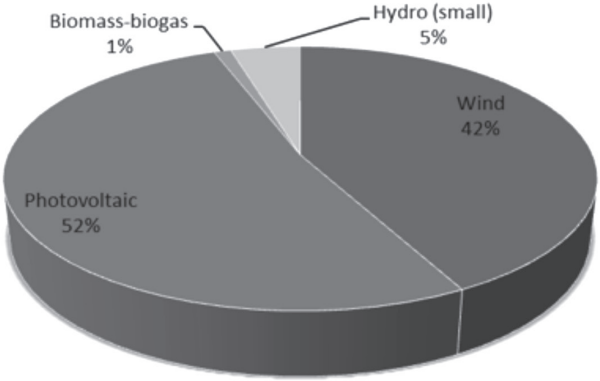

Figure 3. Contribution of RES types to total RES installed power
Source: ICAP, 2016

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% in 2009-2014. [8] The remarkable increase in the number of both RES producers and systems suppliers is, to a great extent, due to favourable institutional conditions such as the feed-in-tariffs instrument facilitating their entrance into the sector. The feed-in-tariffs instrument is now considered unsustainable, and more competitive instruments are invited to apply from 2017 onwards.

The SWOT analysis in Table 2 summarizes the development of the sector. [10]

Strengths	Opportunities
1. The high energy potential of the country (wind power, sunshine etc.). 2. The inexhaustible nature of the renewable energy sources. 3. The introduction of new technologies and the continuous improvement of skills that lower the operating cost of RES. 4. The (relatively) high profit margins of the companies operating in the sector.	5. Large growth potential of the sector. 6. High energy potential of the Greek islands (upon completion of their interconnection). 7. The establishment of smart electricity distribution networks (smart grids). 8. The foreign investor interest in domestic RES.
Weaknesses	**Threats**
9. The slow pace of implementation of RES investment projects (compared to existing possibilities). 10. The delay in implementing infrastructure projects (mainly electrical network expansion), which can enhance the penetration of RES. 11. The saturation of the network in areas with high energy potential.	12. The lack of financing, which results in the postponement and/or cancellation of investments. 13. Frequent changes in legislation and government policies, leading to reduced investor confidence. 14. The decline of RES output selling prices. 15. Possible delays in payments from the operator of electricity market. 16. 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 grow further.

Organic Agriculture and Produce Sector

The organic agriculture sector grew tremendously in Greece in 2004-2006 due to the existence of several subsidy programmes motivating a significant number of producers (small family-owned businesses) to turn to organic agriculture. However, the decreasing number of organic producers and land has resulted in insufficient subsidy programmes since 2010. According to the Research Institute of Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM – Organics international): [12]

- There was 256.131ha of organic agricultural land in Greece in 2014, compared to the 383,606ha in 2013. This marks a 33% decrease and

represents 3.1% of total agricultural land. Olive trees and cereals cover the bulk of organic agricultural land in Greece.

- There were 20,186 organic producers in 2014, compared to the 21,986 in 2013.
- However, there were 1,635 organic processors in 2014, increasing from the 1,555 processors in 2013.
- Exports of organic products are growing in response to the huge global market opportunities.

The SWOT analysis of the organic agriculture and produce sector is summarized in Table 3. [13]

Strengths	Opportunities
1. Excellent climatic and soil conditions, low conversion cost to organic agriculture. 2. International recognition of several products and areas (produce associated with their place of origin, e.g. mastic from Chios, saffron from Kozani). 3. High growth, exporting Greek companies in the food sector that can easily expand their activities to process organic products.	4. High global demand for organic products creating favourable conditions for the increased exports of organic products. 5. Increasing interest in organic business by environmentally responsible individuals. 6. Domestic market growth potential due to the comparatively low current penetration.
Weaknesses	**Threats**
7. High cost of organic production, high dependence from subsidies. 8. Lack of know-how. 9. Fragmentation and Lack of interconnectivity between producers and processors. 10. Small size of domestic market and insufficient awareness of domestic consumers about the benefits of consuming organic products.	11. Lack of efficient policies and support. 12. Deficiency of control and certification mechanisms and the associated lack of know-how to comply with required standards of quality, safety, packaging, labelling, etc. 13. Decrease of domestic demand due to the persisting economic crisis.

Table 3. SWOT analysis of the organic sector

Source: Piraeus Bank, 2013 [13]

Overall, the major problems constraining the growth of the Greek organic sector seem to be related to production's high dependence on subsidies, the deficiency of support mechanisms and policies, and the lack of know-how to comply with the required standards. While organic agriculture in Greece is small-scale, there are huge opportunities for exports. Taking advantage of organic agriculture's inherent strengths, the country could become an organic paradise in the medium-term. Combining organic cul-

tivation with produce that are associated with their place of origin can assist the promotion of Greek organic branded products in the domestic and international markets. Before this objective can be achieved, there has to be increased awareness and training of farmers, the creation of serious control and certification mechanisms, and the establishment of efficient distribution channels in foreign markets.

Waste Management Sector

The waste management sector is generally characterized by a shortage of suitable disposal and recovery infrastructure. Waste management is mainly performed by local authorities who use landfills and rubbish dumps, even though the latter is against regulation. There are limited synergies between sectors in the improvement of waste management. Several of the SMEs providing environmental protection services exclusively offer waste management services such as the collection, transport, treatment and disposal of waste. Alternative waste management in Greece is limited mainly to recycling, composting and energy making. Out of the 287,000 tons of toxic waste produced annually in Greece, 40-60% is exported and approximately 30% is "temporarily" stored. On a positive note, emergent legislation has becomes stricter in light of the upcoming EC fine to which waste producers must conform until 2018. Overall, there is considerable room for the enhancement of control, inspection and sanction mechanisms in the waste management process.

Environmentally Responsible SMEs

An increasing number of SMEs operating in non-green sectors are becoming more environmentally responsible. Figure 4 presents a recent research on 247 Greek SMEs and their adoption of environmental practices. [14]

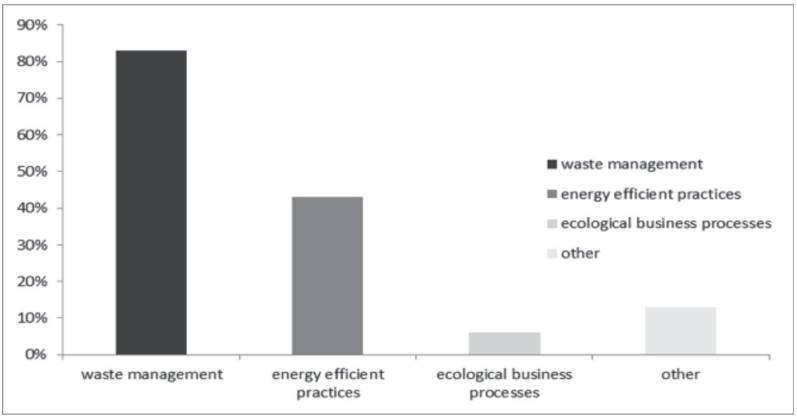

Figure 4. Environmental practices used by Greek SMEs
Source: Evgenia Tzanetopoulou, "National Report on the Perception and Implementation of Green Practices by SMEs," 2010 [14]

The majority of SMEs (83%) often adopt some kind of ecological waste management and disposal procedures because they have to comply with local and EU taxes and rules vis-à-vis environmental impact. More than 40% of SMEs use energy efficiently. Efficient energy use is characterized by rational use of energy, installation of low energy light bulbs, and high efficiency equipment and machinery. As the diffusion of environmental management systems in small companies is much lower than in larger ones, it is unsurprising that there are very few SMES certified by ISO 14001 or the Eco-Management and Audit Scheme EMAS. [14] In addition, only 10% of SMEs issue sustainability reports, indicating most SMEs' lack of interest in reporting. [15] Approximately 10% of SMEs have adopted some quality control system, while 53% have expressed an interest in a specific quality management system for the future. [14]

Although there are increasing signs of green practices by SMEs, the majority of SMEs are still in the early stage of environmental consciousness as seen in their undertaking of mainly isolated environmental actions. This is because the value and benefits of environmental responsiveness are still unclear to SMEs, and/or the perceived financial costs are too great for a small company. In other words, the majority of Greek SMEs cannot realize the benefits of integrating environmental practices into strategies due to lack of awareness and incentives. As a result, they are 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 and 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 in the development of both incremental and radical product innovations. This is especially true when innovation is 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, improved reputation, improvement of relationships with stakeholders, commitment to employees and customers, as well as cooperation and financing possibilities. As such benefits depend heavily on the ability of firms to integrate environmental practices into their strategies, SMEs must transition from the undertaking of isolated and peripheral early actions (such as recycling and waste management) to embedding environmental aspects in their business models (e.g. production of green products and services) so as to "jointly" create value with stakeholders and sustainable development. [9]

To highlight the ways in which SMEs may successfully go green, the next section presents some best practices of SMEs that have managed to follow successful environmental paths and benefit from environmental responsiveness.

GREEN SUCCESS STORIES

Masticulture, www.masticulture.com

Masticulture is a locally owned and small-scale travel bureau operation in the mastic producing village of Mesta on the island of Chios in the Aegean Sea. It is the first and only tourism company specializing in ecotourism on the island. It provides a broad variety of natural and social activities related to the environment, people, businesses and associations representing the local traditions and culture of Chios. Masticulture puts together ecotourism packages combining hospitality and outdoor activities related to the culture of Chios. These different packages feature Chios' 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 maintain the presence of its rural societies because of its active agricultural sector, which continues to be the chief source of employment for the many villagers on the island and the primary factor for Chios' sustainable development. Masticulture belongs to, and operates with the help of Mesta's inhabitants, whilst 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 in various categories nationwide such as restaurants, hotels, catering and hospitals, as well as households collaborate with the company. Revive collects cooking oil produced from the fields for free, and promotes it to the biodiesel industry after appropriate treatment. Simply put, Revive converts cooking oil into more environmentally friendly and less polluting biodiesel and bio-lubricants. The environmental benefits of using biodiesel include the reduction of soot, sulphur dioxide and carbon dioxide emissions, thus mitigating the greenhouse effect. It should be also noted that Revive offers 0.03 euro to WWF Greece for every litre of used cooking oil that it collects from households.

Ditsios, http://www.ditsios.com
Ditsios is a company processing and dyeing furs in the city of Kastoria. Ditsios' environmental performance has resulted in it being recognized as the most ecological fur dressing and dyeing factory in the world. The whole production process is organized and structured to be completely environmentally friendly, producing few or no pollutants at all, consuming the least possible energy, and instilling an increased sense of social responsibility, while being a high end and totally green factory for the dressing and dyeing of fur skins. The company has special installations to ensure that all its procedures are harmless to the local environment. These installations include: equipment for the collection of rain water that is used in the different production processes, solar panels, waste management processes, energy efficient machinery, and chemical cleaning to separate clean and polluted water that is either reused as agricultural fertilizer or stored in special waste containers. Employees also receive constant training to en-

sure that they possess the capacity to carry out all working procedures correctly. [18]

Voion Land Products, http://www.voion.gr
Voion Land Products has been operating in the region of Voio in Northwest Greece since 2008. It produces, processes, packages and distributes Voion legumes such as 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 company's processes are environmentally friendly. Beginning from the construction of its facilities, the owners installed a system for the collection and use of rainwater in the unit for the purpose of cleanliness and beautifying the surroundings. They also implemented a system for recycling paper and packaging materials (such as boxes), as well as plant preparations (such as pesticides) used by producers. Twice a year, the company organizes seminars on the new methods of cultivation, better practices and exchange of information for the farmers of the region. These seminars help the farmers to improve the quality of their products. For this purpose, the company cooperates with the Aristotle University of Thessaloniki on environmental issues. The company pays strict attention to the quality and safety of its 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, quality control mechanisms are implemented to check for possible pesticide residue, the time needed for boiling, and the humidity. Voion Land Products encourages all employees to work with high production values in order to maintain the safety and excellence of its products, and to participate in actions to protect the local environment. [18]

Alfa Koukoutaris, http://www.alfapastry.com/en
Alfa Koukoutaris is a family business manufacturing frozen pastry products in Northern Greece. It 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 exclusively using 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 and BRC. It manages to maintain the quality of its products by performing continuous quality controls. Every day, the temperatures of all refrigerators are measured, both in the building and in the tracks, to ensure that the products are safely stored and transferred. All the suppli-

ers of the raw materials are certified and must observe some preconditions regarding quality, time of delivery and condition of the ordered products. Alfa has in-house chemistry and microbiological laboratories with the latest and most advanced instruments for the analysis and control of raw materials and production sampling. The company emphasizes training seminars, specialization, information on new techniques and methods concerning production, supply, distribution, sales and service. The company's waste is sent to managing companies and a biological cleaning network. The company also promotes recycling by having recycle bins for paper, plastic and metal located in different locations all over its premises. [18]

Daphne's Club Hotel Apartments, http://www.daphnesclub.com
Daphne's Club is family friendly and ecolabelled hotel situated in the city of Xylokastro. The hotel offers 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 the EU ecolabel.

CONCLUDING THOUGHTS

Greece is in its seventh year of deep economic crisis. During the crisis, efforts to go greener have yielded 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 are rapidly gaining traction in the country. 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, has managed to increase the number of organic processors and exports. The waste management sector, though still in its 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 environmental 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 that could increase their ability to identify entrepreneurial opportunities. This could be attributed to the

lack of information and awareness on the benefits of going greener, as well as the lack of incentives that would assist SMEs to overcome the high costs of environmental investments and alter their perceptions about such costs. Thus, public bodies and policies should intervene to assist in the greening of 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 in that direction are:

- Ensuring the effective implementation of policies, plans and programmes related to the environment.
- Providing consultancy for the implementation of low, mid and high cost environmental projects.
- Creating a green map of all environmental SMEs in Greece that includes key performance indicators and success stories.
- Rewarding and promoting environmental SMEs champions.
- Granting a public environmental label to environmentally certified SMEs.
- Favouring 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 energy creation and the production of compost for commercialization.

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3.7. GREEN ECONOMY AND SMEs IN THE REPUBLIC OF MOLDOVA

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ABSTRACT
Lately, attention has been drawn to the greater need for green economic development at both the national and international levels.

The Moldovan Government is also committed to the development of the green economy, as it has affirmed that environmental protection will be one of the main priorities of the country's economic development. Although the Republic of Moldova has declared the transition to the green economy to be a priority for the competitive economic development of the country, green economy issues, including SMEs involvement in environmental issues remain virtually unexplored today. Moreover, the government's policy supporting and developing SMEs is not aligned with its environmental policy.

This paper analyzes the development of the SME sector in the Republic of Moldova and considers SMEs' role in ecological activities. The existing state policy measures supporting SME greening, programmes supporting green SMEs, the characteristics and behaviour of environmentally SMEs, and the challenges faced by entrepreneurs undertaking environmental actions will also be presented.

Keywords: small and medium enterprises, SMEs, green economy, the Republic of Moldova.
JEL Classification: O44, Q01, Q28, Q57, Q58.

1. MAIN INDICATORS OF THE SME SECTOR

Throughout the world, SMEs are seen as a means of solving the social and economic problems of society, regardless of their level of economic development. SMEs play important roles in the employment of the labour force, jobs creation, saturation of the consumption market, middle class formation, and the creation and implementation of innovation.

According to Law No. 206-XVI (2006) on the Support of Small and Medium-sized Enterprises Sector, adopted in 2006, small and medium-sized enterprises are defined according to three criteria: average annual number of employees, annual sales revenue and total annual balance sheet assets. Natural persons engaged in entrepreneurial activity are deemed to be SMEs if they meet the following criteria:

- Microenterprises should have no more than 9 employees, annual sales revenue of not more than MDL 3 million, and assets that are not more than MDL 3 million.
- Small enterprises should have no more than 49 employees, annual sales revenue of not more than MDL 25 million, and assets that are not more than MDL 25 million.
- Medium enterprises should have no more than 249 employees, annual sales revenue of not more than MDL 50 million, and assets that are not more than MDL 50 million.

The National Bureau of Statistics of Moldova (NBS) recorded the existence of 53.7 thousand economic agents in the country in 2014, mostly from the SME sector (97.4%). SMEs thus make up approximately 31.7% of all enterprises registered in the State Registration Chamber.

SMEs significantly contribute to jobs creation in the Republic of Moldova. 56.2% of all employees in the national economy worked in SMEs in 2014. The SME sector contributed to 31.8% of all sales revenue and created 82.3% of total profits before taxation. SME contributed to 32.8% of GDP (market prices). However, as seen in Figure 1, the share of SMEs in export is still very low at approximately 13 % (in 2009).

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

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

77.6% of SMEs are microenterprises, 19.3% are small enterprises, and 3.1% are medium-sized enterprises.

There were 52.3 thousand SMEs in Moldova in 2014, up from 50.9 thousand in 2013. This indicates that there was a 2.8% increase in the number of SMEs between 2013 and 2014.

In 2013-2014, the number of SMEs in each economic sector increased. The only exception to this was the processing industry in which the number of SMEs decreased by 2.9%. The increase in the total number of SMEs was largely due to new agricultural enterprises (+ 6.9% increase), real estate transactions (+ 6.7%) and constructions (+ 4.2%).
Small businesses employed 40.8% of the total SME workforce, medium-sized enterprises 29.4% and microenterprises 29.6%.

In 2008-2011, the total number of employees in all Moldovan enterprises, including SMEs, decreased. This decrease, though less significant, was also noticeable in 2007. In 2012 and 2013, all enterprises in Moldova had an increase in the number of employees as a result of positive developments in large enterprises. In 2013, the number of employees in SMEs decreased to 99.4% of the previous period. While there was a 1.1% decrease in the number of employees in all enterprises in 2014, large enterprises had a 0.4% in the number of employees compared to the previous year.

In 2014, all enterprises in the SME sector experienced a decrease in the rate of employment. In 2013-2014, most SMEs had a decrease in the number of employees. However, this was not the case for SMEs engaged in electric energy, gas and water, real estate transactions and other activities.

In 2014, all enterprises, including SMEs, saw the least profits in five years, showing values below that of 2009. Since 2012, corporate profits before tax fell significantly from that of 2007-2011, except 2009. It may be coincidence, but these economic trends of the past three years have coincided with the amendments made in the Tax Code, whereby there was zero income tax on reinvested profit from 2012 and a corporate income tax of 12% for certain taxpayers, including companies.

In 2014, the SME sector's profit before tax was MDL 3,012.7 million, increasing by more by 49.9% from MDL 2,008.5 million in 2013. MSMEs registered a significant increase in profits before tax in 2014 compared to the previous year.

Table 1 shows the main indicators of the SME sector.

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

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

2. POLICY DOCUMENTS THAT INDIRECTLY REFER TO THE GREEN ECONOMY

Moldova's Association Agreement with the European Union expressly seeks to ensure sustainable development and the promotion of the green economy in the country. By signing the agreement, Moldova is committed

to harmonizing its national legislation with that of the EU so as to ensure the integration of environmental protection, rational use of resources and energy efficiency in all sectors of the national economy and social life.

There is no special green economic policy in Moldova. However, the strategic documents outlining the goals of sustainable development ensure the country's transition to a green economy. Some of these documents are:

- National Development Strategy "Moldova 2020"
- National Programme of Moldova "European Integration: Freedom, Democracy, Welfare"
- National Environmental Strategy of the Republic of Moldova 2014-2023
- Climate Change Adaptation Strategy of the Republic of Moldova
- National Strategy for Radioactive Waste Management 2013-2023
- State Programme of Regeneration and Afforestation of Forest Fund 2003-2020
- Agriculture and Rural Development Strategy (Action Plan, 2015)
- Small and Medium Enterprise Sector Development Strategy for 2012-2020

The Moldovan government's commitment to the development of the green economy may be seen in the National Development Strategy "Moldova 2020" and the National Environmental Strategy of the Republic of Moldova, even though they are not directly related to green SME development.

For instance, the National Development Strategy "Moldova 2020" states 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]

Similarly, the National Environmental Strategy of the Republic of Moldova 2014-2023 vows to establish a modern ecological system through the development and adoption of an environmental legal framework according to European standards within the next 10 years. There are stipulated provisions that will not only reduce the negative impact of economic activity on the environment, but also increase enterprises' knowledge on environmental protection by at least 50%. It also provides measures to protect and conserve biodiversity, reduce the exploitation of ecosystems, reduce greenhouse gas emissions by at least 20% by 2020, reduce the amount of landfill waste by 30%, and increase the recycling rate by 20% by 2023. [1]

Despite the government's declared intent to promote sustainable development and the green economy in Moldova, issues of the green economy, including SME involvement in environmental issues remain virtually unexplored today. Moreover, state acknowledgement of the importance of transitioning to the green economy for the competitive development of the country has not resulted in policies harmonizing SME growth and development measures with environmental policies. Aware of this shortcoming, the Ministry of Economy, Ministry of Environment, and Ministry of Agriculture and Food Industry signed a joint statement in 2014 that affirmed their commitment to the effective coordination of sustainable development towards a green economy in the Republic of Moldova.

3. PROGRAMMES SUPPORTING GREEN SMEs

There are several programmes supporting green practices within Moldavian SMEs. The most notable of which are:

- The Moldovan Sustainable Energy Financing Facility II (MoSEFF)
- The Moldovan Residential Energy Efficiency Financing Facility (MoREEFF)
- The Global Environment Facility (GEF)
- The Energy Efficiency Fund of the Republic of Moldova
- The Moldovan Social Investment Fund (MSIF)
- The Energy and Biomass Project

We will now briefly describe the features of some of these programmes.

The Energy Efficiency Fund, created in 2012, is a structure that manages financial resources to finance projects in energy efficiency and renewable energy. It aims to improve energy efficiency and reduce 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 the strategies and programmes developed by the Government. It will do so 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 energy efficiency and renewable energy projects.

- Direct financial contributions.
- Acting as the agent or mediator for other sources of financing.
- Providing full or partial guarantees in cases of financing by banks.
- Providing assistance in identifying optimal combinations for the funding of projects.

The European Bank for Reconstruction and Development (EBRD) and the European Commission (EC) are the main financers of the **Moldovan Sustainable Energy Financing Facility II (MoSEFF)**. MoSEFF loans are provided by local partner banks to Moldovan companies applying for financing. MoSEFF loans start from EUR 10 thousand and can reach a maximum of EUR 2 million. Companies utilizing MoSEFF loans have to invest in sustainable energy saving and renewable energy producing mechanisms. Any private company, firm, business or sole proprietor formed under the laws of the Republic of Moldova and operating in the country can apply for MoSEFF loans and grants. Projects emphasizing the reduction in primary energy consumption, reduction of carbon dioxide emissions, and improvement in rational energy use in industries, agribusiness and commercial buildings are eligible for loans.

The **Moldovan Residential Energy Efficiency Financing Facility (MoREEFF)** is financed by the European Bank for Reconstruction and Development (EBRD), European Union (EU) and the government of Sweden. It offers grant loans for energy efficiency projects in the residential sector. The MoREEFF facility aims to provide opportunities to householders, condominiums, associations of apartment owners, housing management companies, energy service companies and other eligible service companies across Moldova to realize the benefits of energy efficient home improvements through loans and investment incentives via 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 use biomass sources – the most readily available renewable energy source in the country – to contribute to a more secure, competitive and sustainable energy production in the Republic of Moldova. The project will increase the use of energy from biomass sources, thus contributing to local development as well as a more secure, competitive and sustainable energy production.

The first phase of the Energy and Biomass Project was successfully implemented by the United Nations Development Programme (UNDP) in 2011-2014. To further consolidate the emerging biomass market in the country, the European Union allocated an additional EUR 9.41 million to the project. As of January 2015, the project entered into its second phase with an extended time frame that is expected to last until November 2017. This project will install 80 modern biomass boilers in public institutions; 250 biomass boilers in households at subsidized price; and 80 modern biomass boiler plants in villages and public buildings in the Transnistria region, the Autonomous Territorial Unit of Gagauzia, Taraclia district and small towns. It will also launch 7 new Public Private Partnerships for heat supply services that have been created throughout the country. The Energy and Biomass Project II will promote education on clean energy by creating a unique training centre for operators of central heating, as well as piloting an educational course in vocational schools for future specialists in the bioenergy sector.

Also noteworthy is ProCredit Bank's promotion and offer of eco-credit (also known as Eco Loans) to SMEs. ProCredit Bank began this scheme in Moldova in 2013. It is one of the first banks in Moldova to provide SMEs with "green" credit for the following projects:

- Investments in energy efficiency that aim to save resources and energy by at least 20%, while maintaining productivity levels and growth.
- Investment in renewable energy through the exploitation of natural resources that is practically inexhaustible or capable of regenerating itself shortly.
- Investment in environmentally friendly measures capable of exerting a positive impact on the environment through means that cannot be assessed by energy consumed and greenhouse gases emitted (e.g. organic agriculture, protection of soil and water sources, etc.). [7]

4. STATE POLICY MEASURES SUPPORTING SME GREENING

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

The following institutions develop and implement SME policies in Moldova:

- The Ministry of Economy
- Organization for SME Development

The Ministry of Economy elaborates on the strategies, action plans and support programmes within the policy framework for SME support and development.

The Organization for SME Development is another state institution implementing policies in support of SMEs. This organization seeks to realize state SME and economic development policies, enhance the connectivity between the capital city and the regional areas, coordinate all types of financial support to SMEs, and establish closer working ties with entrepreneurs.

At the local level, each municipality and District Council employs a specialist who is in charge of SME activity in the corresponding territory.

The Strategy of SME Development for 2012-2020 is the policy document outlining the main priorities of the state support for SMEs. The Action Plan for the implementation of the strategy is examined and renewed every three years. There are also government programmes supporting the development of specialized SMEs.

4.2 Governmental policy supporting SMEs' transition towards the Green Economy

As part of Action Plan 2015-2017 implementing the Strategy for SME Development 2012-2020, the government proposed a series of objectives and actions that included references to the development of the Green Economy. [4] Some of these green economy related objectives and actions are:

- 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 the SME sector according to European and international standards.
- 5.3.1. Developing proposals to promote green practices in SMEs.
- 5.3.2. Organize trainings, round tables, workshops in order to keep SMEs abreast of new production technologies for the transition to the green economy.
- 5.3.3. Elaborate a programme especially for the development of businesses in the green economy, and use this programme to support SMEs in rural areas.

However, these measures are not quite enough to assist enterprises' transition to the green economy. Aware that more has to be done, the National Institute for Economic Research (NIER) elaborated a detailed proposal for the Government of Moldova in September-December 2015, under the auspices of the Ministry of Economy. NIER's proposal became known as known as **Priority Policy Direction 8 – Green Economy for SMEs**. This priority policy was consequently included in the Action Plan for the period 2015-2017 as part of the SME Sector Development Strategy for 2012-2020.

This new priority policy officially began in 2016 and has three main objectives:

- Adopt a legal regulatory framework governing green SMEs.
- Improving access to finance for green SMEs.
- Development of training and dissemination of information for green SMEs so as to promote the culture of the green economy in the business community.

We will now briefly highlight some of the measures of Priority Policy Direction 8 – Green Economy for SMEs.

The first set of objectives of "Green Economy for SMEs" laid out in Action Plan 2015-2017 seeks to:

- Adjust the legal framework governing entrepreneurship so that it is in line with the acquis communautaire on energy, agriculture, environment and green economy for SMEs
- Develop studies on the implementation of national environmental standards in Moldovan SMEs based on the international environmental management system ISO 14001.

The second objective is focused on improving green SMEs' access to finance through:

- Attracting financial loans and grants from national and international organizations for Moldovan SMEs' development of green products.
- Developing and implementing innovative instruments for financial support of green SMEs (innovation vouchers, technology transfer projects, etc.)

The last objective is focused on the development of training and dissemination of information to green SMEs. In so doing, the culture of the green economy will be promoted in the business community. This objective will

be reached by:

- Including ecological management education in training seminars for SMEs,
- Introducing a "Green Economy" module as part of the "Development of Entrepreneurship" curriculum in secondary schools.
- Developing and maintaining web pages dedicated to green entrepreneurship development.

When these specific objectives are fulfilled, SMEs awareness of environmental activities will be heightened and some of them may be inspired to become directly involved in the development of the green economy. Once SMEs are educated on greening and its benefits, their new environmental consciousness would enable them to produce environmentally friendly goods; apply the latest technologies in environmentally safe ways; use resources rationally and efficiently; engage in the treatment of production waste; and strengthen the green entrepreneurial culture.

5. SMES AND ENVIRONMENT ISSUES – SHORT FACT SHEET

5.1 Characteristics and behaviour of SMEs meeting environmentally related requirements

The action plan "Green Economy for SMEs" was developed according to the real needs of entrepreneurs. These needs were identified in a survey conducted by the National Institute for Economic Research (NIER) as part of the "Improving the environmental performance of SMEs" project (2014). [6]

Although most companies in Moldova are SMEs, they are insufficiently informed about their environmental impact and do not fully understand the ways in which greening can render them more competitive. Moreover, SMEs are hesitant to go green and implement sustainable business practices because they have limited resources.

This state of affairs is confirmed in the SME survey conducted. We will now discuss the survey results below.

A total of 400 enterprises from 34 regions of the Republic of Moldova, except for Transnistria, were involved in the poll.
The survey shows that:

- Only a small proportion of the surveyed companies have an envi-

ronment-related permit or license. 13.5% of respondents indicated their possession of authorization for atmosphere emissions; 12.0% had authorization for special water use; 8.5% had waste management authorization; and 2.3% had authorization for the exploitation of mineral resources. Almost 16.5% of the surveyed companies had other permits such as authorization for the use of chemical fertilizers, sanitary authorization and other licenses. About 58% of the surveyed enterprises either had no environmental permits or were not subject to environmental regulation.

- 60% of their information on environmental requirements came directly from environmental inspectors during their site visits.
- 54% of surveyed companies complied with national environmental legislation and are contemplating doing more. Additional environmental actions are not priorities for nearly 20% of enterprises.
- 63% of the surveyed companies do not use environmental management systems or standards. This is because their suppliers and/or customers do not demand it. Only 4.3% of enterprises surveyed use ISO 14001, and only 1.8% have ISO 16000 (energy management).
- 67.3% of resource efficient SMEs save energy and 57.8% save water; the majority of these SMEs (67.8%) are resource efficient due to changes in the prices of energy and raw materials. [6]

5.2 Challenges faced by entrepreneurs undertaking environmental actions

According to the survey results of the "Improving the environmental performance of SMEs" project, entrepreneurs face the following challenges when undertaking environmental actions:

- 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%)
- Difficulty in tracking changes to environmental requirements that apply directly to their businesses (9%)
- Difficulty in getting advice on actions that they may take to comply with rules and regulations. [6]

6. BEST PRACTICES IN THE GREEN ECONOMY

Although Moldova's experience in the green economy is very modest, some of its SMEs have successfully gone green. Due to an increase in energy

supply from renewable sources in the country, there are more Moldovan businesses producing fuel from biomass. Fuel from biomass is attractive to consumers and businesses, as it is cheaper and more environmentally friendly.

To showcase the benefits of greening for businesses, we will now present the success stories of two Moldovan SMEs in the biomass fuel industry.

- **Biomass fuel type:** Solid biofuel
  Director: Eugeniu Scurtu
  Company: "Arin Alb" SRL (Ltd), s. Sociteni, district Ialoveni
  Initial investments: MDL 700 thousand

In its first year of business, Arin Alb introduced and promoted the use of agricultural waste (biomass) for energy generation. It emphasized the use of efficient technologies so as to solve the energy supply problems faced by rural communities and agricultural enterprises in Moldova. Its use of biomass processing technology improves air quality and human health because there is very little to no carbon dioxide emissions. [2]

- **Biomass fuel type:** Biogas extracted from refuse that is later used to produce electricity
- **Company:** Tevas Grup SRL (Ltd), s. Ţînţăreni, Anenii Noi district.
- **Investments:** MDL 14 million

Tevas extracts biogas from refuse, which is then used to produce electricity. Polygon waste from Tantareni covers an area of over 24 hectares. Waste from Chișinău has been accumulating here for more than two decades. A few years ago, this mountain of garbage was a source of consternation to authorities and residents of the neighbouring villages. However, an ambitious group of enthusiasts found a solution that brought economic benefits to all. From start to finish, this project has undergone a long and arduous process. It took almost 6 years for the company to draft its proposal, obtain the approval from the Chișinău municipal council, acquire the rights to extract biogas, install the necessary technologies, obtain the required permits, etc.

Waste materials are ideal for the formation of biogas that is half methane and half carbon dioxide and other gases. Thus, the rubbish dump can provide a large amount of energy that would pollute the environment and affect human health, if not recovered and used. [2]

CONCLUSIONS

The transition to a Green Economy directly influences the competitiveness of both individual businesses and the country as a whole. The transition to an environmentally friendly, low carbon and resource efficient economic model is not only desirable, but essential to maintaining and strengthening competitiveness and prosperity, protecting the environment and ensuring the well-being of the people.

The government of Moldova has recently declared green economic development to be one of its top priorities. The Moldova-EU Association Agreement expressly requires the country to undertake sustainable development and promote the green economy.

Although the government of Moldova has prioritized the transition to the green economy, issues of the green economy, including SME involvement in environmental issues remain virtually unexplored. Moreover, the economic policy supporting the development of SMEs has yet to be harmonized with environmental policy.

To encourage SMEs to take up environmental activities and become directly involved in the development of the green economy, the Moldovan government introduced a new priority policy. Known as Priority Policy Direction 8 – Green Economy for SMEs, it is the Action Plan for 2015-2017 as part of the SME Development Strategy for 2012-2020. This new priority policy began in 2016 and seeks to facilitate companies' transition to the green economy. It also engages the assistance of the public sector and local authorities in the greening of SMEs.

In promoting the greening of SMEs, "Green Economy for SMEs" aims to:

- Implement measures ensuring the efficient use of energy so as to optimize the amount of energy and products/services obtained.
- Reduce energy consumption.
- Reduce pollution and carbon emissions.
- Provide better information to the private sector through the organization of round tables and seminars on the green economy, sharing best practices and development of training.
- Improve access to financing through the development and implementation of innovative instruments for financial support of green SMEs, attracting financial assistance (loans and grants) from national and international organizations for SMEs developing green products, etc.

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[7] Politica de gestiune a mediului înconjurător. Finantarea verde, n.d. Online at http://www.procreditbank.md/Pilon_III (accessed 3 May 2016).

3.8. GREEN ECONOMY AND ECO-INNOVATION OF ROMANIAN SMEs

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ABSTRACT
In the last few decades, the green economy has gained importance all over the world as a continuous means of improving the quality of life. This is because it takes into consideration the rational and efficient use of resources. The transition towards the green economy varies in economies across the globe, owing to different socio-economic levels among the UN countries as well as noticeable inequalities across local regions at the national level. Therefore, there is no uniform global policy that may be applied to the implementation of sustainable development goals. Strategies must be developed and applied according to national, and even regional and local particularities.

This chapter presents the experiences of Romanian SMEs and the green economy. The role of the SME sector in the national economy and its evolution will be analyzed. The eco-innovation capacity of Romanian SMEs will be considered and compared to that of the BSEC countries.

Keywords: green economy, SME sector, Romania, eco-innovation
JEL Classification: O44, L2, O52, O3

1. INTRODUCTION

The Club of Rome report, Limits of Growth,[3] published in 1972, was the first to draw attention to the contradiction between unlimited growth and consumption in relation to the limited resources on earth. Its impact on the economic development was powerful, and the concept of **sustainable development** thus emerged in the 1980s. The concept of sustainable development was radical in its time because it required economic develop-

3 See Donella H. Meadows, Dennis L. Meadows, Jørgen Randers, and William W. Behrens III, The Limits to Growth: A Report for the Club of Rome's Project on the Predicament of Mankind, New York: Universe Books, 1972. Online at http://www.donellameadows.org/wp-content/userfiles/Limits-to-Growth-digital-scan-version.pdf (accessed 5 August 2016).

ment to be redefined from an ethical perspective. Today, we see that the notions of sustainable development and environmentally ethical economic development are borne of out stringent necessity. E. B. Barbier (1987) wrote that sustainable development meant "simultaneous maximization" of the objectives of the biological system [genetic diversity, biological productivity, flexibility], the objectives of the economic system [satisfying basic needs, increase equity, growth in goods and services] and the objectives of the social system [cultural diversity, institutional durability, social equity]. Szabó (2011) takes this further by presenting the evolution of the concept of sustainable development.

Pearce, Markandya and Barbier (1989) first used the term "green economy" in their seminal book, Blueprint for Green Economy. There is no internationally agreed definition of the green economy. The Guide for Green Economy (Cameron and Stuart 2012) presents eight definitions formulated by: UNEP (2009 and 2011); UNCTAD (2011); Green Economy Coalition (2011); the International Chamber of Commerce (2011); UNCSD (2011); the government of South Africa (2011); and the Danish 92-Group (2012). The guidebook published by the UN division for sustainable development presents an overview of the literature on green economy as well as the related concepts of **green growth and low-carbon development** (Cameron and Stuart 2012, 63).

In the last few decades, the green economy has gained importance all over the world as a continuous means of improving the quality of life. This is because it takes into consideration the rational and efficient use of resources. It has been realized that economic development has to be sustainable if it is to thrive in the long-term (see Figure 1). As Cameron and Stuart point out (2012, 5),

"Green economy (in its various forms) has been proposed as a means for catalysing renewed national policy development and international cooperation and support for sustainable development."

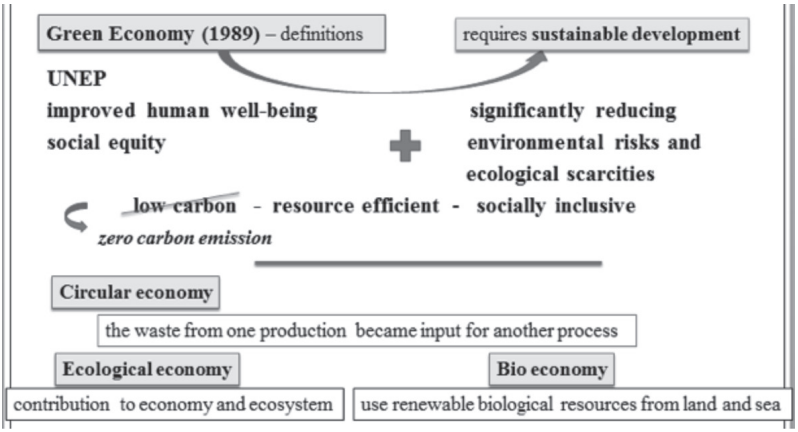


Figure 1. Definition of Green Economy and its Various Forms

The green economy is internationally accepted as a very important concept, so much so that UNEP launched green economy initiatives in October 2008 "to provide analysis and policy support for investment in green sectors and for greening resource- and/or pollution-intensive sectors" (Cameron and Stuart 2012, 8). The green economy also formed one of the two themes for the UN Conference on Sustainable Conference (Rio+20).

This chapter will outline the experiences of Romanian SMEs and the green economy. The eco-innovation capacity of Romanian SMEs will be analyzed and a comparative study on the level of BSEC countries will be presented as well.

2. THE SME SECTOR IN ROMANIA

In February 2015,[4] the KeysFin [5] team published a general overview of the Romanian SME sector in 1990-2014. KeysFin is an officially registered company specializing in the analysis of official public databases so as to publish studies on the Romanian SME sector.

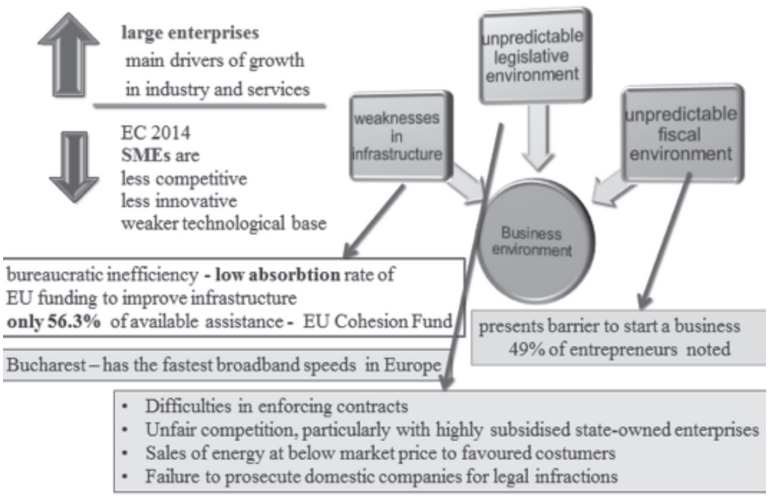
4 See KeysFin website at http://www.keysfin.com/UC/MediaLibrary/Handlers/ViewDocument.ashx?imageDB=true&tbNail=0&imageType=image&imageID=9803&imageName=&cultureId=3 See KeysFin website at http://www.keysfin.com/EN/#!/Pages/News/NewsDetails&title=studiu-imm-uri-din-romania

5 See SBA Fact Sheets website at http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm#sba-fact-sheets

According to the SBA Fact Sheet[6] and data from the Romanian National Institute of Statistics, 99.6% of enterprises are SMEs. SMEs employ 67% of the workforce and create 60.47% of total turnover.

There are no significant changes in the number of Romanian SMEs in recent years. From 2005 to the present, there have constantly been approximately 400,000 active SMEs in the country. Public official data shows that the Romanian SME sector does not play a significant role in the national economy when compared to the 28 EU Member States (EU-28). Romania has the least SMEs among the EU-28 countries, as there are only 22.6 SMEs per 1,000 inhabitants in the country. Among the EU-28 countries, Romania ranks 17th in SME contribution to national GDP and 8th in SME contribution to national employment (Barta, Modreanu, Piti, & colaboratori 2015). KeysFin studies indicate that 98% of SMEs are located in apartments and that most SMEs' are engaged in commerce. 71% of the SMEs are in 5 NACE fields of activity, with 34% in wholesale and retail trade, 11% in professional activities, 10% in construction, 9% in industry and 7% in transport-storage. Only 1% of SMEs are in waste management. 31.2% of medium enterprises are in industry. The Romanian SME sector has not recovered from the global financial crises. The sector's structural problems are due to weak infrastructure, unpredictable legislation, and a fiscal environment that is sorely in need of improvement (see Figure 2).

Figure 2. General overview of the Romanian SME sector



Source: Economic Intelligence Unit; Barometrul antreprenoriatului Romanesc, 2015

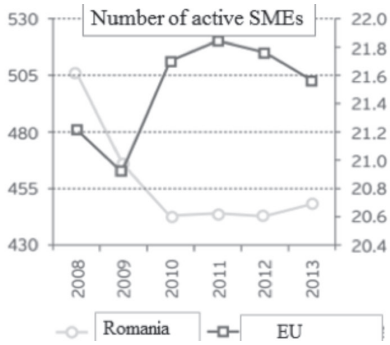
6 See SBA Fact Sheets website at http://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/index_en.htm#sba-fact-sheets

Next, a summary of the Romanian SME sector according to publicly available data will be presented.

2.1 Evolution of Romanian SMEs

2.1.1 General overview

There were a total of 2,600,000 businesses registered in Romania in 1990-2013. When compared to the EU average, the number of active SMEs in Romania has decreased dramatically and does not look set to improve (see Figure 3a). Nevertheless, SMEs' share of employment in Romania is increasing and comparable to the EU average. This is due to the increasing number of self-employed people and the very high number of microenterprises with only one employee working for his/her livelihood without impacting GDP or national economic development (see Figure 3b).



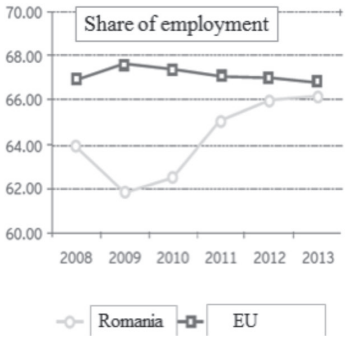


Figure 3a **Figure 3b**

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

2.1.2 Number of SMEs by grouping of micro, small and medium-sized enterprises

Tables 1 and 2 present the demography of Romanian SMEs by area of activity in 1992-2005, according to the statistical classification of economic activities in the European Community (NACE). While Romania's SME sector demonstrated dynamic development in the initial years of its transition to a market economy, its number of active SMEs stagnated after 2005. The short lifespan of a majority of registered SMEs are due to different reasons.

Table 1. Number of active enterprises in Romania, 1992-1999

YEAR / Number	1992	1993	1994	1995	1996	1997	1998	1999
Enterprises	130.076	217.857	286.501	304.359	312.067	316.751	318.376	318.736
SMEs	126.549	214.349	283.697	301.781	309.454	314.183	315.970	316.593

Source: Romanian Statistical Yearbook, Romania in Cifre, 2008

Table 2. Number of active enterprises in Romania, 2000-2011

Year / / Number	2000	2001	2002	2003	2004	2005
Enterprises	308 064	311 260	315 105	349 061	394 519	433 030
SMEs	306 073	309 303	313 159	347 064	392 544	431 135

Year/ / Number	2006	2007	2008	2009	2010	2011
Enterprises	461 812	499857	534 525	488 102	437 035	438 630
SMEs	459 972	498014	532 688	486 461	435508	437 042

Source: Romanian Statistical Yearbook, Romania in Cifre, 2010

There has been no significant change in the number of active SMEs in Romania in recent years. The number of SMEs per 1,000 inhabitants in Romania is below the EU average. Approximately 30% of existing Romanian SMEs were registered in 2000-2009.

In 1990-1994, most Romanian SMEs were either small (31%) or medium-sized (34%) businesses. However, the number of registered microenterprises increased significantly in time.

At present, 98% of microenterprises have 2 employees and turnovers of less than RON 100 million per year. In 2010-2014, registration of new SMEs decreased to 9%.

Table 3 shows the evolution of enterprises in Romania in 2012-2015. Table 4 illustrates the composition of the MSME sector according to business size in 2012-2015.

Table 3. Evolution of all Romanian enterprises, 2012-2015

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

Source: SBA Fact Sheet 2012-2015

While SMEs made up 99.6% of enterprises in Romania in 2015, large enterprises in industry and services were the main drivers of growth.

The European Commission observed in 2014 that Romanian SMEs were the least competitive and least innovative in Europe. The unfavourable business environment is the main barrier to SME development in Romania (see Figure 2).

Table 4. Composition of MSME according to business size, 2012-2015

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

Source: SBA Fact Sheet 2012-2015

2.1.3 Employment rate and Distribution of total workforce by sector

Figure 4 presents the structure and distribution of employees in Romania in 2014. There are no significant changes in the structure and distribution of employees in Romania in recent years. The employment distribution in the private sector and the number of SMEs in it can be better understood following a general overview of the Romanian workforce.

83% of the total active workforce is employed in the private sector. Although the high self-employment rate in Romania is socially important, it does not contribute to GDP or economic development (Szabó and Herman 2014).

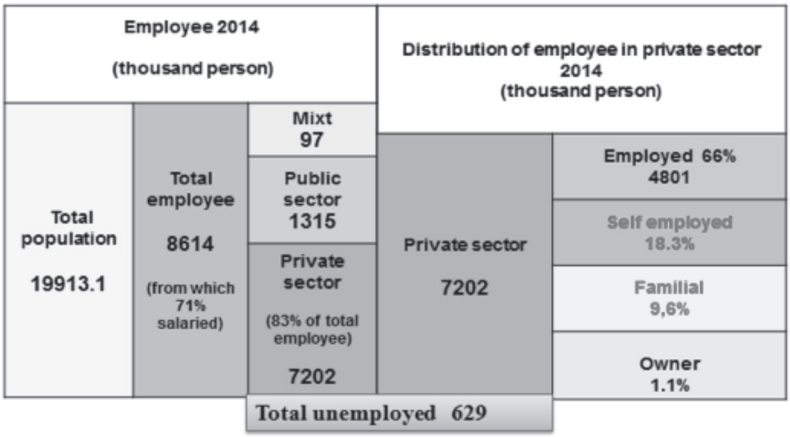


Figure 4. Distribution of employees in Romania, author's own calculation

Sources: NIS, Romania in cifre, 2016; Forţa de muncă în românia ocupare şi şomaj (AMIGO), trimestrul II 2014

As can be seen in Table 5, total number of SME employees range from 2000 thousand to 3000 thousand persons. The employment rates of MSMEs show that employment is decreasing in medium-sized enterprises.

	2001	2005	2008	2009	2012	2013	2014	2015
Micro (%)	34	34	33	34	37	35	35	33
Small (%)	29	30	33	33	31	32	34	35
Medium (%)	37	36	34	33	32	33	31	32
Total employment in SMEs	2,122,617	2,575,520	2,969,489	2,626,216	2,676,948	2,522,128	2,708,806	2,680,259

Table 5. SMEs' Share of Employment, 2001-2015

Source: National Institute of Statistics, Romania in Cifre

Figure 5 shows the percentage of overall employment in active SMEs. It can be seen that the percentage of employees in active SMEs has been increasing since 1990.

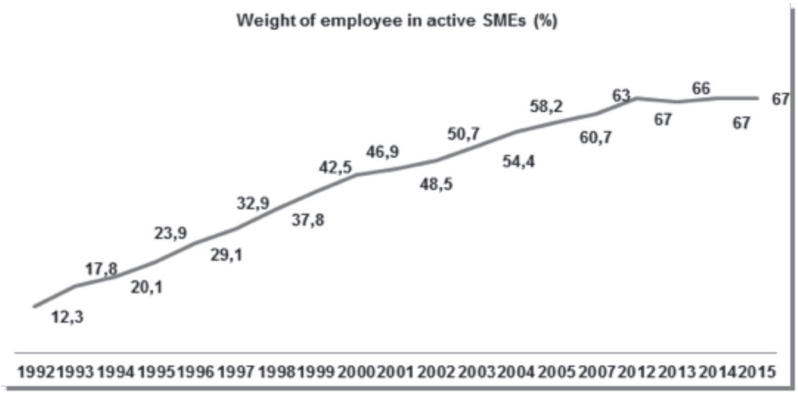


Figure 5. Overall employees in active SMEs
Source: National Institute of Statistics, Romania in Cifre

2.1.4 Romanian SME sector's contribution to revenue in the overall economy

In 2012-2015, large enterprises made up only 0.3% and 0.4% of all Romanian enterprises respectively (see Table 4). As a result, the SME sector contributed slightly more to value added than large enterprises (see Figure 6).

In 2014, SMEs achieved 60.47% of turnover. Although 87% of MSMEs are microenterprises, they only contributed to 19.54% of turnover. In the same vein, medium-sized enterprises contributed 21.59% to turnover even though they made up only 1.9% of SMEs.

This demonstrates that the Romanian SME sector is performing below the EU average due to less competitive and less innovative SMEs. The government should strive to remedy this by prioritizing the improvement of the business environment and the implementation of sustainable economic development policies.

Though the SBA fact sheet shows that Romanian SMEs are contributing more to national value added (EUR 27 billion in 2015), this is miniscule compared to German SMEs' contribution to their national value added (EUR 775 billion in 2015).

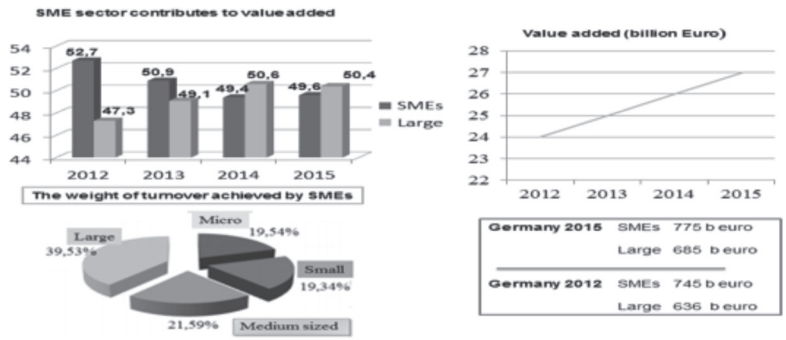


Figure 6. Role of SME sector in overall economy
Source: Contribuţia IMM-urilor la creşterea economică – prezent şi perspective[7]

2.1.5 SMEs and Green Economic Growth

The role of the Romanian SME sector is presented above in Figure 6. It uses data from all the flagship initiatives of Europe 2020 strategy. It also shows that the following areas present challenges for Romanian SMEs: innovation, education, information society, climate, competitiveness, and labour market.

In Romania, entrepreneurial activity is mainly necessity-driven. This accounts for the high rate of self-employment and their resultant inability to impact economic development and GDP. In the Global Entrepreneurship Monitor Report (2012), individuals start businesses out of necessity because they have no other work options and need a source of income, and/or because they recognize opportunities and choose to pursue them (as part of improvement-driven opportunity).

Even though entrepreneurship exists in every country, the outcomes of entrepreneurial activities differ across societies. The literature distinguishes between formal/informal, legal/illegal and necessity/opportunity driven entrepreneurship (Desai 2009).

Innovation is considered the main engine of growth, as development

7 See "Contribuţia IMM-urilor la creşterea economic" online at http://www.cnp.ro/inovatie/docs/seminar-studii-25-06-2012/Rezumat%20studiu%20IMM.pdf

achievements cannot occur without it (Fagerberg and Sapprasert 2011). Therefore, innovative entrepreneurship is a key factor of modern economic development (UN 2012). Moreover, as the level of economic development increases, the innovativeness of entrepreneurs increases as well (Kelley et al 2012).

All over the world, economic development nowadays is only acceptable if it is sustainable. In this way, the green economy has become a major concept internationally. It follows that eco-innovation is an extension of the green economy.

Finally, improved environmental attitudes will result in a healthy entrepreneurial culture as well as a productive SME sector.

In this light, the eco-innovation performance of Romanian SMEs will be discussed next. The abilities of SMEs to meet environmental challenge and requirements will be analyzed, and government policies supporting SMEs' transition towards the green economy will be studied.

3. SMES AND ENVIRONMENTAL ISSUES

Romania's transition to the green economy has excited much scholarly interest, as evinced in the many published studies in different journals. It is also a hot topic for professionals and policymakers. The country's green development is monitored and evaluated in both national and European reports. While Romania has the natural resources to develop its green economy, it has to yet to record the notable changes seen in other European countries. (Ciocoiu and Cicea 2015)

Without a doubt, Romania is a country rich in natural resources, human resources and opportunities. Consequently, it has considerable potential for sustainable development. Romania's potential lies in its:

- Wealth of natural resources
- Rich agricultural lands
- Renewable energy sources (wind, biomass, hydro, geothermal)
- Substantial industrial base
- Educated workforce and well-educated human resources
- Opportunities for expanded development in tourism on the Black Sea and in the Carpathian Mountains (Eco-innovation scoreboard, 2015)

Existing literature and official reports on SME activities show that SMEs are generally familiar with environmental issues. Energy efficiency measures are especially popular, and most SMEs have implemented some green measures. A survey on SMEs also indicates their adoption of concrete measures towards the green economy. Energy efficiency measures employed by SMEs include reduction of waste products and production materials; separate waste collection; reduction of paper use in offices; taking advantage of natural lighting; use of new energy efficient windows; and use of biodegradable materials. A high percent of SMEs use renewable energy sources (RESs) and have generally good attitudes towards the environment.

	001	002	003	004	005	006	007	008	009	010	011
O %)	8.6	9.9	3.9	9.8	4.5	0.2	6.8	6.8	7.6	4.3	7.1

Table 6. Share of RES in total electricity
Source: National Institute of Statistics, 2013

The number of green certificates issued in Romania is presented in Table 7. The green certificate certifies that 1MWh of energy is obtained from RES.

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

Table 7. Number of green certificates issued, 2006-2011
Source: Romanian Electricity and Gas Market Operator (OPCOM)[8]

As can be seen in the total state expenditure on environmental protection in Figure 7, the Romanian government has sustained the transition to the green economy. The government has also kept up efforts to attract foreign investors in the RES sectors, as Romania had one of the highest subsidies in Europe in 2013.

8 See Romanian Electricity and Gas Market Operator website at http://www.opcom.ro/tranzactii_rezultate/tranzactii_rezultate.php?lang=en&language.x=9&language.y=6&language=en#url

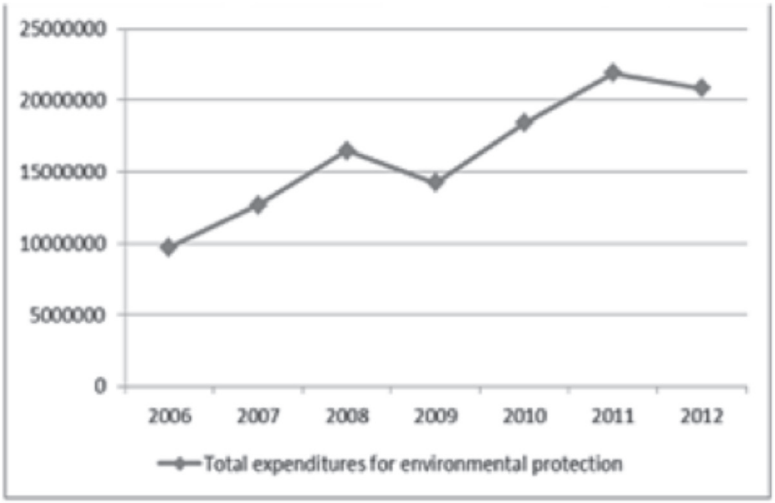


Figure 7. Expenditure on the environment, 2006-2012
Source: National Institute of Statistics

Entrepreneurs increasingly deem environmental issues to be important. Romanian SMEs are interested in acquiring environment management systems certificates because the possession of eco-friendly label on their products is commercially good for businesses.

4. ECO-INNOVATION OF ROMANIAN SMES

A study by by Szabó, Soltés and Herman (2013) highlights the innovation performance of Romanian SMEs. The Innovation Union Scoreboard (IUS) shows that Romania was a modest innovator in 2015, and currently lags behind the other EU Member States.[9]

To facilitate Member States' transition to the green economy, the Eco-Innovation Scoreboard (Eco-IS) was launched in 2010. Eco-IS is a useful tool for measuring and comparing the eco-innovation performance of EU Member States. A country's Eco-IS score is based on its performance in indicators in five areas: eco-innovaton input, eco-innovation activities, eco-innovation output, resource efficiency outcomes and socio-economic outcomes.

9 See European Innovation Scoreboard website at http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/index_en.htm

While Romania's performance is below the EU average, the country's eco-innovation peformance is better than its innovative performance (see Figure 8). The Innovation Union Scoreboard (IUS) ranked Romania in last place in 2015. In contrast, Romania was in the 21st place in the Eco-Innovation Scoreboard (Eco-IS) in 2013 (see Table 8).

Thus, Romanian SMEs are aware of the importance of environmental issues. Although Romanian SMEs generally apply measures to protect the environment, they lack the financial capability to invest in innovation.

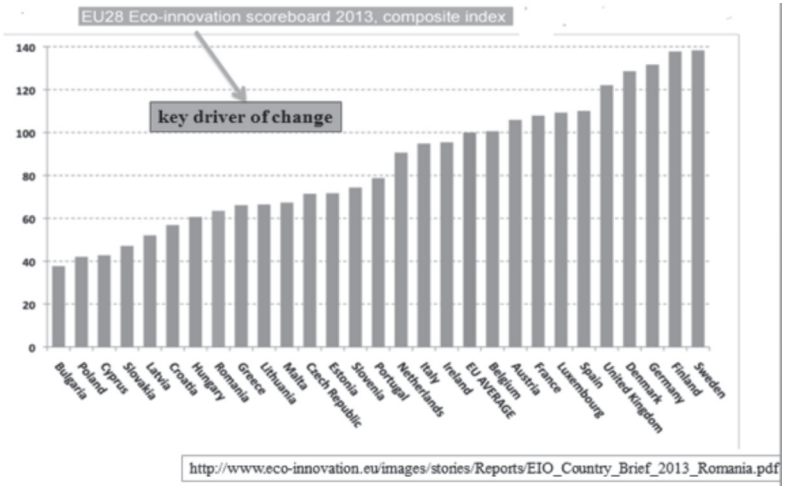


Figure 8. Eco-innovation performance of EU Member States, 2013

Longitudinal data suggests that Romania's eco-innovation performance is slowly improving (see Table 8).

Year	2010	2011	2012	2013
Rank (EU-27 / EU-28)	25	22	19	21

Table 8. Evolution of Romania's eco-innovation performance
Source: Eco-Innovation Scoreboard[10]

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

How can Romania's improved ranking be explained? Close analysis of the components of eco-innovation index will provide the answer. Romania's performance in the eco-innovation activities indicator is over the EU average (see Figure 9). One of the indicators for eco-innovation activities is registered organizations with ISO 14001. Many Romanian organizations are registered with ISO 14001, and this process is facilitated by law.

To enhance Romania's eco-innovation levels, the country has to improve in eco-innovation inputs, socio-economic outcomes and resource efficiency outcomes. All 16 indicators of the composite index must be analyzed in order for the government to formulate and implement adequate eco-innovation economic policies.

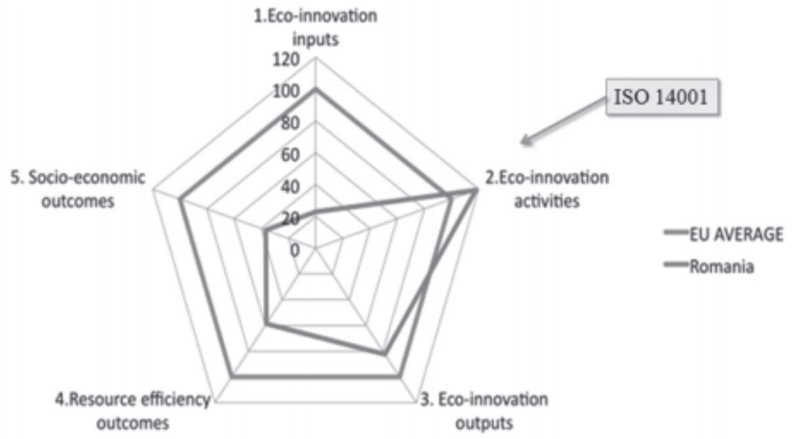


Figure 9. Romania's performance in the eco-innovation composite index

Source: EIO Country Brief 2013 – Romania[11]

5. LEGISLATION ISSUES RELATED TO ENVIRONMENTAL MANAGEMENT OF SMEs

The Romanian government acknowledges the importance of environmental issues as well as the need to transition to the green economy. Ac-

11 See Eco-Innovation's country brief on Romania at http://www.ecoinnovation.eu/images/stories/Reports/EIO_Country_Brief_2013_Romania.pdf

cordingly, EU environmental legislation principles were adopted into the national legal system. Since 1989, several new elements were introduced in Romanian legislation. The National Sustainable Development Strategy of Romania as well as Romanian Environmental Strategy included the main elements of EU environmental legislation (Ionescu 2009). Ioniţă and Mihu (2012) outlined the country's main environmental regulations in their 2012 article, "Romania: Environment 2013 – Romania."

Some of the most important environmental issues regulated by Romanian law are as follows:

- **Law 211/2011 - waste management;** first published in 2011 and republished in 2014. This law establishes the necessary measures for the protection of the environment and human health. It advocates the effective management of waste so as to reduce its adverse environmental and human impact. In so doing, it aims to enhance the efficient use of resources and minimize the production of waste.
- **GO 856/2002** lists the kinds of waste produced, and defines the types of dangerous waste.
- **GO 349/2005** details the ways in which waste storage should be carried out.
- **GO 621/2005** emphasizes the management of packaging and packaging waste.
- **GO 1872/2006** modifies and completes GO no. 621/2005 on the management of packaging and packaging waste.
- **GO 247/2011** modifies and completes GO no. 621/2005 on the management of packaging and packaging waste.
- **GO 2742/3190/205/2011** details the procedure and criteria for the approval, renewal, review, issuance and cancellation of annual operating licenses. It stipulates the minimum percentage of packaging waste that must be recovered from the population. It also lays out the obligations of economic operators in attaining the annual targets for recovery and recycling of packaging.
- **GO 235/2007** is on the management of waste oils.
- **GO 1037/2010** deals with waste from electrical and electronic equipment.
- **GO 1132/2008** is on batteries and accumulators as well as their waste.
- **Law 249/2015** is on the management of packaging and packaging waste.

- **GO 1079/2011** modifies and completes GO no. 1132/2008 on waste batteries and accumulators.

In 2013, 98% of Romanian was landfilled. The present challenge for the country is to recycle or reuse 50% of its waste by 2020.

In January 2014, the Romanian Fund for the Environment introduced a new tax to penalize waste disposal through landfilling. [12]

6. CHARACTERISTICS AND BEHAVIOUR OF SMES MEETING ENVIRONMENTAL RELATED REQUIREMENTS

Activities encouraging and sustaining the implementation of environmental issues can be observed in Romania. These activities are augmented by special government measures that are taken seriously by SMEs conscious of environmental issues. Some of these measures as well as the main traits of Romanian SMEs are highlighted below:

- As the activities of companies in the fields of industry, agriculture, trade and services impact the environment, they must employ an Environmental Officer.
- Romanian environmental legislation stipulates that an SME's NACE code activity determines whether it needs to obtain environment authorization.
- Enterprises' corporate social responsibility investments should be focused on the environment. 16% of an enterprise's total corporate social responsibility investment should be focused on education, health and social issues.
- At present, SMEs devote only 1% of their turnover to environmental issues; the bulk of which goes to ensure their compliance with regulations, audits and environmental certifications.
- Romanian SMEs are less likely to adopt measures to improve their resource efficiency, unlike the rest of the EU.
- Only 17% of Romanian SMEs have been capitalizing on the rising demand for ecological services, whereas 26% of EU SMEs are actively doing so.
- The Romanian business sector is characterized by short-term plans and goals centred on profit-making.
- The Green Business Index (GBI)[13] was introduced in 2010 to benchmark the environmental performance of Romanian companies.

12 See the website for Romanian legislation in green environment support at http://www.raportaremediu.ro/legislatie

13 See Romania's Green Business Index website at https://www.gbindex.ro/en/

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

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

Public procurement in Romania should incorporate environmental criteria as part of its legal rules and regulations. Although this was drawn up as part of the Green Public Procurement Action Plan 2009-2013 in the country, the document remains at the public consultation level and the government has not shown any commitment to put it into action. At present, an enterprise in Romania has to have ISO 14001 and ISO 9001 before it can seek public procurements.

Thus, the law in this case has become an engine for sustainable development and environmental protection. Indeed, the law has positively impacted eco-innovation in the country. Among the BSEC countries, Romania has one of the highest numbers of SMEs applying quality management systems.

Across the world, entrepreneurial achievement of stringent ISO management standards is acknowledged by a valid ISO certificate. ISO management standards have been in place throughout the world since they were implemented in 1993. Fluctuations in ISO survey data on Romania exist due to the activities of certification bodies.

The share of Romanian SMEs applying quality management systems is presented in Figures 10, 11 and 12.[14] Figure 10 measures the number of ISO 9001 certificates issued in Romania in 1996-2014, according to ISO survey data. Figure 11 shows the number of ISO 14001 certificates issued in Romania in 2004-2014, while Figure 12 shows the number of ISO 50001 certificates issued in Romania in 2011-2014.

14 See the ISO website at http://www.iso.org/iso/home/standards/certification/isosurvey.htm?certificate=ISO%209001&countrycode=DE#countrypick

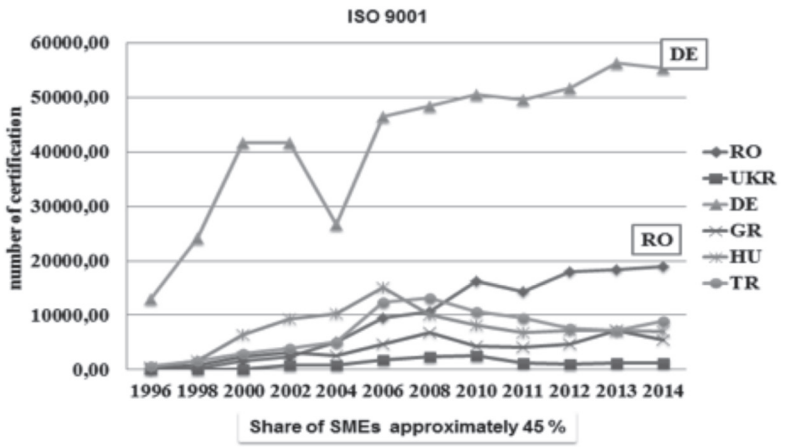


Figure 10. Share of SMEs applying ISO 9001 Quality Management Systems, 1996-2014

Source: ISO Survey 2015

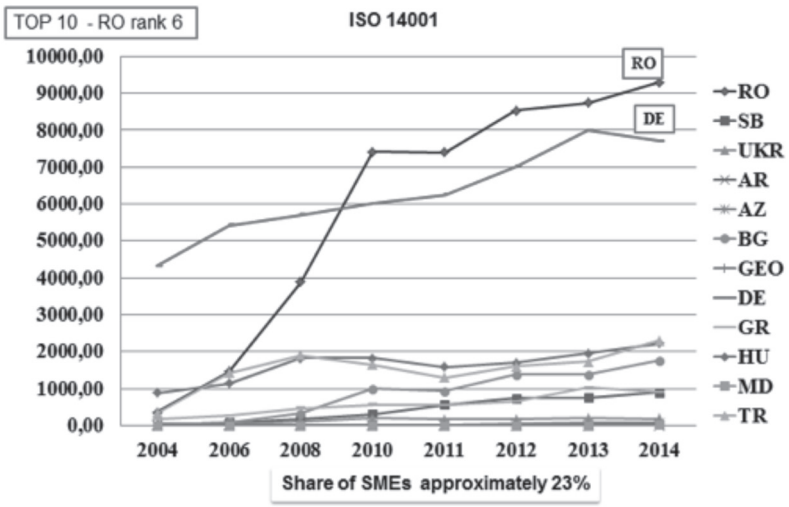


Figure 11. Share of SMEs applying ISO 14001 Quality Management Systems, 2004-2014

Source: ISO Survey 2015

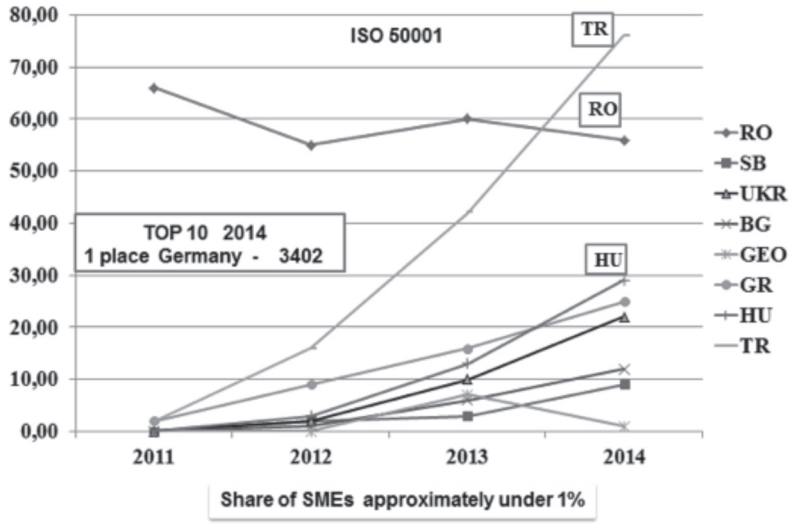


Figure 12. Share of SMEs applying ISO 50001 Quality Management Systems, 2011-2014

Source: ISO Survey 2015

8. OBSTACLES FACED BY SMES IN RELATION TO ENVIRONMENTAL ISSUES AND HOW THEY CAN OVERCOME THEM

Romania continues to face various environmental challenges. The Eco-Innovation country report points out that the Romanian economy is still based on fossil fuels (40%), indicating the continued need for the country to reduce its carbon footprint. This is a particular challenge for the country as the government has been trying to reduce Romania's CO2 emissions since 1990.

According to the EBRD's Renewable Energy Resource Assessment, domestic solar water heating for public buildings and hotels, passive solar systems and stand-alone systems for sites far from the grid are the most promising applications for the country.

Furthermore, more attention has to be paid to waste and water management (UNECE 2013 Environmental Performance Review on Romania). Access to clean water, waste management and wastewater treatment are the main environmental challenges for the country. At present, less than 3% of Romania's municipal solid waste is recycled. About 57% of the Roma-

nian population and 4% of the rural population have access to wastewater collection.

Barriers to the green development of enterprises in Romania include:

- Lack of investment.
- Lack of specialist knowledge.
- Lack of efficient management of available resources, resulting in economic development that is unsustainable.
- Failure to recycle its own waste so much so that private sector waste management facilities have to import waste for their production activities.
- Poor access to finance.
- Excessive regulatory burdens.

Positive trends in the form of eco-innovation initiatives undertaken by the Romanian eco-industry include:

- Growing employment and turnover.
- Wider implementation of measures for the improvement of energy efficiency in residential housing and public transport, as well as wider promotion of renewable energy exploitation (biomass, wind, geothermal, solar and hydro power) in the last decade.
- Collaborative platforms and joint funding for eco-innovation initiatives in local companies.
- Promotion of green public procurement.
- Policy strategies and programmes specifically addressing eco-innovations through infrastructure development and the development of an improved entrepreneurial environment.
- Adoption of EU environmental regulations into national sustainable development policies.
- Ensuring that the fields of energy efficiency and renewable energy received the highest boost in fiscal incentives and available funding in 2013.
- Using a generous government-sponsored feed-in tariff to support renewable energy investments.
- Additional exploitation of renewable energy in 2012-13, through investments in the wind, biomass and hydro sectors.
- Strengthening of private sector SME initiatives in recycling and material reuse in recent years.

9. GOVERNMENTAL POLICY SUPPORTING SMES' MOVE TOWARDS THE GREEN ECONOMY

Adequate policies and investments are needed to support SMEs' transition towards the green economy. Rio+20 globally launched the green economy concept in 2012. As the green economy is an international priority, governments are deeply interested in elaborating meaningful policy frameworks capable of ensuring the protection of the environment alongside economic growth.

The Green Action Plan (GAP), proposed by the EC in 2014, aims to help SMEs turn environmental challenges into opportunities by focusing on resource efficiency, green entrepreneurship and green skills, eco-innovation, greener value chains, and facilitating market access for SMEs; it also provides tools for the internationalization of European SMEs by taking advantage of Europe's advanced green technologies.[15]

EU initiatives towards the green economy are:

- Green Employment Initiative
- Roadmap to a Resource Efficient Europe
- Circular Economy and European Industrial Renaissance, which is intended to create synergies between green economy initiatives through financing from existing programmes.

It is extremely important to note that there is no uniform global policy for the implementation of sustainable development goals. Strategies must be developed and applied according to national, and even regional and local particularities. Within the UN countries, there are huge socio-economic differences, and there are inequalities at the regional and local levels of each country as well. Strategies must be applied from the bottom-up in each country to ensure that the whole nation benefits from these environmentally friendly sustainable development goals.

Romania has to adopt an integrated and strategic long-term policy approach that will result in the mainstreaming of the concepts of sustainable development and eco-innovation.

10. How can SMEs become sustainable and green?

Romanian SMEs have to introduce environmental improvements to their

15 See European Parliament Think Tank, "Green Growth Opportunities for SMEs: Green Action Plan," 25 June 2015, at http://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_BRI(2015)564360

operations if they are to reduce costs and comply with regulatory requirements. Many Romanian SMEs are interested in environmentally friendly sustainable development actions such as use of eco-resources, ecologically clean production processes and bio-degradable materials. They are also interested in providing ecologically clean products and services.

Generally, SMEs finance their own green investments. To encourage them to draw funding from EU programmes, education and training sessions are needed.

Due to their small size, SMEs find it more difficult to fulfil the environmental requirements that are enshrined in Romanian law. Large enterprises do not have this problem. A programme making it simpler and cheaper for them to conform to the country's environmental laws can positively impact SMEs' greening efforts.

Improving the infrastructure for wastewater collection is a key priority for the Romanian government, and suitable measures must be implemented.

In general, SMEs and large enterprises have low environmental awareness as to the impact of their businesses' actions. They are also largely unaware of the economic opportunities of going green. Training has to be given to all enterprises in the country to educate them on the ways in which their businesses will use resources more efficiently when they go green.

11. BEST PRACTICES OF ROMANIAN SMEs IN THE GREEN ECONOMY

Assessing green Romanian SMEs through GEI

Green businesses in Romania are assessed by the Green Economy Index (GEI). GEI is promoted by the Green Revolution Association. GEI is a barometer measuring corporate environmental responsibility in Romania. It began evaluating and analyzing the environmental performance of Romanian businesses in 2012.

Awards are given annually to the top 5 green businesses with the best practices. Figure 13 presents the winners in 2015 as well as the evaluation criteria.

Figure 13. Top 5 Green Businesses in Romania in 2015

Best practices in Eco-innovation activities in Romania

The **National Thermal Rehabilitation Programme** implemented by the Ministry of Regional Development and Housing is widely recognized and appreciated. The renovation works undertaken by this programme include:

- Thermal insulation of terraces with fireproof polystyrene that is 16 cm thick.
- Thermal insulation of external walls with expandable polystyrene that is 10 cm thick.
- Inclusion of a thermo-system.
- Replacing external woodwork.

In the course of carrying out this programme, the following barriers to eco-innovation were identified:

- Local authorities take a long time to approve of the rehabilitation project.
- Costs differ from one firm to another.
- Some firms contracted to the project lacked the necessary experience.
- The programme is only applicable to apartment blocks, not houses.

This programme is considered by the government to be one of its best initiatives in driving eco-innovation.

The programme resulted in the following sustainable developments:

- Significant savings on the energy used for heating.
- More efficient energy use.
- Contributing to the overall EU goal of reducing greenhouse gas emissions by 20% from 1990 levels.
- Contributing to the overall EU goal of reducing energy consumption by 20% of projected 2020 levels.

12. RECOMMENDATIONS TO THE ROMANIAN GOVERNMENT ON STEERING SMES TOWARDS THE GREEN ECONOMY

The transition towards the green economy is a priority of the Romanian government. Adequate policies and investments are needed to support SMEs' transition towards the green economy. These policies should take into consideration the national, regional and local particularities, and be implemented from the bottom-up.

To this end, it would behove to the Romanian government to undertake the following actions:

- Formulate and implement concrete action plans and policies to increase the competitiveness of SMEs so that they are able to achieve green growth.
- Encourage companies to produce environmentally friendly goods and services for the rapidly growing green market.
- Develop and implement policies and strategies for eco-innovation.
- Consistently help in the transition to the green economy.
- Ensure that efforts in the transition to the green economy are sustained.
- Identify the most suitable measures through which green growth can be promoted and accelerated in Romania.
- All government ministries should acknowledge the need for further investment in green skills and education of the labour force towards sustainable development.
- Policy measures promoting green education are needed.
- An action plan prioritizing the greening of the production and consumption processes is needed.
- Cooperation between the public and private sectors should be enhanced.
- Fiscal facilities investing in SMEs' greening efforts should be created.
- Simplified accounting procedures should be implemented for SMEs.
- The business environment must be improved; especially in areas related to regulatory and finance issues. The improved environment will encourage business initiatives.

- Business development should be facilitated.
- Develop and hold training programmes for entrepreneurs so as to improve their quality of entrepreneurship.
- Emphasize opportunity-driven entrepreneurship through state-funded educational programmes.
- Eco-innovation opportunities and green growth initiatives should be emphasized in these educational programmes.
- Legislation on green entrepreneurship should be developed and implemented.
- An e-government procedure should be established to make it easier to start businesses.

CONCLUSIONS

Romania has a strong base for green growth, as it is a country with considerable potential in natural resources, human resources and opportunities. The government and legislation should prioritize the transition towards the green economy as it is a means of sustainable economic development. The legislation on public procurement is particularly important for this reason. This is because SMEs need to have ISO 14001 and ISO 9001 quality management systems before they can obtain public procurements. Many SMEs have ISO 14001 and ISO 9001 quality management system certifications, and are able to label their products as ecologically friendly. This, in turn, has positive economic benefits for these enterprises.

Within the EU, Romania is in last place in the economic indicators for innovation and competitiveness. This is due to the after-effects of 40 years of centralized economy in the country. Although Romania is below the EU average in some economic indicators, it is the far ahead of the other post-communist EU Member States (see Figure 14). Thus, Romania is developing and transitioning well into the market economy.

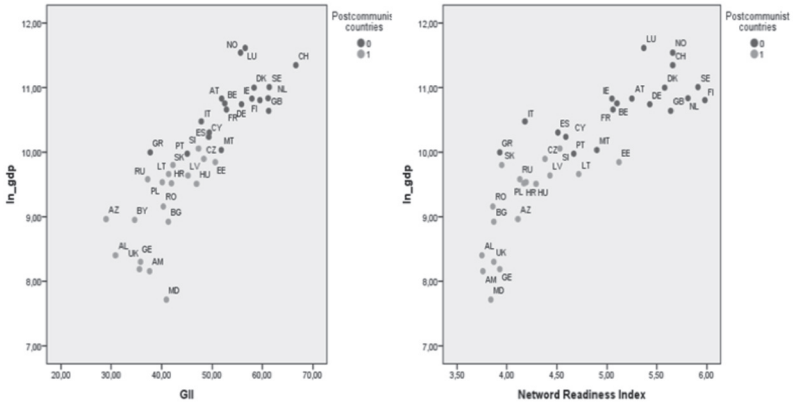


Figure 14. Comparative analysis across Europe - GII and NRI in Europe

Source: Author's Own calculations based on data

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3.9. ECOLOGICAL ENTREPRENEURSHIP IN THE RUSSIAN FEDERATION

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ABSTRACT
The Russian Federation has recently supported the decisions of the United Nations Paris Climate Change Conference (COP21). As a result, it is legally bound to reduce its greenhouse gas emissions.

As the Russian economy is greatly dependent on natural resources, the green economy is an important concept for the country. The green economy acknowledges ecological scarcity of natural resources and seeks to reduce environmental risks. It also promotes sustainable development. Some examples of the green economy are: environmentally friendly technological and product development, green constructions, use of best available technologies (BAT) by environmentally harmful enterprises in regulating, and controlling the amount of waste and pollution produced. However, SMEs have limited desire and capacity to implement sustainable practices. This is due to limited resources, shortage of qualified personnel and lack of professional knowledge.

A small business in Russia is one that employs no more than 60 people and has a turnover of no more than RUB 800 million (USD 12 million).

Mostly ecology-oriented SMEs are in the innovation and scientific fields such as biotechnology. Some green SMEs exist in the field of ecological tourism. Regardless as to their fields of economic activity, environmentally friendly SMEs practice waste recycling, efficient use of resources and energy effectiveness.

Government initiatives on the green economy include the "Basic Principles of State Environmental Development Policy for the period through to 2030", the State Programme for Environmental Protection for 2012-2020, the State Programme for Economic Development and Innovative Economy, as well as many other legislative acts. Presidential decree No.7, issued on 5 January 2016, declared that 2017 is to be the Year of Ecology in the Russian Federation.

Ecological entrepreneurship in Russia can only grow through international and interregional cooperation. Thus, Russian ecological entrepreneurship is shaped by its participation in the World Trade Organization (WTO), the activities of the Eurasian Economic Union, BRICS, and the Shanghai Cooperation Organisation.

This paper is based on literature reviews, desktop researches, interviews, as well as the experiences of various Russian projects and participation in related conferences.

Keywords: green economy, Russian Federation, small business
JEL Classification: M13, O13, Q1

1. INTRODUCTION

Although the Russian economy is greatly dependent on conventional resources, the concept of the green economy is quickly gaining traction in the country. The green economy acknowledges ecological scarcity of natural resources and seeks to reduce environmental risks. It also promotes sustainable development. Some examples of the green economy are environmentally friendly technological and product development, green constructions, use of best available technologies (BAT) by environmentally harmful enterprises in regulating and controlling the amount of waste and pollution produced.

The greening of Russian enterprises began with the development of Federal Laws, promotion and implementation of green standards, as well as the review of various regulatory documents for environmental preservation. The concept of green technologies was first implemented in Russia in the construction infrastructure of the Sochi Olympics in 2014.

Reducing the environmental impact of SMEs' production processes is essential to the greening of the Russian economy. This will improve Russia's performance in international environmental indicators, which in turn will contribute to the development of new lines of business for SMEs as important suppliers of goods and services.

However, SMEs have limited desire and capacity to implement sustainable practices. This is due to limited resources, shortage of qualified personnel and lack of professional knowledge. SMEs often lack information on the many financially attractive possibilities of improving their environmental

performance. There is a widespread misconception that environmental protection involves great technical difficulties, problems and costs. Even when SMEs know that improved environmental performance will enhance their competitiveness, their lack of relevant knowledge and experience precludes the use of ecological and cost-effective options.

The green entrepreneur is considered a changemaker because he/she integrates environmental, economic and social considerations into his/her core business activities; provides eco-innovative solutions to the way goods and services are produced; and practices a business model that contributes to the greening of the economy. [1]

2. SME FACT SHEET

In Russia, a small business is a commercial organization in which the government of the Russian Federation, its subjects, public and religious organizations (associations), and charitable organizations do not fund more than 25% of its activities. Additionally, larger enterprises should not have more than a 25% stake in a small enterprise. The average number of employees in a Russian small business should not exceed 100 persons in industry, and have no more than 60 persons in agriculture. Individuals engaged in entrepreneurial activities without a legal entity are also defined as small business entities in Russia.

Microenterprises are defined in Federal Law No. 209-FZ on the development of small and medium enterprises in the Russian Federation, dated 24 July 2007, which states that the average number of employees in the preceding calendar year must not exceed 15 people.

Russian Federation Government Decree No.98-p, dated 27 January 2015, increased the maximum annual revenues of microenterprises, small businesses and medium enterprises to RUB 120 million (USD 2 million), RUB 800 million (USD 12 million) and RUB 2 billion (USD 33 million) respectively.

Table 1. Statistics on small business in Russia [2]

	Micro	Small	Medium	Individual entrepreneurs	All SMEs
Number, thousands	1,868.2	235.6	13.7	2,413.8	4,531.3
Share in SME sector,%	41.2	5.2	0.3	53.3	100%
Employment, thousand people	4,431.1	6,358.4	1,585.8	5,645.7	18,021[1]
Sales revenues, billion rubles	9,699.3	16,692.9	5,027.8	10,447.5	41,867.5

3. SMEs AND ENVIRONMENTAL ISSUES

The Russian Federation has recently supported the decisions of the United Nations Paris Climate Change Conference (COP21). As a result, it is legally bound to reduce its greenhouse gas emissions.

In 2000-2012, Russia reduced its energy consumption by 33.4%. Russia is projected to reduce its energy consumption by an additional 13.5% by 2020. [3]

Russian SMEs are interested in implementing environmentally friendly technologies, as they want to be globally competitive with international enterprises that have long adopted ecological standards. In becoming eco-friendly companies, Russian SMEs will enhance their image as socially responsible businesses and attract more loyal customers.

Russia is expected to fully utilize green technologies in 2050, whereupon 50% of energy will be renewable, 30% of energy will come from natural resources, and 20% of energy will be nuclear energy. [4]

4. ENVIRONMENT-RELATED LEGISLATION ISSUES FOR SMEs

The Russian Constitution guarantees its citizens' right to a clean environment. There are more than 70 Federal environmental laws and 4,000 by-laws. Russia's basic environmental law, the 2002 Federal Law on Environmental Protection, defines the principles governing environmental activities in the country. Other important environment-related framework legislation are the Federal Law on Air Protection, the Federal Law on Waste Management, the Federal Law on Sanitary Protection, the Federal Law on

16 SMEs account for 25% of total employment, according to the Rosstat Statistical Book 2015.

State Environmental Review, the Federal Law on Ecological Examination (which provides a basis for environmental impact assessment), and some others. There are also legal codes pertaining to the environment such as the Water Code, the Forestry Code and the Land Code.

The adoption of the Federal Law on Saving Energy and Increasing Energy Efficiency, and on Amendments to Certain Legislative Acts of the Russian Federation in 2009 was another important step forward towards the enhancement of energy efficiency.

The Law on Saving Energy and Increasing Energy Efficiency, and on Amendments to Certain Legislative Acts of the Russian Federation establishes principles regulating energy consumption, and provides amendments to existing legislation on technical regulation, housing, taxation and so on.

The Law also provides new standards for the use of energy consuming products. For example, it instituted the phasing out of incandescent light bulbs and implemented energy efficiency requirements for newly constructed buildings. These requirements apply to specific elements in the construction of buildings as they cover the technologies and materials used during construction, as well as capital repair and reconstruction projects.

Organizations with state or municipal equity participation are mandated to approve energy saving and energy efficiency programmes. State or municipal procurement orders are also placed with due regard for energy efficiency regulations. For this purpose, tax incentives, subsidies, energy audits, labelling and other economic mechanisms are envisaged to encourage the use of energy-saving technologies, including the use of secondary energy resources and renewable energy sources. For example, the requirement for producers and importers of principal household energy consuming appliances to label their products according to energy efficiency classification has been effective since 2011, for computer and office equipment since 2012, and for other goods since 2013. [5]

5. CHARACTERISTICS AND BEHAVIOUR OF SMEs MEETING ENVIRONMENTAL RELATED REQUIREMENTS

SMEs need to adapt to environmental changes, including climate changes to meet environment-related requirements. This adaptation responds to the customers' demands and broadens the market. Such changes include new requirements to production systems, operational processes, logistic

systems and financial procedures. The introduction of environmental requirements also changes the behaviours of the companies and customers in favour of environmentally friendly production, products, technologies and consumption.

Environmental Adaptation

Environmental adaptation is a complex phenomenon and a complex adaptive system. The three key structural elements of such system are:

(1) Key actors and their attitudes
(2) Firms and their characteristics
(3) Broader context of organizations and institutions

The interactions between these elements increase the strength of the system and make it more adaptable to changes.

Behaviour of SMEs meeting environmental requirements include:

a) Adapting the business according to changes in climate, and
b) Inter-firm adaptation comprising:

1. Adaptation of the product specification, product design and manufacturing processes
2. Adaptations in delivery procedures
3. Adaptations in stockholding
4. Adaptations in administrative procedures
5. Adaptations in financial procedures

When companies start the adaptation process, they make decisions on different levels of adaptation. The level of adaptation is influenced by material resources such as human resources, finance and technology. In addition, the level of adaptation is also determined by the way in which companies choose to adapt, either actively or passively. When the company chooses to invest (active), the adaptation level is higher than when it simply adapts (passive). When the company is forced to adapt (because of the legislation, for example), the adaptation level is limited. The higher the level of adaptation, the higher is the environmental complexity that can be handled by the firm. [6]

Characteristics of SMEs successfully meeting environment-related requirements include evaluation of customers, extent of information sharing, focus on quality, reaction to salient events, forming strategic alliances and partnerships, and fair treatment of employees.

6. SMEs IN APPLYING ISO 9001, ISO 14001 AND ISO 50001 QUALITY MANAGEMENT SYSTEMS

Adhering to international standards provide as many benefits for small businesses as they do for global enterprises. The strategic use of international standards can make a significant difference to the annual turnover of an SME, sometimes the difference between success and failure.

Some of the benefits reaped by SMEs using international standards include:

- The opening up of export markets, as products become compatible on a global scale
- Increased efficiency
- Increased credibility and confidence as customers all over the world recognize ISO international standards.

In recent years, Russian enterprises have only obtained a small amount of ISO certificates. This is due to the low interest of Russian enterprises. Reasons for the low interest stem from:

- The absence of a single domestic information resource containing complete data that the enterprises can consult if they wish to apply for ISO certificates and check the outcome of their application.
- The short-sighted policy of domestic SMEs' top management, who are more concerned with obtaining paper certificates than going through an efficient system of application and functioning according to international standards.
- Domestic firms' unwillingness to bear definite financial expenses and cooperate with organizations providing energy management system implementation services. [7]

Solutions to overcome the barriers to standardization can be grouped into three categories:

a. Compensation of SMEs' lack of resources (time, financial resources or knowledge).
b. Making the "supply side" of standards and standardization more easily accessible.
c. Focusing on intermediary organizations (such as trade associations) as means of bridging the gap between SMEs and the achievement of standardization world.

7. OBSTACLES FACING SMEs WISHING TO TACKLE ENVIRONMENTAL ISSUES

In a crisis-affected economy SMEs face a lot of obstacles such as:

- Demand constraints – SMEs are failing to find sufficient markets for their goods and services.
- Resource constraints – Small firms experience difficulties in securing necessary production inputs.
- Institutional constraints – The official legal, regulatory and fiscal regimes are not conducive to the emergence, functioning and growth of small firms.

The major limiting factors are:

1. Institutional and technological inertia in economic development does not allow the global economy to adapt production processes to a lower demand as quickly as it would adapt them to a higher demand. As the data provided by the International Energy Agency indicate, the decline in corporate sector revenues and production growth in 2008-2010 did not result in a corresponding decline in emissions. Thus, as the situation in Russia also suggests, economic growth contributes to the decrease in specific carbon emissions while a recession increases them, amplifying the risks of climate change caused by industry.

2. Significant disparities in the development of the green economy among different countries and industrial sectors, as well as disparities in the impact of green investments on economic growth. These disparities are related to:

- Differences in the scale and effectiveness of political and institutional support for the green economy and clean energy, in particular on the national level (on the part of states on the global economic level), by all key components of the international community.
- Various sectors and areas of production of the green economy, which certainly do not always surpass competitors in productivity and efficiency. Specific technologies, companies, industries, regions, and countries perform differently. Some receive triple benefits (for instance, while reducing pollution and greenhouse gas emissions along with production costs, they also create new jobs and increase profit). Others end up on the losing end with their costs exceed earnings, giving them losses instead of profit, often leading to layoffs and business liquidations.

- Differences in the extent to which green production and technologies actually benefit the environment. Not all green enterprises are clean and environmentally friendly. The biofuel industry is a clear example of this.
- Different impact of green investments on the growth of productivity and employment in various industrial and non-industrial sectors.
- Different impact of subsidy reforms that are proposed by promoters of the green scenario for developing the global economy, and are intended to spur state-driven green investment and spending. [8]

Russia's transition towards the green economy is due to the continued high intellectual potential and the considerable presence of low economic activity territories making up more than 60% of the country. When a green economy is truly in place in Russia, it can become a leader in the transition to a new development model. Before that can occur, Russia needs to get out of a systemic crisis and begin its permanent move towards a green economy.

The ecological orientation of the Russian economy should involve a change of investment policy to emphasize increased investments in high-tech industries capable of solving environmental problems. Ecological innovations should become the main mode of innovative development of Russia and its regions.

Smart investment and innovation policy in the environmental field will provide an incentive for businesses to implement environmentally oriented investment. It can also activate the development of the market for environmental goods and services. It is necessary to create an effective system based on a strategically advantageous interaction between natural resources, local authorities, population and environmentally oriented businesses. [9]

8. GOVERNMENTAL POLICY SUPPORTING SMEs' TRANSITION TOWARDS THE GREEN ECONOMY

Environmental issues come under the joint competence of the Russian Federation and its federal subjects. The main agency responsible for environmental policy as well as for policy and regulation of the exploitation of natural resources is the Ministry of Natural Resources and Environment of the Russian Federation. It coordinates and supervises the activities of

the Federal Service for Hydrometeorology and Environmental Monitoring, the Federal Service for the Supervision of Natural Resource Management, the Federal Agency for Water Resources and the Federal Agency for Subsoil Management. The Committee on Natural Resources, Environmental Management and Ecology of the State Duma develops environmental laws.

Government initiatives on the green economy include the "Basic Principles of State Environmental Development Policy for the period through to 2030" (approved by the President of Russia on 30 April 2012) and the State Programme for Environmental Protection for 2012-2020 (approved by the government on 15 April 2014).

The strategic priorities of Russia's Energy Strategy for the period through to 2030 (approved by decree No.1715-r of the Government of the Russian Federation on 13 November 2009) include energy security, ecological safety, and the energy and economic efficiency of the energy sector. The strategy envisages the development of non-fuel energy and the creation of conditions for the widespread application of energy-saving technologies. However, the broader development of alternative energy is foreseeable in 2022-2030.

The Climate Change Doctrine of the Russian Federation for the period up to 2020 is a key document for the implementation of climate policy. It officially acknowledges the threat of global warming to the country's security. It also sets fundamental tasks in the formation of Russia's climate policy, including energy efficiency measures. Although of a general character, the doctrine envisages the introduction of stimulus mechanisms for rational natural resource use and the adoption of resource and energy saving technology, as well as the creation of conditions for the effective functioning of the natural resource complex and the reclamation of renewable natural resources and sustainable forest management.

As a part of the implementation of this doctrine, the Comprehensive Implementation Plan of the Climate Doctrine of the Russian Federation for the period up to 2020 was adopted by a government decree in 2011.

Presidential decree No.7, issued on 5 January 2016, declared that 2017 is to be the Year of Ecology in the Russian Federation. On 6 June 2016, Russian Prime Minister Dmitry Medvedev signed decree No.1082-p to approve the plan for the main activities in the Year of Ecology.

There are 234 planned events; 55 of which pertain to the implementation of the best available green technologies in Russian enterprises. The plan also provides 54 actions aimed at construction and reconstruction of entities in the field of waste management. One of the priorities of the Comprehensive Implementation Plan deals with the protection of the unique ecosystem of the Baikal natural territory and includes 33 events. The rest of the Comprehensive Implementation Plan relates to environmental rehabilitation of water sources, reforestation, the Arctic territories and climate, development of protected areas and environmental education.

Approximately 194 billion rubles (EUR 3 billion) will go to funding this Action Plan.

The Comprehensive Implementation Plan envisages measures that will create conditions for the reduction of harmful emissions into the atmosphere by more than 450 thousand tons per year, help to restore at least 800 thousand hectares of forests, and rehabilitate 866 hectares of water reservoirs. The plan envisages a reduction of 150 million cubic metres per year of wastewater discharge and 183 million cubic metres of water losses. [10]

9. SMEs START TO BECOME SUSTAINABLE AND GREEN

One of the most popular ways of greening SMEs is applying green standards to the ecological certification of enterprises.

In response to a global sustainable development initiative in 2009, the Ministry of Natural Resources and Environment of the Russian Federation set up a working group to formulate criteria for a voluntary environmental certification mechanism similar to the Leadership in Energy and Environmental Design (LEED) or Building Research Establishment Environmental Assessment Method (BREEAM) systems, but based on Russian national construction norms and regulations.

The first version of the national voluntary building certification system "Green Standards" was officially registered with the Russian Federal Agency on Technical Regulating and Metrology in February, 2010. To permanently continue this task, the ad hoc working group was duly replaced with a newly established Green Standards Eco-Certification Center. Since then, the second version of the national voluntary building certification was registered in 2011, and the third one is under development now.

9.1. Green Standards System

The Green Standards System is a rating system providing architects, designers, facility owners and operators with a set of criteria for environmentally sustainable green construction and maintenance. There are eight groups of such criteria from management to waste disposal, with 100 possible base points distributed between them. Buildings can qualify for four levels of certification, depending on the points acquired: certified (40-49 points), silver (50-59 points), gold (60-79 points) and platinum (80 and above). Only accredited certification entities with enough accredited experts onboard can operate in this market and grant green standards certificates.

The Green Standards System is new, highly versatile, and adaptable to different needs and projects. Its most important accomplishment so far is the 2014 Olympics construction site in Sochi, where all the premises built by the Olympstroy Company were supposed to be green.

At present, the Green Standards Eco-Certification Center is an independent, non-profit institution. The Center works closely with the Ministry of Natural Resources and Environment, local authorities as well as non-governmental organizations (NGOs) like constructors' associations, environmentalists and R&D organizations to define and maintain the system's procedures, make necessary changes to the rules and policies, and implement new approaches and ideas into the system.

The Green Standards Eco-Certification Center is also responsible for two major activities. First, it trains, tests and awards certificates to those who want to become Green Standards experts. Currently, there are 50 certified Green Standards experts nationwide.

Second, the Center accredits companies to become independent certification entities all around the country. Accreditation is granted solely by the Green Standards Eco-Certification Center, in compliance with system's requirements and procedures. [11]

9.2. Grants and Awards for the implementation of "green" technologies and solutions

Order No.549-p of the Russian Government, dated 28 March 2015, states that in accordance with the government's anti-crisis plan, and as part of the framework of the State Programme for Economic Development and

Innovative Economy, a USD 5 billion budget will be allocated for the provision of grants to the Fund for the Assistance of Small Innovative Enterprises in the area of science and technology. This will not only support the expansion of small innovative enterprises, but will also help to create and support new and existing small innovative enterprises capable of implementing innovative projects and creating new jobs.

The Russian Ministry of Natural Resources and Ecology conducts an annual All-Russia Competition known as the "Ecological Development – Evolution Awards". The awards are given to businesspersons and/or companies that made environmental achievements in the field of sustainable development in the Russian Federation. The awards also acknowledge achievements in the development and use of green technologies that save and reproduce resources.

9.3 Development of the Moscow Environmental Strategy for 2030

Over 4,700 Muscovites aged between 16 and 87 took part in the Moscow Environmental Strategy crowdsourcing project on the crowd.mos.ru website. The participants posted over 10,000 questions and comments, and made about 1,340 unique proposals. About 85% of participants were environmentally conscious Moscow residents. Environmental experts from leading research organizations and specialized institutes also took part in the discussion.

Project participants discussed six key issues: air quality, water quality, greenery (including soil conservation, biodiversity and wildlife), waste, noise pollution and environmental education. [12]

10 SMEs AND BEST PRACTICES IN THE GREEN ECONOMY

Favourable preconditions for Russia's green sector expansion exist in a number of economic fields such as agriculture, forestry and tourism. Thus, Russia has great potential for expanding its green sector. The prospective green development of these areas and the economy as a whole is largely contingent upon the progress in the energy sphere, particularly in the development of alternative energy sources.

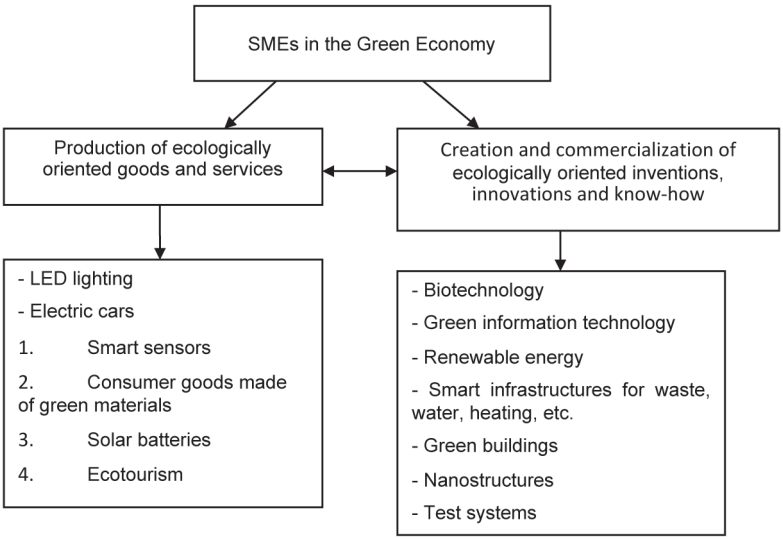
The eco-market is built on the production of environmental products, services and works, aimed at improving the environment. Two activities in the field of environmental entrepreneurship can be outlined:

1. Activities addressing the negative impact of human activities.

2. Preventing environmental harm through the replacement of environmentally hazardous materials with innovative and ecologically oriented resources.

Accordingly, the eco-market infrastructure includes companies providing environmental services such as environmental banks, information centres, educational establishments, eco-funds and non-profit organizations. [13]

Figure 1. Eco-oriented small businesses in Russia



SMEs working in a scientific research field (i.e. small scientific enterprises) play an important role in know-how transfer and the commercialization of innovations by closely cooperating with universities and innovative centres.

Ecologically oriented SMEs also operate in ecotourism. Ecotourism is ecologically sustainable tourism primarily focusing on experiencing natural areas so as to foster environmental and cultural understanding, appreciation and conservation.

The core set of 8 principles of ecotourism was established by Green Globe, a US-based organization providing certification for sustainable tourism, as well as training, education and marketing services in 83 countries world-

wide. [14] These 8 principles are:

1) Focus on giving visitors the opportunity to personally and directly experience nature.
2) Provide opportunities to experience nature in ways that lead to greater understanding, appreciation and enjoyment.
3) Represent best practice for environmentally sustainable tourism.
4) Contribute directly to the conservation of natural areas.
5) Provide ongoing contributions to the local community.
6) Be sensitive to, interpret and involve the culture(s) existing in the area.
7) Consistently meet consumer expectations.
8) Be marketed and promoted honestly and accurately so that realistic expectations are formed.

10.1 SMEs BEST PRACTICES

10.1.1 Rosta Ltd (in Yaroslavl, Russia)[17]

The demand for ecologically friendly and low-cost heating systems is increasing every year. This is due to the implementation of energy efficiency programmes worldwide. As a consequence, customers have started to choose heating products of higher quality that also reduce costs.

Rosta Ltd was founded by a group of young graduates from Yaroslavl State University in 2010. They invented and patented an infrared system of electric heating, thereby lowering heating costs for houses, offices and public entities, especially in remote regions where central heating is very expensive.

They set up a small manufacturing business in the regional city of Yaroslavl to produce the infrared electric heater "Sunshine". It is a low-cost and easy installed, fire-secure heating system for buildings transmitted through infrared membrane elements consisting of multi-layered resistors located between two special plastic films (Utility patent of the Russian Federation #116731).

In 3 years, the system was installed in 300 buildings in several Russian regions, the product range expanded from 5 types of heaters to 25, and the number of workers increased 10 times.

17 For more information, see http://www.rostayar.ru

Under the local name "Slunce", marketing research is now ongoing in the Czech Republic to develop the project and enhance the territory of sales. In so doing, Rosta Ltd shows good business perspective. The envisaged target markets are Russia, the EU, Belarus and Ukraine.

Advantages of Sunshine Heating are as follows:

- Energy-saving. The average seasonal electricity consumption is twenty watts per square metre (20w/m2). The system can be adjusted into saving mode (+10ºC) in the absence of people.
- Reliability. The product does not require maintenance for its whole operational period. There is also a 10-year warranty on the product because automatic elements in the device fall under the manufacturer's warranty.
- Independent from the gas or district heating systems. The system has no visible presence in the room such as pipes, radiators, etc. No facilities such as boilers, heating devices, etc., are needed to operate the heating system.
- High dynamic warming (an increase of 10ºC in 60 minutes). This allows for possible remote controllable heating.
- Thermal comfort. The thermostat precisely monitors and maintains the set temperature of the consumer's air.
- Elimination of moisture without drying. The system provides natural humidity.
- The product is absolutely safe for health and recommended for use in maternity hospitals, kindergartens and schools.
- Easy to install at any time of year.
- It is water resistant, fireproof and protected against dust.

10.1.2 "SIBECOPRIBOR" Ltd (in Novosibirsk)[18]

The industrial and environmental enterprise "SIBECOPRIBOR" was founded in 1994 by a group of engineers and researchers from the Siberian branch of the Russian Academy of Sciences. SIBECOPRIBOR is a member of the SibAcademInnovation Association, the most representative association of small and medium-sized high-tech companies in Novosibirsk, and resident of the scientific and technological park of the Novosibirsk Akademgorodok. The company's main activity is in the practical development of the national system of environmental protection through the implementation of modern methods and control devices.

The high level of production is ensured through cooperation with lead-

18 For more information, see http://www.sibecopribor.ru/

ing scientific institutes of the Russian Academy of Sciences (such as the Design and Technology Institute of Scientific Instrument Engineering, Novosibirsk Institute of Organic Chemistry, Institute of Inorganic Chemistry) and the Federal State Unitary Enterprise "Siberian Research Institute of Metrology" (FSUE SNIIM), as well as use of the most advanced scientific technologies.

The company implements an integrated approach to environmental control and monitoring. It manufactures ecological monitoring equipment as well as auxiliary equipment such as thermostats, laboratory extractors and sampling systems. More than four thousand Russian and CIS analytical laboratories of enterprises and organizations use SIBECOPRIBOR equipment.

10.1.3 Grey Horse Ltd (Nizhny Novgorod region)[19]

Grey Horse Ltd is a small business created by spouses Alexander and Tatiana Pirogov in 2007. They keep 75 horses, mainly Orlov trotters. There is also a farm with milk cows, sheep, goats, pigs, dogs, chickens, ducks, pigeons and pheasants.

The business has been an ecotourism one for 15 years. The Pirogovs organize outdoor activities of various kinds such as long rural trips, recreation weekends, corporate trips, and trekking on horseback and by canoe.

In two guest houses in the villages of Blagoveschenskoe and Troitskoie, guests can take the opportunity to become part of typical Russian village life. They can live in a traditional Russian house with wood heating, eat food from a Russian stove, relax in a traditional Russian bath, milk cows, take care of horses, and take part in equestrian trips and walks.

The two rural estates can accommodate up to 70 visitors at a time. The estates are equipped with an equestrian club and a stud farm known as the Grey Horse. This stud farm has horses, deer, a barn, an apiary and a dovecote. A special place for keeping moose and reindeer was also created in 1600 ha of leased forest.

11. RECOMMENDATIONS TO THE GOVERNMENT ON STEERING SMEs TOWARDS THE GREEN ECONOMY

Ecological entrepreneurship in Russia can only grow through international

19 For more information, see http://www.greyhorse.ru/

and interregional cooperation. Thus, Russian ecological entrepreneurship is shaped by its participation in the World Trade Organization (WTO), the activities of the Eurasian Economic Union, BRICS, and the Shanghai Cooperation Organisation. Ecologically oriented SMEs can enhance the Russian economy's international competitiveness in the field of innovations, inventions and know-how.

The government can successfully support SMEs in these fields as well as green economy enterprises through tax reductions, implementation of favourable conditions for research and development financing, free access to standardization and ecolabelling procedures, and assistance in international promotion and marketing.

11.1 Green Economy Opportunities for Russia

- Cost saving in the long-run for manufacturing, energy production, waste management and other spheres.
- Reduction of resources used, with opportunities for cost saving and increased quality of environment.
- Environmental monitoring of natural resources across the country.

11.2 Threats to the Green Economy in Russia

- Increasing total costs for "green development" in companies and governmental bodies may create obstacles.
- Emergence of "green barriers" for companies newly entering the green economy.
- Necessary green technology support for the green economy might not be available.

12. CONCLUSION

SMEs must actively participate in greening the country's economic development if the Russian economy is to modernize, transition to an innovative social-oriented type of development, and achieve the goals outlined in the Concept for the Long-term Socio-Economic Development of the Russian Federation until 2020.

The key elements of the green economy and green growth underline the decisions adopted in 2008-2011 on improving the energy and environmental performance of the economy by 40% by 2020, and increasing the share of renewable energy from under 1% to 4.5% in 2020, etc.

Although transition to the green economy encompasses the objectives of the modernization of the economy of the Russian Federation, there are other pressing ecological issues as well. These are the elimination of accumulated environmental damage, development of measures to reduce the amount of waste, and creation of recycling systems for different types of wastes.

These measures will help reduce the harmful effects on the environment and reduce greenhouse gas emissions. Successful transition to the green economy involves the development of environmental education, shaping the environmental culture in society and promoting green economic development policy. [15]

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3.10. SMALL AND MEDIUM ENTERPRISES AND GREEN ECONOMY IN SERBIA

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ABSTRACT
This paper examines the policy measures that the national government of Serbia can and should take in supporting SMEs' transition towards the green economy. Government initiatives promoting capacity development in areas such as cleaner production, eco-efficiency, pollution control and environmental management are very beneficial for the greening of the Serbian economy. To develop and implement policies that are in line with green economy principles, the government has to have innovative and strategic thinking.

Keywords: green economy, SMEs, entrepreneurship, quality management systems
JEL Classification: O20, M21

1. INTRODUCTION

In the last decade, Serbia has recognized the importance of the SME sector in economic development (Radović-Marković 2014b). This is taken into account in the country's macroeconomic framework for 2012-2016, which focuses on a radical improvement of the business milieu in Serbia. While there are some improvements, SME development in Serbia is not growing and entrepreneurial activities have stagnated. This is largely due to the national recession that began in 2008 (Radović-Marković 2014a). The national recession has exacerbated the major problems in SME development. In turn, there is also a lack of satisfactory results in green business development in Serbia. By addressing the lack of greening development in the SME sector, we hope to draw attention to the importance of natural resources for Serbian green businesses and green economic development.

Sustainability emerged as a new concept of economic development in recent years, owing to the global economic crisis. The crisis showed that the prevailing model of economic growth failed to meet the increasing demand for consumption because of limited resources and the limited capacity of the ecosystem. As this is a new concept in economic development, literature on the subject is scarce (Radović-Marković 2014b, 2). Consequently, there is no generally accepted definition of green economy, no clearly defined strategy of sustainable growth, no unique definition of sustainable development and no consensus on the definition of green economy. Instead, each country defines the "Green Economy" according to its own economic and environmental vision.

Despite the lack of consensus on the green economy concept, it is generally agreed that he green economy seeks to ensure economic development, employment growth and an increase in earnings without doing harm to the environment. A rapid growth in production and consumption can have negative consequences for our environment such as increased noise, environmental pollution, increased consumption of fuels and other inputs in production, and so on.

According to some theoreticians, the green economy is part of the sustainable development concept that seeks to improve human well-being and achieve social equality while reducing negative environmental impact (Szabó 2016). Szabó emphasizes the role of the European Union in the promotion of the Green Action Plan for SMEs as well as the ways in which it complements the Green Employment Initiative.

Serbian policymakers have acknowledged that SMEs are of great importance to the economy by declaring 2016 as the year of entrepreneurship in Serbia. According to the latest data by the Serbian Chamber of Commerce, there are almost 320,000 small and medium enterprises and entrepreneurs in the country (Savić 2016, 19-33). The large number of SMEs in Serbia confirms the fact that they have the power to drive the economy forward and contribute significantly to the green economy.

2. LITERATURE OVERVIEW

Different schools of thought have emerged on the subjects of sustainability and green economy (Radović-Marković 2014b). According to Radović-Marković, many researchers in this area started from common premises

only to disagree vis-à-vis the greening effects on economic growth. Furthermore, it is agreed that economic research should be linked with the researches in the fields of ecology and environmental protection so as to anticipate and mitigate the effects of climate change, soil degradation, greenhouse gas emissions and anything that is a threat to the future and survival of the global population (Golušin et al. 2012). Natural resources, especially non-renewable resources, cannot be indefinitely exploited (Munitlak-Ivanović 2007). Irresponsible and unplanned exploitation of natural resources will result in the collapse of society, which is against the principles of sustainable development and the green economy. Thus, the concepts of sustainable development and the green economy go hand in hand.

However, some authors distinguish between sustainable development and the green economy by highlighting their differences. According to this school of thought (Ilić Petković 2015, 561-563; Pokrajac 2009, 21-30; Unković and Kordić 2012, 11-21), sustainable development is an instrument for the implementation of the green economy because they interpret the ecological activities of sustainable development as means of realizing the green economy (Unković and Kordić 2012, 11-21). After so many decades of exploiting non-renewable natural resources and inflicting damage to the environment through industries and other economic activities, it is clear that the world's current economic development model is not sustainable. Therefore, the green economy will push us, our governments, societies and economies in the right ecological direction by contributing to every form of social equalization (Munitlak-Ivanović 2010, 427-439; Popović, Munitlak-Ivanović, and Jovanović 2015, 693-697).

3. BASIC FACTS ABOUT SMEs IN THE REPUBLIC OF SERBIA

As can be seen in Table 1, 99.8% of all enterprises in Serbia are SMEs. Of all the SMEs in the country, 70.43% are entrepreneurs who, with all their assets, are responsible for their commitment to society; i.e. they are "social entities". Microenterprises are the next largest group of businesses in terms of number and number of employees.[20] However, analysis of the other variables such as number of employees and percent of total workforce, GDP contribution (in millions RSD), share of the SME sector in the overall economy (in %), turnover (in millions RSD), export (in millions RSD), net income (in millions RSD), share in profit of non-financial sector

20 Microenterprises have 0-9 employees. When a microenterprise has 0 employees, it has workers and volunteers engaged under a contract of service in lieu of officially employed individuals.

(in %), and profitability rate (in%) show that large companies with 205 or more employees still have the greatest share in the observed variables. According data published by the Serbian Chamber of Commerce in January 2016 (Čadež 2016, 14-15), SMEs are not very interested in transitioning to the green economy because they face the challenges of insufficient financial means, increasing their overall share in GDP (from the current 33%), increasing their participation in export (from the current 42%) and transforming their activities into export-oriented ones (from the current 4.5%). Thus, the green economy can be exploited as a niche market for SMEs. This will encourage further SME development.

Green economy areas that could be used for the development of SMEs include the rehabilitation of large open pit mining hotspots, ecological preparation sites for small businesses, ecotourism, multifunctional farming, formation of green enterprises in the service sector, establishment of green businesses in rural areas, organic agriculture, intense application of eco-management, efficient use of energy and resources, use of biogas for personal purposes, etc.

	MICRO (0-9)	SMALL (10-49)	MEDIUM (50-249)	LARGE (250 or more)	Total SMEs	% SME in total	TOTAL
Number of SMEs	303,927	9,353	2132	494	315,412	99.8	
Number of Employee and percent of total workforce	356,384	189,172	222,994	416,394	768,550	64.9	1,184,944
GDP contribution (in millions RSD)	377,823	269,095	317,088	834,643	964,006	53	1,798,649
Share of the SME sector in the overall economy (%)	21.0	15.0	17.6	46.4	53.6	53.6	100%
Turnover (in millions RSD)	2,232,361	1,745,887	1,735,609	3,167,978	5,713,857	64.3	8,881,835
Export (in millions RSD)	128,861	143,028	247,187	683,722	519,076	43.2	1,202,798
Net income (in millions RSD)	109,057	115,291	107,809	365,910	332,157	47.6	698,067
Share in profit of non-financial sector (%)	15.6	16.5	15.4	52.4	34.5	34.5	100%
Profitability rate (=net income/GDP*100)	28.9	42.8	34.0	44.8	34.5	/	/
Form of organization							
Companies	81,775	9,353	2,132	/	93,260		/
Joint stock company	1,127	420	380	/	1,927		/
Limited liability company (LLC)	63,051	7,985	1,415	/	72,451		/
Other	17,597	948	337	/	18,882		/
Entrepreneur	222,152	0	0	/	222,152		/
TOTAL	303,927	9,353	2,132	/	315,412		/
Investments							
Per enterprise	395	7,909	47,978	697,276	874	/	1,978
Per employee	320	203	390	354	354	/	523

Table 1. Enterprises in Serbia, 2013

Source: Report of the Ministry of Economy on small and medium enterprises and entrepreneurship, 2013. pp. 76-96

* 1 EUR = 123.50 RSD, according to the National Bank of Serbia (NBS) on 29 February 2016.

Table 1 shows the breakdown of MSMEs (including individual entrepreneurs) by economic structure and size in 2013. Some data was taken from the 2015 SBA Fact Sheet on Serbia. The additional data presented below may partially account for SMEs unwilling to apply the green economy to

their business activities. Serbian SMEs' low transition rate to the green economy is due to the following facts:

- Most SMEs are situated in Belgrade and Vojvodina, which are the most developed regions in the Republic of Serbia
- A total of 7,355 companies and 32,853 entrepreneurs had to cease operations in 2012. While 8,648 new companies opened in 2012, only 30,200 entrepreneurs were registered.
- 36,909 companies and 43,900 entrepreneurs are active loan users.
- 20% of all business loans are nonperforming loans (NPLs).

As SME efforts of SMEs did not result in improved business, they are less willing to adopt green economy principles. Moreover, the SME sector was hard-hit by the national recession. This not only slowed down SME development and growth; it also reduced the development of SMEs' greening efforts. Despite certain improvements, Serbian SMEs are not satisfactorily moving towards the green economy.

4. LEGISLATION ISSUES FOR SMEs RELATED TO ENVIRONMENTAL MANAGEMENT

The Republic of Serbia has 57 laws and 32 strategies that are directly or indirectly connected to sustainable development, the environment, green economy and green growth. Some of them are:

- National Sustainable Development Strategy
- Action Plan for the implementation of the National Strategy for Sustainable Development
- National Environmental Protection Programme
- Waste Management Strategy, 2010-2019
- Biodiversity Strategy of the Republic of Serbia for the period 2011-2018
- Strategy of Mineral Resources Management in the Republic of Serbia until 2030
- Draft of the National Strategy for Sustainable Use of Natural Resources
- National Strategy for the inclusion of the Republic of Serbia in the Clean Development Mechanism of the Kyoto Protocol to the Sectors of Waste Management, Agriculture and Forestry
- Strategy for the introduction of Cleaner Production in the Republic of Serbia
- Development and promotion of corporate social responsibility in the

Republic of Serbia, 2010-2015
- National Environmental Approximation Strategy for the Republic of Serbia.

The Law on Environmental Protection is the most important because it deals with the question of companies' (including SMEs) environmental responsibilities on five different levels in articles 4, 9 and 92. The "polluter pays" principle is the most important, i.e. the manufacturer who caused the environmental damage in their production or consumption process must pay compensation. However, the "polluter pays" principle will disadvantage consumers as the polluting manufacturer will incorporate the amount they paid in compensation into the final cost of the final product, which will make it more expensive to purchase.

In May 2009, the Serbian National Assembly adopted the "Green Pack" comprising 16 laws harmonized with EU requirements in the field of environmental protection. The "Green Pack" touches on regulations on the adequate use and storage of hazardous chemicals, waste storage, ways of protecting the environment, and ways of protecting human, animal and plant health.

Serbia is currently negotiating 35 chapters with the EU as part of its application to accede to the European Union. An interesting but worrying fact is Serbia's lack of financial means in implementing Chapter 27, which deals with the Environment and the EU Internal Market. According to the Union of Employers of Serbia, the technological machinery, equipment and tools in the Serbian economy have been in use for 27.5 years on average. This demonstrates that Serbia lacks the financial means to upgrade its means of production, let alone incorporate green and friendly technologies in the production process. The National Environmental Approximation Strategy for the Republic of Serbia estimates that Serbia would need EUR 10.6 billion by 2030, if it is to implement Chapter 27. As these funds cannot be taken from Serbian budget, new financial sources will have to be found.

5. CHARACTERISTICS AND BEHAVIOUR OF SMEs MEETING ENVIRONMENTAL REQUIREMENTS

A large number of experts have pointed out that the Serbian private sector has its own specificities in its method of financing. There are significantly limited sources of financing for the private sector. Possible financial sourc-

es in the Republic of Serbia are limited to loans granted by commercial banks, leasing companies, factoring, microcredit organizations and capital market corporate bonds, and share issuing.

Small and medium-sized enterprises (SMEs) in Serbia are primarily concerned with financing their survival, not investing in development. This is because their most pressing needs are the provision of salaries to employees and repaying their obligations to the state. Most new companies are closed within three years from foundation (Grozdanić, Radović-Marković and Jevtić 2015).

In the 28 EU Member States, 90% of their public revenues are derived from taxes (Munitlak-Ivanović, Golušin, Filipović 2013, 300). Serbia only obtains 85-90% of its public revenue from taxes. Ecological tax is a relatively new type of tax, first applied in Scandinavian countries. Ecological taxes require a tax reform. The aim of this tax reform is to use fiscal instruments to preserve the ecological environment, and realize sustainable development and green economy goals. The implementation of new ecological taxes should be followed by a decrease in rates of other types of taxes, so that the total tax burden would stay relatively unchanged. On the other hand, the tax burden should be directed towards economic activities that should be discouraged because they pollute the environment. This will encourage the companies to adopt new green technologies and use renewable resources in their production processes. Ecological taxes are taxes penalizing activities negatively impacting the environment. The revenues obtained from ecological taxes would, in turn, be used for policies related to environmental protection. Unfortunately, this fiscal mechanism has not been implemented in Serbia.

The 28 EU Member States (EU-28) have collected a significant amount in revenues from SMEs through this ecological tax, and it speaks volumes of the potential growth of income for Serbia if it were to be adopted in the country (Munitlak-Ivanović 2016, 16-17). Analyzed data on the total income from ecological taxes in EU-28 in 2004-2013 showed that income collected from this fiscal instrument has been increasing. This demonstrates that it can be a source of funds for Serbian SMEs' transition to the green economy.

To examine Serbia's projected rate of growth, we conducted a time series analysis by calculating annual absolute growth and pace of growth. Ser-

bia's pace of growth had positive values in every year, except in 2008 and 2009, where it decreased by 2.2% and 2.7% respectively. These negative values are a direct consequence of the global economic crisis. The calculated average rate of growth for Serbia in the time series is 1.8%, which shows that incomes from ecological taxes recorded an increase during a defined time interval. This clearly shows that ecological tax is very important in EU-28 and Serbia stands to benefit if it is implemented.

In Serbia, SMEs pay three kinds of charges instead of environmental tax (Munitlak-Ivanović, Mitić, Raspopović 2016, 375-378):

1. Fee for the use of natural resources
2. Fee as compensation for environmental pollution
3. Fee for the protection and improvement of the environment.

When ecological tax is implemented, it will not be paid by SMEs. The larger companies will pay it. This will ensure that Serbia has the necessary funds for the implementation of the green economy.

Generally, the government does not encourage investments in the environment and the purchase of environmentally cleaner technologies. As a result, SMEs have little to no incentive to transition to the green economy.

6. SHARE OF SMEs APPLYING ISO 9001, ISO 14001, ISO 50001 QUALITY MANAGEMENT SYSTEMS

Most of the quality management standards are specialized for a certain product, material or process. However, ISO 9001 and ISO 14001 are generic standards of systems management. That means that the same standard can be applied to every activity, organization and MSME regardless of the product or service. This also means they can be applied in any sector, regardless as to whether an organization is public or private. ISO 9001 contains a set of generic requests for the implementation of the system for quality management, and ISO 14001 is for environmental management.

The ISO 9000 and ISO 14000 series are among the most popular standards, and are implemented by more than a million organizations in 175 countries all over the world (see http://www.kvalitet.org.rs/standardi/). ISO 9001:2008 and ISO 14001:2004 have become so widespread that they are now integrated into the global economy.

The ISO 9000 series refers to quality management. That means that SMEs have to "meet client requests concerning quality, respect legal regulations,

constantly improve customer satisfaction, and continuously enhance performances" (Stevanović at al. 2003, 417-433).

The ISO 14000 series represent the system of standards ensuring that SMES take a comprehensive and systematic approach in managing the impact of their overall activities on the environment. This series requires SMEs' environmental activities to be in line with their own declared vision, policy and goals for environmental protection as they move towards the green economy. This also ensures that legal regulations stimulating the implementation of the Green Economy are in compliance (Stevanović at al. 2003, 417-433). The ISO 14000 series (specifically ISO 14001-1004) are among others used to measure the standards for ecological management systems.

The ISO 50001 Energy Management System is one of the latest standards in the field of management systems. It occurred as a response to requests for environmental protection, energy efficiency and sustainable development. Thus, ISO 50001 is closely connected to the implementation of the green economy. It can be used to measure the energy management system of SMEs because it is compatible with all standards from the area of systems management declared by ISO and can be applied in all SMEs regardless of the size and type of business. ISO 50001 is very similar to ISO 14001 and is very often associated with energy efficiency (Žikić, Paunković and Jovanović 2016, 55-56). ISO 50001 ensures a rational management of energy and lower operating costs. Through the framework of energy management system defined by the ISO 50001 standard, we can establish a programme of energy saving to ensure energy efficiency.

Unlike ISO 14001, ISO 50001 specifically demands SMEs to use indicators to demonstrate their energy efficiency levels, much as ISO 9001 demands that companies establish a system for monitoring and measuring the efficiency of the process. ISO 50001 demands that every SME establishes the purpose for which it uses energy, the amount of energy used for each purpose, the sources from which the energy is derived, and the measures undertaken to reduce energy use to a reasonable and/or acceptable level. Like ISO 14001, this standard does not define the exact "reasonable" or "acceptable" level, leaving it to the specific SME.
Benefits from the development and implementation of ISO 50001 Energy Management System are reduced energy use, control and reduction of

energy costs, reduced negative influence on environment and aspects of the green economy, preparation for monitoring and reporting the emission of greenhouse gases, and growth of SMEs' credibility in public about energy awareness and social responsibility (Munitlak-Ivanović, Jovanović and Mitić 2014, 623-628).

According to the Serbian National Association for Sustainable Development (NACOR), 42 certification organizations exist in Serbia. However, all data on the number of certified ISO standards in SMEs are approximate (see https://www.google.rs/#q=nacor+srbija).

Table 2 shows the number and type of certified SMEs in Serbia. We can see that 289 SMEs have implemented ISO 14001, while 110 SMEs have implemented ISO 9001. Overall, only 12.78% of all SMEs in Serbia implemented any type of ISO standard. Of these few SMEs, 9.16% implemented ISO 14001 and 3.49% implemented ISO 9001. Only 4 enterprises in Serbia implemented ISO 50001 (Savić 2016, 9-13).

Table 2. Share of SMEs applying ISO 9001, ISO 14001 and ISO 50001

ISO standard	Number of SMEs	Percentage
9001	110	3.49%
14001	289	9.16%
50001	4	0.136
Total	**403**	**12.78%**

Source: Adapted from Savić, "Razvoj preduzetništva," 2016, pp.9-13

The following indicators from the Serbian National Association for Sustainable Development (NACOR) on the growth or decline of ISO standard implementation are interesting (Jovanović, Jovanović and Matavulj 2016, 58-59):

- Certification of SMEs related to ISO 14001 in 2015 increased by 30% compared to 2014.
- Certification of SMEs related to ISO 9001 in 2015 increased by 12% compared to 2014.
- Standard ISO 50001 was certified for the first time in 2015 in one SME and one large company.

7. OBSTACLES FACED BY SMEs IN RELATION TO ENVIRONMENTAL ISSUES AND HOW TO OVERCOME THEM

The low level of green economy implementation in the SME sector in Serbia is noticeable. The following suggestions are some steps that could be taken to improve the introduction of green economy principles among SMEs:

- Faster and more accurate processing of environmental data for SMEs.
- Adequate trainings and practical guides for implementing the green economy in SMEs. These trainings and seminars should be organized for the SMEs' management. Alternatively, the SMEs should seek professional eco-management assistance.
- The government must help SMEs with subventions in implementing ISO standards and purchasing ecologically friendly technologies.
- The government should be more interested in organic production to give Serbian SMEs a comparative advantage.
- Faster implementation of the Law on Environmental Protection and changing the environmental legislation according to SMEs needs, etc.

Further steps that could be taken to improve the greening of SMEs in Serbia include:

- Implementing ISO standards (9001, 14001, and especially 50001)
- Implementing eco-management as a way of doing business
- Using solar panels, biogas, energy saving technology, and any kind of renewable energy
- Implementing waste management, especially in the field of electronic or IT waste (e-waste)
- Foresting and greening the environment around the companies.
- Constantly train and educate employers (as well as business owners) on the importance of sustainability and green thinking

Critical environmental and green economy objectives for SMEs practicing sustainable development and green Growth include "reviving growth; changing the quality of growth; meeting the essential needs for jobs, food, energy, water, and sanitation; ensuring a sustainable level of population; conserving and enhancing the resource base; reorienting technology and managing risk; and merging environment and economics in decision-making (Ecimovic et al. 2014, 7-25).

Most SMEs are prevented from implementing the green economy by lack of direct or indirect financial funds.

Financing environmental objectives and issues related to the green economy are challenges for SMEs of all sizes as well as local regional governments and the state. It is exacerbated by the belief that implementation of green technology and greening measures is expensive, and will reduce earnings.

As environmentally friendly enterprises elsewhere in Europe have shown that green economy brings the benefits of energy efficiency and resource saving, these notions are untenable in the twenty-first century. Ambec and Lanoie (2008, 56-64) demonstrate that environmentally friendly SMEs operating on green principles can reduce costs and increase earnings because they have better access to certain markets, easier product differentiation, use technologies capable of controlling pollution, reduce ecological risks, have better relationships with stakeholders, lower costs of input products, lower energy and service costs, and lower capital and labour costs. Despite these benefits and the existence of different national and international greening programmes, it is still difficult for all companies in Serbia to obtain financial assistance to invest in environmentally friendly production and management methods.

8. GOVERNMENTAL POLICIES SUPPORTING SMEs' TRANSITION TOWARDS THE GREEN ECONOMY

Green economy implementation varies in different countries due to the fact that each country has its own visions, challenges, opportunities and priorities for change. This means the resources available for the implementation of the green economy will also vary considerably by country. Hence, the results achieved in each country will also differ. For instance, the process of starting and running a business will differ according to national and geopolitical, industrial, governmental and cultural factors. These differences may account for Serbia's difficulties in conceptualizing and implementing policies supporting the development of new businesses and entrepreneurial activities.

Serbian governmental policy in this area is weak because of economic and political problems, which in turn creates a lot of social problems. In Serbia, weak governmental policies on the environment could result in ecological, economic, social and political problems. Serbia has a high level of unemployment. According to the Statistical Office of the Republic of Serbia, the unemployment rate in the last quarter of 2015 was 17.9%, and the

unemployment rate of the working age population aged 15-64 was 18.5%. Another social problem related to poverty issues in Serbia is the continual decline in the natural population growth rate. This has been ongoing for quite some time. Unemployment of young people is a pressing problem as well. The latest data from the Statistical Office of the Republic of Serbia shows that 90,000 young people aged 20-24 and 100,000 people aged 25-29 are unemployed. In the second quarter of 2015, the unemployment rate in Serbia was 17.9%; with almost 50% of young people aged 15 -30 unemployed (see http://webrzs.stat.gov.rs/).

Starting a personal entrepreneurial endeavour, i.e. creating a small or medium enterprise, would be one way of solving the unemployment problem. The state can, should and must help in this area, especially if private entrepreneurs are to find their own niche markets and be in line with green economy principles. The government should offer loans and grants to help new SMEs in areas such as the agricultural production of organic products, rural tourism, use of any kind of renewable resources end renewable energy, building sanitary landfills, recycling waste and e-waste, the introduction of the new concept of the circular economy based on reuse of waste, etc (Munitlak-Ivanović 2010, 427-439; Popović, Munitlak-Ivanović, and Jovanović 2015, 693-697).

Communities can use the strategies of new small-scale enterprises and harness the initiatives of local entrepreneurs to create businesses that are both environmentally sustainable and economically profitable (Shahidullah and Haque 2014).

The Serbian green growth strategy is based on: (1) Knowledge-based sustainability; (2) Socio-economic conditions and perspectives, and (3) Environment and natural resources.

According to some researchers (Jovicic and Branković 2014, 87), the most relevant green growth strategies for Serbia are those that will lead to green (or sustainable) development. In short, these researchers advocate sustainable development strategies. Another group of researchers have the opinion that the improvement of the waste management system should be one of the main strategies towards the green economy in Serbia (Stosic and Brnjas 2014, 86). The main goal of the waste management strategy is to reduce pollution and environmental degradation. In that re-

gard, activities envisaged by the waste management strategy are highly relevant for the achievement of green growth.

However, there are a number of obstacles impeding the implementation of these strategies, most notably, the lack of financial funds, inadequate administrative capacity, lack of awareness and insufficient public participation. Moreover, some of these activities are not focused in a unique way, require further coordination and cooperation, and lack long-term vision (Piljan and Cogoljevic 2014, 128). Some activities also overlap one another.

9. SME BEST PRACTICES IN THE GREEN ECONOMY

As there are many business opportunities in the green economy, entrepreneurship has the potential to be a catalyst for positive change in both the economic and environmental spheres (Shahidullah and Haque 2014, 3232-3251). All businesses contributing to the preservation of the ecosystem, biodiversity, improvement of energy efficiency and decrease in waste creation and pollutions are part of the green economy (Stosic and Brnjas 2014). Greening the economy refers to "the process of reconfiguring businesses and infrastructure to deliver better returns on natural, human and economic capital investments, while at the same time reducing greenhouse gas emissions, extracting and using less natural resources, creating less waste and reducing social disparities" (Maclean, Akoh and Egede-Nissen 2011).

SMEs can participate in green enterprise development in the following areas of the service sector: renewable energy production, smart metering, building refurbishment, cleaner cars, wind and solar installations.

9.1 Village and rural tourism

Economic development through village and rural tourism is a suitable green economic endeavour, as it uses natural resources while contributing to the protection of the environment. In Serbia, more than 300 households with approximately 2,500 beds are engaged in village and rural tourism (Hopić 2009, 9). Rural tourism in village households is still a new development in Serbia. Thus, it is not recognized as a significant tourist product, and consequently has no financial mechanisms for entrepreneurial ideas. However, this has not stopped some private entrepreneurs from investing their resources in this form of tourism.

Planning and management are necessary for the development of rural tourism. However, there is no advisory body to observe private entrepreneurial ideas in rural tourism and direct them. An advisory body for SMEs in rural tourism would provide a realistic assessment of entrepreneurial possibilities, consider factors overlooked by entrepreneurs, and consider the needs of the customers using these tourist services. The lack of an advisory body did not stop financially well-off entrepreneurs and foreign investors from quickly reacting to the market demand for rural tourism. These well-off investors have clearly defined requirements that must be met before they invest. Some of their requirements include: a clear legal property situation, adequate access to main roads and local streets, and good electric, sewage and water networks.

Serbia has great potential in rural tourism as nearly 80% of the country is rural (Todorović and Bjeljac 2007, 135-148). Through use of the right managerial tools, this entrepreneurial idea can yield substantial financial inflows. An example of the successful application of the rural tourism concept in Serbia can be found in the 25 villages of Rudnik-Takovo area, where 80 village households with 275 rooms and an income of EUR 230,000 were registered in 2014. We can most definitely define these households as microenterprises (Živković 2015, 570-574). This form of tourism shows the practical application of green economy principles.

9.2 Green business development in rural areas

Farmers in Serbia have fared poorly for decades. While a few individuals were able to boast of good material well-being, most were on the verge of poverty. The low level of literacy and education of the population in rural areas, migration from rural to urban areas in search for better living conditions and a lack of funding have resulted in the Serbian agricultural sector lagging behind the European Union's. Radović-Marković (2010) defines rural entrepreneurship as entrepreneurial associations created by individuals and government systems through rural development policy emphasizing investment in rural entrepreneurship. These entrepreneurial associations aim to improve crucial economic, social, and other changes in the rural regions through rural entrepreneurship. Flower and decorative plant production offers great opportunities to new start-up businesses. Approximately 1,000-1,360 hectares in Serbia have been dedicated to the cultivation of flowers and decorative plants in the last six years. Most flower and decorative plant businesses are dominated by individual producers with nearly

90% of land; public sector flower and decorative plant businesses only occupies 10% of such land (Stosic and Brnjas 2014, 90). The demand for flowers and decorative plants is much higher than production, which is good news for the creation of start-up firms and jobs in this industry.

The development of rural entrepreneurship brings major benefits to the local community and society at large through the improvement of infrastructure in the rural areas, increasing the number of entrepreneurs and new businesses, producing more competent entrepreneurs who are knowledgeable and skilled in their businesses, growth and expansion of businesses through increased production and sales, creation of jobs for the local labour force, and economic benefits for the local community by way of tax payments (Radović-Marković 2012, 249-247).

10. A FEW SUGGESTIONS TO THE GOVERNMENT ON HOW IT SHOULD BETTER STEER SMEs TOWARDS THE GREEN ECONOMY

- Educate SMEs owners and management on the importance of sustainable development and the green economy.
- Increase funding for new start-ups built on the principles of sustainable development and the green economy.
- Provide incentives and benefits for the purchase and usage of environmentally friendly technologies.
- Improving the waste management system so as to introduce green economy principles and promote the circular economy in Serbia.

CONCLUSION

SMEs have a large part to play in green growth. Different countries deploy different strategies in transitioning towards the green economy. Regardless as to the strategy employed, the greening of SMEs is dependent on the overhauling of their production, technological and management practices into environmentally friendly ones.

The Serbian strategy for green growth is based on:

(1) Knowledge-based sustainability,

(2) Socio-economic conditions and perspectives, and

(3) Environment and natural resources.

The full participation of SMEs in Serbia's green growth efforts is central to the transformation ahead. Thus, green economy policies in the country should reflect long-term social, economic and environmental public

interests, with an emphasis on SME development, reduction of poverty and employment growth (Radović-Marković 2014b). In other words, green economy policies in Serbia must be supported by clear processes that integrate environmental, social, and economic goals with national strategies for the creation of social responsibility in the socio-economic sphere.

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3.11. SMEs AND GREEN ECONOMY IN TURKEY

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ABSTRACT
Turkey has been very successful in developing its energy consumption capacity in the last decade. For this reason, it is often recognized as one of the most important emerging markets in the world's energy sector. Turkey's importance in the world's energy scene is due to its strategic location, two decades of economic reform, and excellent economic development performance.

However, there are three major problems in the Turkish energy system. These are: (1) dependency on imported energy sources, (2) domination of energy consumption by fossil fuels, and (3) low energy efficiencies compared to other countries. Turkey has to develop and implement sound energy policies towards solving these problems if it is to continue to grow in the future.

The studies have shown that energy efficiencies are usually low in Turkey. Turkey's overall energy and energy utilization efficiencies were at 44.91% and 24.78% in 2000, with the projected values of 55.15% and 30.44% in 2020 respectively. It is believed that energy consumption will increase as long as the economy continues to grow in Turkey. By improving its energy savings, Turkey can meet its energy consumption challenges without interrupting its economic growth.

Therefore, increasing energy efficiency, the diversification of energy supply and resources, as well as the development of alternative energy resources should be prioritized in order to overcome the supply security problem. Turkey can facilitate economic growth by organizing its energy sector more effectively and efficiently.
A brief summation of energy in Turkey is as follows:

- Very high energy demand and very high energy investment requirements

- High energy import dependency
- High potential in renewable energy recourses
- High energy efficiency potential
- Geopolitical place of Turkey and its advantages

Turkey is estimated to have an energy saving potential of 30% in the building industry, 20% in the production industry, and 15% in the transportation industry. To exploit this potential and improve energy efficiency, the Energy Efficiency Law was adopted in 2007 and enacted by the Ministry of Energy and Natural Resources. The Energy Efficiency Law sets the rules for energy management in industry and large buildings, project support, energy efficiency consultancy companies, voluntary agreements, etc. It affects industry, power plants, transmission and distribution systems, buildings, services and transport. Enforced in 2009, the regulation on Increased Energy Efficiency in the Use of Energy Resources and Energy both authorized and certified universities, engineering organizations and energy consultancy companies to support energy efficiency projects in industry through voluntary agreements.

Based on the level of energy consumption in 2008, the Energy Strategy Plan has set a 20% primary energy intensity reduction target for 2023.

Even though Turkey has adopted green growth policies into its well-established regime, the state has insufficient capability to support them. In order to support these policies on the state level, a systematic coordinating scheme between the government and relevant institutions is needed. Moreover, SMEs must overcome the challenges of moving towards green growth. Even though SMES are the main driving force of the national economy in Turkey, they are in fundamentally disadvantageous positions. SMEs in Turkey have low value added and weak competitiveness due to their small-scale structure in the wider economic market.

Keywords: definition of SMEs in Turkey, legislation in environmental management, Turkish SME strategy and action plan
JEL Classification: L15, L26, Q56

TURKEY SME FACT SHEET

The regulation on SME definition came into force on 18 May 2006, and it was revised on 4 November 2012. According to that regulation, an SME is

an economic entity with less than 250 employees and an annual turnover or annual balance sheet not exceeding TRY 40 million. As with the EU SME definition, the enterprise has to meet the staff headcount thresholds, but it can choose to meet either the turnover or balance sheet ceiling. The employment criterion conforms to the EU SME definition.

1. SME Definition of Turkey

As in the EU SME definition, the Turkish SME definition distinguishes between micro, small and medium-sized enterprises on the basis of balance sheet, employment and turnover. This single SME definition is used by all governmental bodies in Turkey. The characteristics of micro, small and medium sized enterprises are illustrated in Table 1.

Table 1. Characteristics of SMEs in Turkey

Size	Employees	Annual Turnover	Annual Balance Sheet
Micro	< 10	≤ 1 Million TL	≤ 1 Million TL
Small	< 50	≤ 8 Million TL	≤ 8 Million TL
Medium-sized	< 250	≤ 40 Million TL	≤ 40 Million TL

As in other developed or developing countries, SMEs are the backbone of the Turkish economy. Their share in national economy can be tracked in various studies by the Turkish Statistical Institute (TURKSTAT). According to TURKSTAT:

- SMEs constituted 99.8% of total number of enterprises in 2014.
- SMEs contributed to 74.2% of employment in 2013.
- SMEs contributed to 54.7% of wages and salaries in 2013.
- SMEs contributed to 63.8% of turnover in 2013.
- SMEs contributed to 52.8% of value added at factor cost in 2013.
- SMEs contributed to 53.3% of gross investment in tangible goods in 2013.
- SMEs contributed to 56.4% of exports in 2014.
- SMEs contributed to 37.8% of imports in 2014.
- SMEs put in 17.4% of total research and development (R&D) expenditure in 2014.
- SMEs share in R&D expenditure within the business enterprise sector was 34.9% in 2014.
- 26.5% of total full time R&D personnel were employed in SMEs in 2014.

- 92.2% of SMEs used the internet in 2015.
- 81% of SMEs used the internet for interaction with public authorities in 2014.

A sectoral distribution of Turkish SMEs according to TURKSTAT's business registers is illustrated below in Table 2. Table 2 shows that there were 3,525,431 enterprises in Turkey in 2014; of which 93.7% were microenterprises, 5.3% were small enterprises and 0.9% were medium-sized enterprises. More than one-third of Turkish SMEs operate in the trade sector (34.8%), and 12.1% of SMEs operated in the manufacturing sector.

Table 2. Distribution of SMEs in Turkey by Sector (2014)

Sector	0-9 Employee	10-49 Employee	50-249 Employee	> 250 Employee	TOTAL
A- Agriculture, forestry and fishing	28.675	1.245	133	13	30.066
B- Mining and quarrying	5.970	1.358	351	61	7.740
C- Manufacturing	371.009	44.392	10.191	1.992	427.584
D- Electricity, gas, steam and air conditioning supply	5.263	474	154	64	5.955
E- Water supply; sewerage, waste management and remediation activities; Service	3.852	450	151	97	4.550
F- Construction	226.427	33.687	5.404	562	266.080
G- Trade: Wholesale and retail trade; repair of motor vehicles and motorcycles	1.176.383	43.980	4.523	568	1.225.454
H- Transportation and storage,	528.220	11.344	1.527	259	541.350
I- Accommodation and food service activities	291.848	13.609	1.874	367	307.698
J- Information and communication	39.706	2.374	416	96	42.592

Sector	0-9 Employee	10-49 Employee	50-249 Employee	> 250 Employee	TOTAL
K- Financial and insurance activities	22.517	1.335	187	79	24.118
L- Real estate activities	52.658	1.482	166	18	54.324
M- Professional, scientific and technical activities	190.777	9.576	798	142	201.293
N- Administrative and support service activities	45.200	5.409	2.853	999	54.461
P- Education	22.224	6.653	995	315	30.187
Q- Human health and social work activities	38.590	3.834	1.137	489	44.050
R- Arts, entertainment and recreation	34.198	914	153	28	35.293
S- Other service activities	218.880	3.457	258	41	222.636
TOTAL	**3.302.397**	**185.573**	**31.271**	**6.190**	**3.525.431**
Share	**93,7%**	**5,3%**	**0,9%**	**0,2%**	**100,0%**

2. LEGISLATION ISSUES FOR SMEs RELATED TO ENVIRONMENTAL MANAGEMENT

- By-law on Waste Management
- By-law on the Control of Medical Waste
- By-Law on Mining Waste
- By-law on the Control of Packaging Waste
- By-law on the Control of Waste Oils
- By-law on the Control of Used Batteries And Accumulators
- By-law on the Control of Waste Vegetable Oils
- By-law on the Control of Excavated Earth, Construction and Demolition Waste
- By-law on the Control of polychlorinated biphenyls (PCBs) and polychlorinated terphenyls (PCTs)
- By-law on the Control of End-of-life Tyres
- By-Law on the Control of End-of-life Vehicles
- By-Law on the Control of Waste Electrical and Electronic Equipment
- Directive 2010/75/EU of the European Parliament and the Council on Industrial Emissions (IED), adopted on 24 November 2010, requires the establishment of an integrated permitting system. Turkey is currently conducting studies to harmonize its legislation with the IED. The IED will affect the permits of about 5,300 existing installations, including SMEs.
- By-Law on Industrial Air Pollution Control (O.G. 27277, dated 3 July 2009; revised O.G. 29211, dated 20 December 2014) defines the

procedures and principles of controlling air emissions. SMEs are included in the scope of the by-law.

- By-Law on the Control of Odour Emission (O.G. 28712, dated 19 July 2013) requires the control and decrease of odour emission caused by industrial facilities, including SMEs.

3. CHARACTERISTICS AND BEHAVIOUR OF SMEs MEETING ENVIRONMENTAL RELATED REQUIREMENTS

In order to close material loops and sustain a circular economy, waste policies leading to resource efficiency through recycling and industrial symbiosis are needed.

The new By-Law on Waste Management defines and legally introduces the concepts of reuse of waste, by-products and extended producer responsibility. In so doing, the by-law promotes the production and use of products derived from waste. Recycling, reuse and recovery of waste are emphasized in relevant policies, with an eye to reducing natural resource use and decreasing import dependency of raw materials. Recycling scrap metal (iron and steel) and special waste groups (waste oils, waste tyres, waste accumulators and packaging waste) are specifically highlighted by the National Recycling Strategy and Action Plan for the sake of both the environment and the economy.

Industrial symbiosis, on the other hand, has been promoted by the Draft Small and Medium Enterprises (SME) Strategy and Action Plan (2015–2018) and the National Recycling Strategy and Action Plan (2014–2017). These two strategies and action plans ensure wastes or by-products of an industrial facility or company become the raw materials of another. This promotes material and energy exchange. Increasing resource efficiency, adding value to waste and reducing costs are strategically targeted through industrial symbiosis policies and their implementation. In addition to these documents, the implementation of industrial symbiosis studies is promoted and disseminated in the Draft Productivity Strategy and Action Plan (2015–2018).

4. SHARE OF SMEs IN APPLYING ISO 9001, ISO 14001 AND ISO 50001 QUALITY MANAGEMENT SYSTEMS

Statistics on the implementation of ISO standards among SMEs is scarce. When companies export or sell their goods to government departments,

they need ISO certificates. Medium-sized companies usually have ISO 9001 certificates. While the ISO 14001 Management System is uncommon among SMEs, Turkish SMEs with ISO 14001 certification are likely to perform better in environmental processes due to the positive impact of disposal, design and environmental management systems. Manufacturing SMEs that are business partners of, or in the production chain of big companies should improve their environmental performance. Turkish textile, goods and machinery companies working with international companies have ISO 14001 certification.

ISO 50001 is very new in both Turkey and the EU. Almost no Turkish SME has ISO 50001 certification because the establishment of an energy management system is not compulsory for SMEs. However, ISO 50001 certification is compulsory for industrial companies with annual energy consumption exceeding 1,000 tonne of oil equivalent (toe).
The Republic of Turkey Small and Medium Enterprises Development Organization (KOSGEB) is currently sponsoring 50% of all SME certification expenses.

5. OBSTACLES FACED BY SMEs IN RELATION TO ENVIRONMENTAL ISSUES AND HOW TO OVERCOME THEM

SMEs usually have very limited resources to focus on measures for environmental sustainability. They also lack knowledge on the benefits of environmental measures. They need training and education to address this, as well as access to specialist information. Key contextual factors influencing the provision of environmental sustainability advice include the industrial sector, relevant local and national legislation and regulations, and the economic climate. In other words, SMEs need education and information programmes, legislation, as well as technical and financial support to successfully implement measures for environmental sustainability.

6. GOVERNMENTAL POLICY TO SUPPORT SMEs TOWARDS THE GREEN ECONOMY

Reduction of waste is the government's priority in the country's transition towards the green economy. Where waste reduction is not possible, the recovery of waste is the next best alternative. These two principles are enshrined in government legislation to promote sustainable development. As a last resort, waste that cannot be recovered should be disposed in a way that does not damage the environment and human health.

The amount of solid waste is increasing due to developments in public lifestyles and population growth. The solid wastes discharged to nature have begun to threaten the environment and the health of living things. Therefore, integrated waste management policies are needed to reduce and control the amount of solid wastes at their source. Solid waste should be handled in an integrated system because it has sizeable environmental risks. Both the EU Directives and national legislations recommend an integrated system for the recycling and reuse of waste. Integrated solid waste management consists of source reduction, reuse, recycling, composting, incineration and storage so as to reduce the negative impact of waste on the environment.

7. HOW CAN SMEs BECOME SUSTAINABLE AND GREEN?

More action is needed to underpin this trend in resource efficiency. Stronger policies on energy, material resources, waste management, sustainable development and green economy are needed.

8. RECOMMENDATIONS TO THE TURKISH GOVERNMENT ON HOW TO BETTER STEER SMEs TOWARDS THE GREEN ECONOMY

The Turkish government should implement a dedicated circular economy strategy capable of creating a production and consumption system that generates little waste and keeps materials in use for as long as possible. The adoption of a circular economy strategy would enable the country to move away from the current linear economic model and close material loops. Policy initiatives related to the circular economy should go beyond increasing recycling rates by focusing on waste management and promoting increased use of secondary raw materials.

3.12. STRATEGY OF DEVELOPMENT OF SMALL AND MEDIUM-SIZED BUSINESSES IN UKRAINE FOR THE PERIOD UNTIL 2020

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GENERAL OVERVIEW

The Small Business Act for Europe (SBA) and the immediate priorities of the Strategy for Sustainable Development "Ukraine 2020" lay out the significance of small and medium enterprises (SMEs) for economic growth. Ukrainian state policy regards the comprehensive use of SME capacities as both economic and social objectives that will increase the share of innovative commodities and lead to the creation of new jobs.

The SME sector makes up the largest number of registered legal entities in Ukraine, and it contributes sizeably to employment and sales. In 2014, SMEs accounted for more than 99.9% of the 1.93 million registered businesses in Ukraine (excluding the banking sector, budget institutions and legal entities of the temporarily occupied territory of the Autonomous Republic of Crimea and Sevastopol as well as part of the anti-terrorist operation zone). Of these, 16.6 thousand were medium-sized businesses (0.9% of all business entities); 1.9 million were microenterprises, small enterprises and private entrepreneurs (99.1% of all registered legal entities); and 497 were large enterprises.

The SME sector plays a significant role in the Ukrainian labour market. In total, SMEs employ 6.9 million of the working age population (including 2.5 million self-employed individuals), accounting for 78.2% of total number of employed persons in business entities, or 40% of the employed persons making up the total working population. SMEs also generated 60.9% of sales in goods and services, out of which UAH 1,735.9 billion were by medium enterprises (38.9% of total sales) and UAH 981.3 billion were by micro and small enterprises (22% of total sales).

Updates to policies promoting SME development should take the Small Business Act for Europe (SBA) into account and commit to the following:

1. Create conditions for the development and prosperity of SMEs.

2. Provide a "second chance" opportunity to an entrepreneur who had complied with all regulations but is presently bankrupt.
3. Develop regulations based on the "think small first" principle.
4. Orientate public authorities to the needs of SMEs.
5. Improve SMEs' access to public procurement and state support.
6. Improve SMEs' access to finance, and support the establishment of legal and business systems of timely payments in the commercial sphere.
7. Assist SMEs in such a way that they may benefit from the opportunities gained through access to the European market.
8. Support the development of skills and capacities of SMEs in innovations.
9. Support SMEs in turning environmental challenges into economic opportunities.
10. Encourage and support SMEs in their growth in external markets.

The Strategy of Small and Medium Business Development in Ukraine until 2020 (hereinafter, the Strategy) was developed to serve the above objectives. At the same time, the government hopes the Strategy would encourage the regional areas to create their own regional programmes for SME development. It is envisioned that these regional SME development programmes would apply the cluster-based approach, which takes into account regional aspects and development priorities.
The Strategy aims to solve the problems that restrain the development of the SME sector and create the conditions for SMEs to fully unleash their potential.

PROBLEMS REQUIRING SOLUTIONS

Problems related to SMEs can be divided into three groups, according to their current state of development. These three groups of problems are listed below.
1. Unfavourable conditions for the operation of SMEs:

- Entrepreneurship has no broad public support.
- Inefficient regulation of business environment.
- Weak protection of property rights and competition.
- Limited access to financial, property and natural resources.
- Limited access to foreign markets.
- Insufficient support infrastructure.
- Absence of a system for entrepreneurial competence and skills development.

2. Low state capacity, which impedes the efficient formulation and implementation of SME development policy, resulting in:

- Undeveloped public institutions of SME support at national and local levels.
- Inadequate government responses to the needs of SMEs.
- Incompleteness of methodological and statistical tools for SME sector analysis.
- Limited access to participation in public procurement.

3. The problems of the SME sector are due to:

- Low competitive capacities of SMEs.
- A large share of SMEs producing commodities with low value added.
- High level of "shadow" entrepreneurship.

To resolve these three groups of problems, state authorities at all levels must coordinate their efforts to include the involvement of business associations and international technical assistance programmes.

GOAL OF THE STRATEGY OF SMALL AND MEDIUM BUSINESS DEVELOPMENT IN UKRAINE UNTIL 2020

The main goal of the Strategy is to create an enabling environment for business that will unleash the potential of the SME sector and ensure the sustainable economic and social development of Ukraine.

STRATEGY OBJECTIVES

The Strategy should facilitate the achievement of the three objectives listed below.

1. Creating the best conditions for businesses:

- Positioning of entrepreneurship as the basis for economic development of Ukrainian society.
- Promote entrepreneurship and economic development through implementation of deregulation reforms.
- Creating a competitive environment with equal opportunities for all market participants.
- Ensuring SME access to financial, property and natural resources.
- Elimination of barriers preventing the entrance of SMEs to the external markets.

2. Capacity building of public institutions to efficiently formulate and im-

plement SME development policy through:

- Creation of SME support infrastructure.
- Ensuring lifelong learning opportunities are accessible to entrepreneurs.
- Integrating the inculcation of entrepreneurial skills into educational programmes.
- Ensuring constructive dialogue between public bodies and SMEs.
- Ensuring SMEs have broad access to public procurement.
- Improving public authorities' statistical and analytical knowledge of the SME sector.

3. Development of the SME sector should:

- Improve the competitiveness of Ukrainian SMEs.
- Increase the value added generated by Ukrainian SMEs.

MAIN STAGES AND DIRECTIONS OF STRATEGY IMPLEMENTATION

There are three stages in implementing the Strategy. These are: (I) creating favourable conditions for doing business, (II) building up state institutional capacity so that it is strong enough to support SMEs development, and (III) implementing entrepreneurship support programmes. Each of these stages will be discussed in detail below.

I. Creating favourable conditions for doing business

The implementation of a transparent and coherent regulatory framework would ensure the creation of an efficient and comfortable business environment.

Current legislation regulating economic activity is largely outdated, inefficient and redundant due to duplication. The regulatory framework needs to be reviewed; outdated legislation needs to be abolished; and redundant and inefficient laws should be replaced. The new legislation should take an alternative approach to regulation that does not place unnecessary burdens on businesses.

To prevent new regulations from putting additional burdens on entrepreneurial activity, checks must be done to ensure they are economically reasonable and do not duplicate another legislation already in place. New legislation should also be simplified to promote and improve regulation efficiency.

Deregulation is a priority reform for the state, as it realizes the pitfalls of its current economic legislation. There are 3 components in deregulation, namely:

1. Abolition of redundant, obsolete and excessive (duplicating) regulations, cancellation or transfer of inefficient, non-relevant functions of the State to the private sector.

Implementation of these reforms will be carried out through:

a. The establishment and implementation of annual government action plans focused primarily on the activities of SMEs and aimed at reducing their costs by use telecommunications, de-monopolization of state functions, and facilitating access of SMEs to markets of goods and services.

b. The systematic review of the legal framework to render it relevant, efficient and compliant with the provisions with European legislation. This should be followed by the elaboration of relevant proposals, especially with regard to the abolition or modification of current regulations.

Taking into account the scope of the task and the functional constraints of public authorities, the above mentioned reviews of the regulatory framework should be delegated to independent non-governmental organizations (NGOs) working together with the government, businesses and civil society. The Ukrainian government has taken a step in this direction by setting up the Better Regulation Delivery Office (BRDO) under the auspices of the Ministry of Economic Development and Trade and international donors. BRDO aims to speed up the reform process in Ukraine by providing operational expert reviews of the regulatory acts affecting business areas, identifying regulations requiring abolition or amendments, and drafting the appropriate amendments.

2. Introduction of control so that new barriers to business are not created.

To ensure that state regulation of businesses (including SMEs) is effective and fair, each new legal initiative on the regulation of business activities should be quantitatively analyzed to determine their consequences on enterprises when implemented. The initiators of new regulations should calculate the costs and benefits their proposed regulatory initiative would have on businesses, and submit them for public discussion. CMU regulation No.1151 requires the M-test to be performed on regulatory policy, thereby making it compulsory to calculate the additional costs for businesses vis-à-vis the enforcement of each new governmental regulation.

It would also be expedient to use the "one-in-two-out" principle to eliminate one or more administrative barriers to doing business as they are replaced by newer, more encompassing and efficient legal acts meeting EU legislative requirements. This would simplify the business regulatory framework in the country and prevent complications resulting from duplicating legislation.

3. Introduction of best international practices.
To build up an efficient entrepreneurship system, it is important to create a predictable and efficient regulatory framework that takes into account the real balanced social and economic needs of businesses in the functional abilities of the state.

To ensure that the new regulations are efficient, international indicators from the World Bank's Doing Business reports (hereinafter, the Ranking), which determines ease of doing business in 189 countries, should be consulted.

Raising Ukraine's position in the Ranking will validate the quality of the country's business regulations enhancing business activity, and increase the investment attractiveness of Ukraine. Therefore, raising Ukraine's position in the Ranking will facilitate the introduction of new technologies, creation of new jobs, and improve the country's competitiveness in the global market.

A country's position in the Ranking is determined by its performance in criteria such as ease of starting a new business, obtaining a construction permit, registering of property, access to loans, investors' rights protection, paying taxes, legal protection of contracts and so on.

The government of Ukraine can achieve the goal of improving Ukraine's position in the Ranking through the implementation of a number of tasks approved by the central authorities.

II. Building up State institutional capacity so that it is strong enough to support SME development
Strong state institutional capacity is needed if it is to have an efficient support system for SME development. To bolster state institutional capacity for this purpose, the SME development support system should consist of:

- Central authorities, services and agencies that will develop and im-

prove legislation on SMEs; provide a comprehensive allocation of responsibilities in promoting SME development among different authorities; create and coordinate networks of SME support institutions at the regional level.

- Local authorities that will determine local development priorities, formulate and implement regional programmes of entrepreneurship support, facilitate the creation of infrastructure of SME support, optimize procedures and cost reduction for administrative services.
- International and national business associations that will support the smooth operation and expansion in the number of enterprises who are members, raise awareness among authorities on the problems and needs of SMEs, provide feedback and impact assessment of acting or emerging regulations on SMEs to the authorities, host dialogues on policy efficiency and the implementation of decisions taken.
- International organizations and technical assistance projects that will fund and implement projects and assistance programmes.

During the implementation of the second phase, the most important activities are:

- Creation of an Agency for SMEs:

State policy in the development and support of SMEs has to be formulated and controlled by the Ukrainian Ministry of Economic Development and Trade. The Agency for Entrepreneurship Development is a specially authorized body in the field of small and medium business entrepreneurship that implements state policy.

The Agency for Entrepreneurship Development provides and organizes:

- Advisory services
- Collection of information on the export markets and providing it to SMEs
- Business planning assistance for SMEs
- Assistance in collaborations with international donors and financial institutions
- Identification of possible ways of financing
- Support in marketing on the export markets
- Support for businesses adapting to DCFTA requirements
- Development of business associations

- Building a network of regional entrepreneurship support centres:

The creation of new support centres and improving the quality of services provided in established SME support infrastructure in accordance to international best practices is one of the best ways of promoting entrepreneurship to the population. These new and existing support centres should provide entrepreneurs with professional and qualified assistance.

The creation of Regional Business Support Centres (BSCs) in all regions of Ukraine is part of the EU Support to Ukraine to Re-launch the Economy (EU SURE) programme. These BSCs will conduct trainings on starting and doing business, assess the entrepreneurial skills of existing and potential entrepreneurs, and organize and provide advisory services to SMEs in various areas of business activities.

- Creation of the Office for the newest technologies:

The development of innovating infrastructure can be enhanced through the establishment of the Office for the newest technologies. This proposed Office will serve as the main coordinator and intermediary for the creation of innovative systems that will encourage financial and loan institutions to provide related funding.

- Creation of a network infrastructure for business activity:

To improve the business environment and increase investment attractiveness, a network of specially equipped areas and sites for entrepreneurial activity should be created. Some examples of these specialized sites for entrepreneurial activity are:

- Industrial parks for SMEs that have all the necessary conditions for the fast launch of business start-ups in manufacturing, logistics and services.
- Entrepreneurial labs serving as local small sites for microenterprises in the service and information technology sectors.

  Such a network infrastructure for business activity is an important tool for the expansion of the cluster approach, which would help SME development at the regional level. Creation of support programmes for clusters (which are concentrations of a large number of related companies producing similar or related commodities or services in one place) should become the institutional component of an efficient regional policy for SME development.

- Creation of a unified information resource for entrepreneurs:

Establishment and operation of a common information internet resource

for existing and potential entrepreneurs would go a long way into building an effective system where practical business knowledge, skills and useful information are provided.

- Improvement in the system of statistical accounting of SME activities:

New statistical indicators and analytical methods better representing the state and status of SME development should be introduced and used to carry out the statistical accounting of SMEs.

- Aligning the legislation on SMEs:

There has to be a coherent and more efficient state policy on SMEs to remedy the existing disparity in tax and economic legislation arising from the classification of enterprises according to number of employees and revenue.

III. Implementation of entrepreneurship support programmes

Entrepreneurship development and promotion:

- Teaching of entrepreneurial skills and laying the foundations for entrepreneurial culture should be included to the educational curriculum for the whole of Ukraine. To do this, the Ukrainian Ministry of Education and Science should appoint an authorized person to be in charge of the creation and operation of an effective system that will inculcate entrepreneurial skills and develop business competencies.
- Lifelong learning should be offered for the duration of the programme for SMEs. This would enable them to improve their organizational management during times of financial crisis, implement structural changes by enacting changes in their manufacturing processes, develop new products, further professional development, and improve strategic management and decision-making skills.
- Market development and improved access to professional advisory services such as the provision of market information, promotion and improvement of the manufacturing process, improvement and implementation of quality management systems, technology, management, accounting, leadership, etc;
- Conduct seminars for SMEs on a regular basis so that entrepreneurs are kept up-to-date on the available support opportunities. Regular workshops should also be conducted for potential entrepreneurs so that members of the working population would be encouraged to undertake entrepreneurial activities.
- Promote entrepreneurship among disadvantaged social groups such

as internally displaced persons, women, etc. Through continuous monitoring of the most vulnerable social groups and developing their capacity, factors limiting their growth, education and financial situations can be identified and eliminated.

- Giving a second chance to SMEs that experienced bankruptcy would show a positive attitude towards personal and entrepreneurial growth. Campaigns to provide bankrupt entrepreneurs a second chance at business should be held. Likewise, seminars raising the self-awareness, managerial skills and business efficiency abilities of bankrupt entrepreneurs should be conducted. Provisions in bankruptcy laws should also be improved so that bankrupt entrepreneurs can have a second chance at business.
- SME innovation should be supported through participation in international innovation programmes of innovation, including Horizon 2020.

Access to finance:

- Improve entrepreneurs' access to finance by developing loan guarantee schemes through an independent and reliable loan guarantee fund that will provide targeted assistance to existing SMEs with reliable business plans.
- Cooperate with commercial banks to develop mechanisms that will guarantee provision of credit to SMEs.
- Improve the legal regulation of transactions with credit guarantees, and develop optimal and transparent rules regarding the selection of candidates receiving the guarantees.
- Develop and support the introduction of special loan and financial schemes (such as venture capital, guarantee funds, etc.) that will stimulate and promote private sector capital as a source of funding for SMEs.
- Create a loan guarantee fund under the EU Support to Ukraine to Relaunch the Economy (EU SURE) programme.
- Encourage more active use of leasing services by creating a favourable legislative framework that develops the mechanism of subleasing, extends lease structures, develops guarantee systems, and reduces the cost of leasing so as to minimize the financial burden on lease applicants.
- Enhanced access to loan programme through the transformation of international borrowing into loans for SMEs. This would allow SMEs to invest in new technical or technological solutions, purchase machin-

ery and equipment, expand their enterprise and/or production, and adapt and modernize their manufacturing, commercial and/or service facilities.

- Facilitate start-ups' access to international development programmes of finance.
- Encourage the issuance of loans to export-oriented SMEs.
- Promote non-bank forms of SME financing such as credit unions, crowdfunding institutions and the stock market.
- Adapt tender conditions in public procurement to ensure broader participation of SMEs.
- Support the introduction of International Financial Reporting Standards for SMEs.
- Develop financial education tools for micro and small enterprises to ensure broader application of existing instruments and market opportunities.

Access to foreign markets:

- Ensure Ukraine's participation in the EU programme for Competitiveness of Enterprises and Small and Medium-sized Enterprises (COSME). This would maximize the opportunities for Ukrainian businesses to develop mechanisms for finding international partners in the Enterprise Europe Network (EEN).
- Complex use of all programme components when adapting to the free trade area with the European Union.
- Use the national network of institutions to encourage awareness of the system of technical regulation
- Simplifying certification procedures for Ukrainian SMEs.
- Develop and implement financial support for exports through credit, insurance and guarantees.
- Create specialized institutions to provide financial support to SMEs entering the global markets. Export credit agencies (ECAs) and export insurance agencies (EIAs) are two examples of specialized institutions providing financial support to SMEs.
- Export credit agencies (ECAs) would be able to financially assist SMEs by providing pre-export loans, short-term credit to domestic importers, and medium and long-term credit to foreign importers, project financing and financial services.
- Export insurance agencies (EIAs) would be able to financially assist SMEs by providing insurance, reinsurance and banking guarantees.
- Promote the internationalization of companies by identifying invest-

ment opportunities in emerging markets, training SMEs' readiness for investment, encouraging SME participation in national and international exhibitions, and promoting their services in the field of international marketing and trade.
- Facilitate the participation of Ukrainian SMEs in international public procurement under the WTO Agreement on Government Procurement.

DEVELOPMENT OF THE GREEN ECONOMY
- Develop and implement a national strategy for waste management to create a circular economy market that is open to SMEs.
- Support the development of ecotourism and alternative energy.
- Raising awareness on environmental standards and the principles of environmental management.
- Promote the establishment of environmental and bioproduct production.
- Implement energy efficiency measures.
- Provide information and support to SMEs on Ukrainian and European environmental requirements and legislation,
- Create access to international funds for financing of environmentally oriented economic projects.
- Encourage the creation of ecological incentives for private sector financial companies.

Organizational support and monitoring of the Strategy's implementation

The Ukrainian Ministry for Economic Development and Trade annually submits proposals to the Cabinet of Ministers of Ukraine to ensure the effective implementation of the Strategy.

The Strategy is implemented in accordance to the competencies of the Ministry for Economic Development and Trade as well as other central and local authorities, NGOs, business associations and international organizations.

An annual report on the state of SME development and the implementation of the Strategy is prepared, published and submitted annually to the government.

Currently, the Ukrainian Ministry of Economic Development coordinates and monitors the implementation of the Strategy. When the Agency for

Small and Medium Entrepreneurship is finally established, it will take over the implementation of the Strategy.

Expected results

The expected results of the Strategy are:

- Entrepreneurship is enshrined as the basis of economic growth.
- Efficient regulation of the business environment at all stages of SME activity.
- Growth of competitiveness in the internal market;
- SMEs will have broad access to the necessary financial, property and natural resources.
- Increased number of SMEs successfully competing in the global market.
- SMEs will have broad access to all necessary infrastructure needed for their development.
- Developed entrepreneurial competence in society will lead to prosperity and enrich small businesses.
- The state has actively and efficiently implemented government policies related to SME development.
- Increased SME participation in the formulation of efficient state policies.
- SME development policy is based on quantitative indicators.
- SME support institutions have been created and are successfully functioning.
- SMEs will compete successfully in the market of public procurement.
- SMEs will compete successfully in domestic and foreign markets.
- The value added generated by SMEs will increase.
- The number of people officially employed by SMEs will increase.

The criteria determining the Strategy's success are as follows:

- Ukraine is among the top 30 countries in the World Bank's "Doing Business" ranking.
- Over 40% of SMEs are benefiting from credit funds by 2020.
- The number of SMEs in export has increased by 30% in 2020.
- Over 20% of businesses in Ukraine are innovative enterprises by 2020.
- A 55% increase in the growth of market share with competitive structure in 2020.
- SMEs' share in total sales has increased by 5% by 2020.
- Reduction of employment in the informal sector from 4.5 million people to 3.0 million people by 2020.

4. BEST PRACTICE STUDIES IN UKRAINE

4.1 PRODUCTION OF PAINTS AND ECOLOGICAL SAFETY – IS THE COMPROMISE POSSIBLE?

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ABSTRACT
The private entrepreneur Oleynikov A.V. is a family company producing and selling paints. It is one of the most progressive companies in Ukraine.

Our qualified staff enables us to have a system of production that controls the quality of the products and raw materials, thereby satisfying the requirements of our customers. Apart from the main issues of production and sales, our company pays great attention to environmental protection.

We are an environmentally friendly company and it shows in all of our activities from the development of the formulations, to the selection of the safest raw materials, and to the production of paints.

We also promote a healthy lifestyle and respectful attitude towards natural resources. In this regard, we have developed our own training programme for sales agents, students of professional schools and other interested individuals. Additionally, we hold seminars on the importance of preserving the environment. The training programmes and seminars are held on our company grounds.

Our dedication to preserving the natural environment for future generations has enabled us to look confidently into the eyes of our compatriots.

Keywords: environmentally friendly paint production, Global Ecolabelling Network (GEN), Dniprodzerzhynsk
JEL Classification: O31, Q55, Q56

A) INTRODUCTION

My name is Inessa Oleynykova and I would like to tell you about our family company. Our participation in this workshop is very meaningful to us, and

I will try to explain why. Our company produces paint, making us part of the chemical industry.

Although it may seem like we accidentally stumbled into a conference devoted to the environment and the green economy, our company's dedication to environmental preservation precludes that possibility. Our company is an ecologically friendly full participant of the green economy.

2016 marks our twentieth year of operation. Our company, which is really a family business operating under the private entrepreneur Oleynikov A.V., has a united team of great professionals. We are bound together by common goals, interests, a high level of civil liability and healthy ambitions. Our company is a modern paint producing plant. Our qualified staff enables us to have a system of production that controls the quality of the products and raw materials, thereby satisfying the requirements of our customers.

We are a company deeply committed to the protection of human health and the environment. It is widely known that paints and varnishes release chemical components into the environment when used. Their production is also associated with the release chemical components into the environment. Some of these chemicals destroy our bodies when they get into our skin and respiratory system; other chemicals seep into the soil and dissolve in rivers and lakes, causing irreparable damage to nature.

Sadly, we cannot live without paints and varnishes. People enjoy using paint to beautify their surroundings, but this paint could damage their health and harm the environment. As people begin to realize this, the issue of environmental protection grows increasingly important.

Unfortunately, the Ukrainian government's attitude towards environmentally safe methods of production differs from European countries. European countries have had special environmental protection programmes in place for a long time – programmes that motivate manufacturers to produce safe products and implement environmental projects. There are tax emption schemes for environmentally friendly companies in Europe, as well as ecological taxes for companies with activities that adversely impact the environment. The governments of the European countries and the many public organizations there also ensure that environmental legislation is strictly observed.

B) ENVIRONMENTAL POLICY OF THE PRIVATE ENTREPRENEUR OLEYNIKOV A.V.

Our mindfulness towards human health and natural resources has shaped the environmental policy governing our production process. Our environmental policy covers all our activities from the development of the formulations, to the selection of the safest raw materials, and to the production of paints.

The basic principles of our environmental policy are as follows:

- Use of modern production and environmental protection equipment as well as advanced technologies
- Mindfulness of energy use and natural resources
- Meeting European requirements in the safety of our coatings
- Replacing and eliminating the dangerous components from our paint formulations
- Producing high quality materials with long-term cover
- Control and check of products in independent laboratories
- Maintaining our ecolabel from the Global Ecolabelling Network (GEN)
- Ensuring that our products do not harm the health of our master finishers
- Making sure our products meet sanitary and epidemiologic standards
- Membership in the Ukrainian Paint and Coatings Association (AUP) and Technical Committee on Standardization of Ukraine
- Educate others on topics related to the production and use of safe materials

Let us now examine the application of our environmental principles in our production process.

B.1) USING MODERN PRODUCTION AND ENVIRONMENTAL PROTECTION EQUIPMENT AS WELL AS ADVANCED TECHNOLOGIES

In 2010, we built a plant in Dniprodzerzhynsk where we started a workshop for our water-dispersed materials. In 2015, we added a workshop for organic paints and varnishes.

We maintain high standards in our technological process, culture of production, arrangement of territory, and cleaning of industrial areas.

Through use of modern equipment as our own engineering and laboratory research, we have escaped small-tonnage production that requires more manual labour. We use special software to carry out process control.

Environmental protection equipment

Unlike other Ukrainian paint manufacturers, we do not use drinking water for production. Instead, we draw water from the river and use the special water treatment system in our plant to purify it to the molecular level by passing it through special filters operating on reverse osmosis.

Our production zones are equipped with ventilation systems that use Donaldson air filtration technology. Thus, we are able to purify the air from dust and impurities before releasing it into the atmosphere.

The use of closed tank equipment allows our company to maintain safe environmental conditions. We use an automated water heating system, specifically, high efficiency boilers from Buderus to heat household and industrial areas.

These equipments have resulted in the stability of our quality parameters. They also enable us to save energy resources.

Mindfulness towards energy and natural resources

Our personnel work in clean conditions. For this, we have washing machines and vacuum cleaners in our plant. We maintain cleanliness in the manufacturing area so that the health of our employees and fellow citizens do not suffer. Energy resources are also efficiently used in our plant in the following ways:

- Use of thermal insulation on facades of buildings, where we use our own special heat-paint and plaster for this purpose
- Use of industrial water in a closed cycle so that it is not dumped into waterways
- Use of heat generated by compressors and other industrial equipment
- Installation of dock shelters, which minimizes heat loss in the loading and unloading area
- Installation of roller shutter doors outside the plant and in production areas
- Use of motion sensors and energy saving lamps to save electricity
- Replacing windows in the production zone with modern double-glazed windows

Unfortunately, Ukrainian enterprises have to act alone when they introduce environmental safety programmes. The government does not issue incentives for such programmes, which inhibits their introduction. Busi-

nesses implementing environmental safety programme incur a lot of value added tax (VAT) from importing equipment and from non-returning VAT subsequently. The processes of registration and starting businesses are slow too. It took us a year to build the plant, and we waited 6 years for our business project to be approved and put into operation.

B.2) MEETING EUROPEAN REQUIREMENTS IN THE SAFETY OF COATINGS

The manufacture of alkyd enamels, primers and varnishes is not possible without organic solvents. Depending on the quality and purpose, solvents may contain carcinogens that can accumulate in the human body and cause incurable diseases. For economic reasons, manufacturers often use the cheapest and, therefore, most dangerous solvents. Spirit is the least dangerous of organic solvents. We would like to assure our audience today that we use high quality purified white spirit in the production of our organic paint materials.

Some of our products such as our varnish **SMILE WOOD PROTECT** and our alkyd **SMILE Premium Enamel** contain highly purified white spirit from Europe. The content of dangerous aromatic hydrocarbons (such as benzene, xylene and toluene) in highly purified European white spirit is ten thousand times lower than in Ukrainian white spirit of medium quality.

Thus, we are ahead of our time in Ukraine because we are guided by EU directives concerning the emissions of easily volatile organic compounds (VOC). Specifically, we adhere strictly to VOC Solvents Emissions Directive 1999/13/EC and the Directive on the Limitation of VOC Emissions in Decorative Paints and Varnishes 2004/42/EC. At present, these directives are not operational in Ukraine as a whole.

B.3) REPLACING AND ELIMINATING DANGEROUS COMPONENTS FROM OUR PAINT FORMULATIONS

Some pigments that give their colour to paints contain dangerous heavy metals such as zinc, chromium and lead. Such paints affect the body during the application and subsequent use in coatings. When used over time or in subsequent repairs/repaints, they continue to damage our bodies.

Children are especially vulnerable to this effect. The brain, nervous and circulatory systems suffer the most. For example, each year in the United

States, there are more than 250 thousand cases of children with mental development problems as a result of the harmful effects of lead in paints. Lead is also toxic to plants, animals and microorganisms.

The United Nations Environment Programme (UNEP) and the World Health Organization (WHO) established the Global Alliance to Eliminate Lead Paint in 2002 because of these dangers. The Global Alliance to Eliminate Lead Paint aims to phase out lead paint internationally by 2020.

Today, we can proudly declare that there are no such hazardous ingredients in our paints. Our leading specialists have found us a replacement and we have been able to exclude heavy metal pigments from our paint formulations.

We will not list all the paint components and their influence on the human body and nature. Let us now move on to the selection of raw materials.

Our company uses purer and more modern products that are less harmful to human health and the environment. Although these purer and more modern materials make our production process more expensive, the economical and ecological advantages outweigh the material costs.

B.4) PRODUCING HIGH QUALITY MATERIALS WITH LONG-TERM COVER

At our company, we understand the ecological benefits of being mindful towards natural resources and human health. We know the importance of producing materials that are high in quality and offer long-term coverage. The long life of our paint coating means that there would be less frequent repairing/repainting work in the future. It reduces the amount of construction waste, emission of harmful solvent vapours, the amount of recyclable packaging, and so on.

B.5) MAINTAINING OUR ECOLABEL FROM THE GLOBAL ECOLABELLING NETWORK (GEN)

The safety of our paints and varnishes is as important as their quality.

Living Planet, a Ukrainian public organization, has been active in the country since 2001.

Paint manufacturers may submit products meeting the international ISO 14024 standard voluntarily to Living Planet. This certification enables them to get the evaluation of independent experts who will assess their paints according to environmental criteria. The requirements of the standard are much higher than legally prescribed norms. Once a paint product meets these requirements, it is granted the "Green Crane" ecolabel. Consumers who see this "Green Crane" ecolabel will know that the paint product is environmentally safe.

85% of our company's range of water-dispersion products display this sign proudly.

We are the only company in Ukraine to produce a special series of child-safe paints called BABY SMILE. It was designed for finishing children's rooms. This is our own project. Any finishing work related to a child's room – paint for a baby's cot, room walls, window sills and radiators – can be safely decorated with BABY SMILE.

B.6) USE OF SAFE MATERIALS IN THE PRODUCTION PROCESS

Our company uses resources in ecologically friendly ways, as we believe in promoting environmental preservation. Our environmental label is used to demonstrate this. We also practice the following measures in our business:

1 **Ecolabelled Packaging.** All certified products carry the ecolabel sign. This label's placement is prominently prioritized after the name and brand of the product.
2 **Promotional materials** describe and explain the benefits of eco-marked products.
3 **Press.** We release comments, notes and articles on our participation in the environmental product certification system.
4 **Corporate magazine, SMILE Profi**. Our corporate magazine explains our production processes, and convinces readers of the need to produce and use environmentally friendly materials.
5 **Educational programmes** for managers, traders and craftsmen. For the last 10 years, the main specialists of our company have been holding seminars on the production methods we have used. These educational programmes garner an average of 500 participants each year.
6 **Training programmes** and seminars for students of professional technical colleges.

7 **Video recordings** of master classes. We have made more than 10 of them.

8 **Official website** hosting answers to frequently asked questions, as well as ecological and safety topics.

C) CONCLUSION

This presentation has shown you the holistic work of our company. We can look confidently into the eyes of our compatriots today because we can honestly say that we have done our best to preserve the natural environment for future generations. Let me end my report with this simple appeal:

Let us strive to do our best within our competence. Do it now! Do it today! Do not put the responsibility on the next person or your neighbour or anyone else. Do not wait for someone to create the necessary conditions for environmental preservation. Act on what's right for the environment so that we can be honest to ourselves and to our children!

4.2 SMEs' ACHIEVEMENT OF EXCELLENT QUALITY – BASIC REQUIREMENTS FOR THE GREEN ECONOMY

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ABSTRACT
Implementation of green economy concepts by SMEs is only part of the sustainable development solutions for the world's environmental and socio-economic problems. Other solutions could be one-off measures, or they could be locally applied to specific communities, or they could be in the form of regular and systematic efforts by individuals, governments and enterprises. Regular and systematic efforts by businesses moving towards the green economy result in the creation and use of up-to-date integrated management systems. Herein, the problems, experiences and opportunities for the improved development of quality management systems in Ukraine are explored.

Keywords: quality management system, excellent quality management, European Foundation for Quality Management (EFQM) model, Ukrainian excellent quality management SMEs
JEL Classification: L15, L26, M14

QUALITY MANAGEMENT REQUIREMENTS IN MEETING ENVIRONMENTAL CHALLENGES

Of the 10 principles of the UN Global Compact on Social Responsibility, 3 are on the environment:

- Businesses should support a precautionary approach to environmental challenges.
- Businesses should undertake initiatives to promote greater environmental responsibility.
- Businesses should encourage the development and diffusion of environmentally friendly technologies.

In recent decades, businesses all over the world have responded to emerging global economic challenges by adopting appropriate standards in their management systems, namely:

- ISO 9000 on quality management to remedy problems in the quality sphere.
- ISO 14000 on environmental management to attenuate environmental problems.
- ISO 50000 on energy management to mitigate problems related to energy use.

At this juncture, it should be noted that quality management systems enable businesses to regularly and systematically resolve their economic and environmental issues.

Due to inadequate understanding of international standards on target management systems in Ukraine, they are implemented mechanically and are not in concert with the enterprises' management systems. Therefore, these international standards and effective management systems have to be integrated with one another so much so the quality standards form an organic part of the business's management system. Only when this is achieved can a company's management system be effective in meeting the environmental and socio-economic challenges at large.

INTEGRATED QUALITY MANAGEMENT SYSTEMS

The inadequate understanding of international standards on target management systems in Ukraine stems from the education of specialists in universities. Standards on target management systems are studied in the module on "Quality, standardization and certification", which does not provide training on the basics of organizational management. As an upshot, graduating students do not have enough knowledge on management systems as a whole. Moreover, the module on "Management" only provides knowledge on management systems as a whole, without considering the impact of standards on target management systems. As a result, qualified managers are not sufficiently trained to work in a saturated and competitive market.

ISO 9000, ISO 14000, OHSAS 18000 and other similar standards define requirements not so much to target management systems than the enterprise or organization itself. It should be noted that successful international companies only have one complete, balanced management system for resolving task challenges and the achievement of all objectives. The decisions taken within the management system can simultaneously af-

fect the different goals of the company such as quality control, energy consumption, environment, costs, productivity, and so on. Therefore, an enterprise's management system must be able to consider each goal in connection with others.

When small and inexperienced businesses use target management systems based on standards, they often discover that they are not as effective or efficient as advanced companies using the same target systems. This is because advanced companies usually adhere to a significantly higher set of requirements than standards. The integrated management systems of advanced companies contain the target management systems, for which there are no standards. Thus, even if all Ukrainian companies use target management systems that meet international standard requirements, they will remain less effective and efficient than European companies. This is because the advanced European companies use management systems that operate on a much higher level than international standards. This phenomenon shows that international standards only establish the minimal norms acceptable for a particular market; they are not substitutes for a firm's own high ethical attitudes towards the environment and society at large.

What are the general international trends in the area of safety, quality and excellence in management? First of all, companies in countries that are on the lower levels of socio-economic maturity tend to focus on safety and quality of products. In contrast, companies in countries with high socio-economic maturity tend to focus on cost effective and resource efficient ways of improving organization and creating products. Companies in socio-economically mature societies practice excellent quality management such as taking care of all stakeholders, customers and the natural environment.

At the first level of socio-economic maturity, a company pays attention to the safety of its products. In the second level of socio-economic maturity, it emphasizes the quality of its products. At the third level of socio-economic maturity, local target management systems based on standards are used. At the fourth and highest level of socio-economic maturity, companies use advanced integrated management systems that are characterized by a pronounced social orientation and continuous improvement of all aspects of their activities. This allows them to be successful and to sustain their success. Careful study of such management systems allows researchers

and other enterprises to identify fundamental concepts of business excellence inherent to successful organizations.

CONCEPTS OF EXCELLENCE BY EFQM

The European Foundation for Quality Management (EFQM) is a leading organization in high quality excellent management systems. Its Concepts of Excellence are listed below:

- Leading with vision, inspiration and integrity
- Succeeding though the talent of people
- Adding value for customers
- Creating a sustainable future through the green economy
- Developing organizational capability
- Harnessing creativity and innovation
- Managing with agility
- Sustaining outstanding results

European organizations use these EFQM Concepts of Excellence as guidelines for their own business culture.

Both the UN Global Compact and the EFQM Concepts of Excellence focus on the promotion of the socially responsible companies that look after the needs of society, the environment, their customers and their personnel. As socially responsible companies, they are naturally focused on the development of the green economy as well.

As most companies aim to adhere to the principles of the UN Global Compact on Social Responsibility, meeting EFQM Concepts of Excellence are of secondary importance to them. However, the EFQM Concepts of Excellence set out the guidelines and tools through which companies, including SMEs, can grow into socially responsible ones.

One of these EFQM tools is the EFQM Excellence Model. It comprehensively lists the traits of an excellent company with good managerial organization. Five of its criteria deal with the organization/company and its management system. Four criteria examine the outcome of the firm's action such as the business results achieved and the way in which it looks after stakeholders. It also has a criterion assessing the company's satisfaction of society, which looks into its attitude towards the environment and the green economy.

The EFQM Excellence Model uses the 1000-point scale to quantitatively assess and trace a company's improvement dynamics.

The EFQM Model highlights the characteristics of the ideal business organization. Its methodology enables businesses to compare themselves with the ideal and tackle the aspects that require improvement. The EFQM Model sprang from the experience and vision of the most successful European organizations. It is mainly used by organizations seeking continuous improvement, rather than simple compliance with certain standards.

EXCELLENT QUALITY UKRAINIAN SMEs

In Ukraine, as well as in a number of other BSEC countries, the improvement process is carried out in three main ways:

- Study and use of good business practices (benchmarking);
- Use international standards to improve target management systems;
- Improve integrated management systems through the study and application of the EFQM Concepts and Model of Excellence.

These three approaches are interrelated and should be considered as organic parts of a single integrated management system. When the organization culture within the management system is formed according to the Concepts of Excellence and international standards for target management systems are applied, a company will have a perfect management system. In Ukraine, some SMEs have applied European management systems and organized themselves after the EFQM Excellence Model. These SMEs typically have good business practices. Some of these SMEs already exist in Ukraine. More than 50 Ukrainian companies were awarded with EFQM "Recognised for Excellence in Europe" certificates; 19 of whom received 5* star excellence ratings. 32 companies won the International Quality Tournament of the Central and Eastern European Countries; 14 walked away with prizes from this Tournament; and 2 companies became finalists of the EFQM Excellence Award in the SME category. Thus, Ukrainian SMEs are making good progress in the area of best practices.

The following SMEs use the EFQM Excellence Model.

- **LLC "UkrSKS" (50 employees), Kyiv.** This company's management of its production process, environmental resources and risks meets international standards. Measures on waste management are developed and managed under the UkrSKS Company Development Programme. Risks associated with the production process, environ-

ment and occupational safety are defined. The company has also designed registers to account for environmental aspects in its production process.

- **TN "Standartpark" (69 employees),** Kyiv. This enterprise comprehensively develops processes for effective drainage systems in Ukraine. As a small company, it is actively looking for opportunities to implement its global socially oriented mission.

Other Ukrainian organizations using the EFQM Excellence Model include the Ukrainian Laboratory of Quality and Safety, as well as the companies "Kerameya" and "Mamin Khleb".

The efficiency of the EFQM Excellence Model in Ukrainian businesses has been recognized by the President of the European Union, Herman Van Rompuy. When Van Rompuy gave away the awards to winners of the tenth International Quality Tournament of the Central and Eastern European Countries organized by the Ukrainian Association for Quality, he said that these winning companies were role models in Central and Eastern Europe due to their high levels of excellence and social responsibility.

The Ukrainian Association for Quality recognizes the involvement of youths in the movement for excellence and quality. Two young specialists from Ukraine became the Grand Prix Winners at the second International Competition on Management for Youth in 2015. Karina Zarechna from Kyiv Polytechnic Institute won in the "Practice and methods of management" category; Oleksandr Gavrilko from Interbranch Quality Centre "PRIROST" won in the Quality Management Systems category and was also the Super Grand Prix winner.

Active government support will help to promote and develop quality and business excellence throughout the country. The government can motivate companies to adopt quality and business excellence by creating favourable conditions for improvement. To do so, the government should ensure that Ukraine has the necessary scientific and methodological base for the improvement of quality and business excellence. The contribution and involvement of young people in the development of quality and business excellence should also not be discounted.

Ways in which the Ukrainian government can promote and develop quality and business excellence are:

- Create a working group to develop national policy on business excellence.
- Reallocate functions and responsibility in the sphere of excellence in the country.
- Oblige executive authorities by promoting the culture of organizational improvement in the industry and regional development policies.
- Establish a National Council for Business Excellence, Competitiveness and Sustainable Development within the Office of the President of Ukraine.
- Organize training on business excellence for the country's top management.
- Educate the public on organizational management and business excellence by working with the mass media.
- Use the experience and guidance of European authorities in the Ukrainian Association for Quality (UAQ).

The Ukrainian Association for Quality (UAQ) is presently doing its part to promote quality and business excellence throughout the country by assisting local governments in the different regions of Ukraine. Seminars with representatives from regional state administrations and regional councils, regional NGOs and businesses have been held in the regions of Kherson, Nikolaev (also known as Mykolaiv), Dnepropetrovsk and Zhytomyr. Regional projects for the improvement of economic competitiveness as well as the inclusion of green initiatives in quality and business excellence are currently under way. UAQ is also negotiating with other regional leaders to promote the concepts of quality and business excellence in their districts.

The UAQ provides methodological and practical assistance in the development of quality and business excellence. Some of the programmes on offer are:

- Personnel training in the areas of target management (ISO 9000 version 2015, ISO 14000, ISO 50000, OHSAS 18000, etc.), business excellence (EFQM Concepts and Excellence Model), motivation, the process approach to management, information technology and efficient management systems, and so on.
- Methodical assistance for organizations that want to improve their management systems.

- Personnel certification that is recognized worldwide.
- Certification of management systems that is recognized worldwide.
- Assessment of enterprises and organizations according to the EFQM Excellence Model. This assessment will outline the company's strengths and identify areas for improvement. It will also provide methodical assistance in the company's development of a target improvement programme, as well as ensure that the company obtains recognition after it has achieved the appropriate level of excellence in national and/or international systems.
- Methodical assistance in the development and implementation of operational management information technologies in the company's management system so as to ensure its continuous improvement.

CONCLUSION

By working together to improve the management systems in Ukrainian firms, we would be able to substantially increase the number of successful SMEs in Ukraine, promote the practice of green economy in the country as a whole, and move towards sustainable development.

5. FINAL CONCLUSIONS AND RECOMMENDATIONS OF THE BSEC WORKSHOP

5.1 CONCLUSIONS:

1. There is no single definition of the Green Economy. Instead, Green Economy is viewed as a unifying articulation of **sustainable development** that all economies need to strive towards.

2. UNEP has developed a working definition of a Green Economy as one that results in **improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities**. In its simplest expression, a Green Economy can be thought of as one which is l**ow carbon, resource efficient and socially inclusive**.

3. Green Economy is a model, which:

- Secures growth and development;
- Safeguards human wealth, health and well-being;
- Provides decent jobs;
- Reduces inequalities and invests in and preserves biodiversity, including the ecosystem services it provides, for its intrinsic value and for its essential contribution to human well-being and economic prosperity.

4. The Europe 2020 Strategy outlines the EU's priority to become a sustainable economy by setting ambitious objectives for climate action and energy efficiency.

5. The Green Action Plan (GAP) provides the EU, its Member States and neighbouring regions with a clear direction and framework through which they may help SMEs to exploit the business opportunities emanating from the transition to a Green Economy.

6. The majority of BSEC SMEs are still in the early stages of environmental consciousness. SMEs in BSEC do not see environmental responsiveness as a source of competitive advantage, due to lack of awareness and incentives.

7. It is estimated that companies devote only 1-3% of their turnover to

environmental issues, and most of these expenditures are used to ensure their compliance with regulations, audits and environmental certifications.

8. The SMEs' general lack of understanding of the economic benefits of greening their businesses leads to their lack of motivation to do so. This is one of the main barriers to the BSEC region's transition towards a Green Economy.

9. Most micro and small enterprises are not greening their activities because they lack skilled labour and financial resources, and have limited information on possible in-house measures that they can take without suffering significant financial damage.

10. The cost of new eco-friendly investments is very high and rarely affordable for small companies. The cost of acquiring environmental, quality and energy management certifications is relatively high too.

11. However, there is an increasing number of SMEs adopting various ecological measures (such as eco-resources, ecologically clean production processes, biodegradable materials and products) as well as waste management and disposal procedures, due to local and EU taxes and rules on environmental impact.

12. Energy efficiency measures are more popular among SMEs. An increasing number of SMEs strive for an efficient and rational use of energy through the installation of high energy efficiency equipment and machinery, etc.

13. Most BSEC Member States have elaborated priority policy directions and projects on the Green Economy for their SMEs. The following BSEC Member States have taken the following steps forward:

- Albania – Hydro Renewable Energy, Law on Renewable Energy, Albania Hydro-energetic Potential, National Strategy for Science, Technology and Innovation 2016-2020
- Armenia – Strategic Objective under the new SME Development Strategy 2016-2018, Resource Efficiency and Cleaner Production Project (RECP)
- Azerbaijan – Azerbaijan 2020: "Look into the Future" Development Concept, Resource Efficiency and Cleaner Production Project (RECP)

- Bulgaria – Energy Efficiency Policy for SMEs, and various policy follow-ups to COP21 Priorities
- Georgia – New SME Development Strategy, Social-Economic Development Strategy of Georgia "Georgia 2020", Green Growth Policy Paper, Revised Plan of Actions for March 2016 to September 2017
- Greece – National Action Plan for Corporate Social Responsibility (CSR) 2014, Regional Regulatory Plans
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- Russia – Development of Federal Law on Green Standards, Russian Federal Law No. 7-FZ "On environmental protection" dated 10 January 2002, Development of Moscow Economy Strategy for 2030, Energy Strategy of Russia for the period up to 2030
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14. Only a small number of SMEs have adopted quality control systems. Even fewer SMEs are certified by ISO 14001 or the EU's Eco-Management and Audit Scheme (EMAS). Romania is an exception, as public procurements require environmental certification.

5.2 RECOMMENDATIONS:

1. Governments should continue to integrate Green Growth considerations in their long-term socio-economic strategies by including specific measures and incentives for all economic sectors.

2. An effective implementation of laws, strategies and target programmes related to the environment should be guaranteed. More resources from governmental and/or federal budget should be allocated for the promotion of green practices.

3. BSEC Member States should be proactive in elaborating bankable Green Economy related projects eligible for financing by the Black Sea Trade and Development Bank and other international financial institutions.

4. SMEs should be encouraged to make environmental improvements in their operations not only to comply with regulatory requirements, but also to go beyond compliance.

5. SMEs are encouraged to consider adopting in-house measures to green their businesses, and to adopt integrated energy and environmental management systems (EMS).

6. Governments are invited to design and introduce improved regulatory and financial incentives in order to promote investments in renewable energy, energy and resource efficiency, and waste management.

7. Public authorities should provide guidance for SMEs by:

- Increasing the environmental sensitivity of SMEs;
- Transferring technology from best practices;
- Supporting the implementation of existing excellence models such as the European Foundation for Quality Management (EFQM) Excellence Model;
- Raising businesses' awareness of environmentally friendly practices and applications in businesses through awareness raising campaigns, as well as through an environmental education/Green Business component in entrepreneurship education programmes.

8. Governments should cooperate with relevant regional and international organizations to extend consultancy services for SMEs and elaborate a guide on the implementation of green practices.

9. Governments should assist SMEs by providing subsidies when they implement ISO standards, energy efficiency audits and purchase ecologically friendly technologies.

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