



Sustainability through change

SUSTAINABLE DEVELOPMENT KEY CHALLENGES FOR REPUBLIC OF MACEDONIA

JOURNAL OF SUSTAINABLE DEVELOPMENT

Volume 1

Issue 2

Skopje, June, 2008

Integrated Business Faculty - Skopje





Sustainability through change

SUSTAINABLE DEVELOPMENT KEY CHALLENGES FOR REPUBLIC OF MACEDONIA

JOURNAL OF SUSTAINABLE DEVELOPMENT

Volume 1
Issue 2



Integrated Business Faculty - Skopje

Skopje, June, 2008



IBF Journal of Sustainable Development

Reviewers:

Prof. Antonija Josifovska, Ph.D.
Prof. Nanevski Blagoja, Ph.D.

Editorial Board:

Prof. Strahinja Trpevski, Ph.D.
Prof. Vesna Stojanova, Ph.D.
Prof. Natalija Nikolovska, Ph.D.
Biljana Avramovska, Secretary

The views expressed in each paper are those of the author(s) and do not necessarily represent those of the Integrated Business Faculty.



Foreword

Sustainable development implies that the needs of the present generation should be met without compromising the ability of future generations to meet their own needs. In other words, while planning our present-day existence, we should think about future generations and not deprive them of their resources.

This paper is based on the proposal for a National Strategy for Sustainable Development (in the following the NSSD) for the Republic of Macedonia, as the ultimate and tangible outcome of a SIDA funded Swedish co-operation project with the Ministry of Environment and Physical Planning of the Republic of Macedonia. The NSSD Project was run from mid February 2006 to mid February 2008.

Publication of the "Key Challenges for Sustainable Development of the Republic of Macedonia" aims to increase public awareness for the sustainable development. In this connection emphasis in the NSSD has been put on making the proposal as context focused as possible on present situation of the Republic of Macedonia and fully reflect its development potentials. Consequently, the content of this journal consists of two main fields of survey: first two chapters which includes the overall assessment and strategic framework for sustainable development, and other four chapters which includes the overview of the key challenges for Sustainable Development of the Republic of Macedonia.

The final NSSD should have a broad consent and a firm anchoring in all walks of life in the Republic of Macedonia. Hopefully this thematic edition of the SD Journal "Key Challenges for sustainable development of the Republic of Macedonia", will contribute to the awareness rising process and involvement of citizens, public and private organisations, institutions, companies, and educational, research, and development institutions.



List of authors:

- Prof.d-r Svetislav Krstic
- Prof.d-r Natasa Markovska
- Prof.d-r Silvana Mojsovska
- Prof.d-r Vesna Stojanova
- Prof.d-r Vladimir Vukovic
- Prof.d-r Nikola Nikolov
- Prof.d-r Ivanka Nestorovska
- Prof.d-r Delco Jovanovski
- Prof.d-r Nikica Mojsoska
- Prof.d-r Verica Janevska
- Prof.d-r Strahinja Trpevski



CONTENT

IBF Journal of Sustainable Development
KEY CHALLENGES FOR SUSTAINABLE DEVELOPMENT OF THE REPUBLIC OF MACEDONIA

Foreword	3
CONTENT	5
1. Sustainable development and the Republic of Macedonia	7
2. The NSSD process and its background	8
3. Macedonian Sustainable Development Vision and State Mission: Key Challenges and Key Objectives	9
3.1 Key Challenges and Key Objectives	9
3.2 Sustainable Development Synergies between Sectors and Cross-Cutting Issues	11
3.2.1 Good Governance and Better Policy-Making	12
3.2.2 Diversification of Income in Rural Regions and Sustainable Development Challenges (DIRRSDC)	16
3.2.2.1. The Macedonian 21st century synergism of good traditional knowledge and new technologies	16
3.2.3 Macedonians - future partners of their own national forestry	16
3.2.2.3 Macedonia unique tourist precious of "originality of life and fairly undisturbed nature"	17
3.2.2.4. The "added values" of the Macedonian society from an unexpected direction	18
3.2.3 Economic Prosperity and Job Creation	23
3.2.4 Sustainable Human Settlement	29
3.2.5 Cross-Cutting Policies contributing to the Knowledge Society	31
3.2.6 Climate Change and Clean Energy	35
3.2.7 Sustainable Transport	39
3.2.8 Sustainable Consumption and Production	41
3.2.9 Conservation and Management of Natural Resources	47
3.2.10 Public Health	53
3.2.11 Social Inclusion, Demography and Migration	55
4. Comprehensive sustainability diagnosis for the Republic of Macedonia	58
5. Goal, direction and guiding principles for making the Republic of Macedonia Sustainable	59
6. Organisational and implementation framework for making the Republic of Macedonia Sustainable	61





1. SUSTAINABLE DEVELOPMENT AND THE REPUBLIC OF MACEDONIA

The World Commission on Environment and Development (known as the Brundtland Commission) defined sustainable development as: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." It underpins the view of sustainable development of the Republic of Macedonia and sums up a number of thoughts and visions relevant to us all.

The definition continues: "In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations."

Sustainable development incorporates three interdependent and mutually reinforcing dimensions:

- The economic dimension (economic resources, development and growth).
- The environmental dimension (natural resources, protecting and exploiting nature sustainably, and preventing and combating pollution).
- The social dimension (social resources, solidarity, and combating poverty).

Sustainable development is an ongoing process that involves improving the integration of environmental, economic and social considerations. The Republic of Macedonia is to be a society where economic progress can go hand in hand with an improved environment. Necessary incentives and opportunities must exist that enable individuals to contribute with their own initiatives. The population should enjoy and contribute to a good framework for employment, living conditions, social conditions, and quality of life.

Sustainable development implies that society must face up to economic, environmental and social challenges simultaneously. Future generations should have at least as favourable opportunities for a good life as the present, and a sound socially balanced economic development must be ensured. This development must provide for greater individual freedom of action, display respect for the limits of nature and the environment, and have no negative impact on people's health.

Sustainable development cannot be achieved in one country alone since we are all becoming increasingly interlinked. Therefore, global sustainable development envisions a world of economic progress, increased welfare, and better environmental protection. This development is for the benefit of all, including the less powerful and less developed parts of the world. It presupposes openness, democracy and respect for human rights. Sustainable development requires global cooperation and international solutions.

Exactly because of this the Republic of Macedonia must not relax its efforts on the home front. In the National Strategy for Sustainable Development, the Government presents what the Republic of Macedonia will do to ensure a society in balance. The strategy represents its response to the challenge presented at the 1992 Rio Conference, and contributes to meeting international obligations towards the promotion of sustainable development.



Sustainable development is an overall objective for European cooperation in the EU; cf. Article 2 in the Treaty on European Union, stipulating that, the objective of the Union is to promote economic and social progress and a high level of employment and to achieve balanced and sustainable development.

2. THE NSSD PROCESS AND ITS BACKGROUND

The strategic process is based on a participatory approach. The driving engine of the process is a selected group of highly accomplished national specialists, who each cover a sector or issues cutting across more sectors. They are the foundation stone of the entire process and they are at the centre of the changes achieved through the project.

The changes following the implementation of the NSSD will hopefully make the people of the Republic of Macedonia think and work in a sustainable way. This will require a more flexible approach to life and development of society. The community should be seen as a responsible entity for development and this necessitates a transparent decision making process that focuses on the quality of the processes for both management and participants. The sectors of society have to integrate their planning and the development should primarily be driven and financed by domestic sources.

To achieve all this, increased awareness of sustainable development is a must not just among the natural stakeholders of the strategic process but also among the people of Macedonia. The National Specialists and their working group members have strong networks, and have taken on the role of ambassadors creating awareness alongside their other activities. They not only work in Core Working Groups but also with wider and more widespread working groups covering many stakeholders in the Republic of Macedonia.

The basic fundament for the whole strategy development process is 11 cross-cutting and sector analysis and assessment reports (AAR), which are available on request from the NSSD Project Office. They have been prepared by the National Specialists. For the sake of a more focused strategic orientation, the 11 Analysis and Assessment Reports - covering 4 Cross-cutting Support Units and 7 Sector Working Groups - have been merged into the following six main issue areas. They will constitute the strategic structure on which the NSSD build:

1. Policy and Legal Framework (cross-cutting)
2. Environment (cross-cutting)
3. Energy (cross-cutting)
4. Rural Development (includes agriculture, forestry, and tourism)
5. Social Issues (includes employment, social care, health, and education)
6. SMiLES (including Small - and Medium-sized enterprises (SMEs), Infrastructure and Industry)

The 11 Analysis and Assessment Reports have been consolidated into a Sustainable Development Framework Report, which includes the following main parts, and which is available on request from the Project Office:

- The Knowledge Platform in terms of especially the consolidated findings and the consolidated conclusions from the 11 Analysis and Assessment Reports structured in accordance with the above six main issue areas.
- The Enabling Environment addressing the need for trust in the future, the political willingness and capacity, the legal and regulatory instruments, and the investment climate.



- The Implementation Capacity addressing the technical and professional capacity, the institutional and organisational capacity, and the investment and funding capacity.

The 11 Analysis and Assessment Reports and the Sustainable Development Framework Report has been consolidated into a NSSD Technical Background Report, which is the professional point-of-departure for the strategy outlined in the following. This report is also available on request from the Project Office.

3. MACEDONIAN SUSTAINABLE DEVELOPMENT VISION AND STATE MISSION: KEY CHALLENGES AND KEY OBJECTIVES

Until recently, authors of National Strategies for Sustainable Development have enjoyed all freedom, enabling them to develop a strategy that is adjusted to the requirements, the development and the actual circumstances in the country only. However, the situation at least in the European context changed in a way when after intensive public consultations the **Renewed EU SDS** was presented in June 2006. This renewed EU SDS demonstrates that Europe is putting its own house in order and provides international leadership.

By acknowledging the consolidation process in an EU context, and the Republic of Macedonia after being awarded the candidate status for EU membership in December 2005, the NSSD Project Team decided to firmly anchor its strategy at the EU level, but at the same time emphasize the countries' specific key challenges and key objectives. Therefore, the **5+6 Key Challenges and corresponding Key Objectives** together are regarded as two sides of the same medal which form the heart of the vision for Macedonia's future.

By choosing this approach to describe the Macedonian Sustainable Development Vision and State Mission for the future, sectoral planning is left behind and we rather follow the picture of a mosaic: The famous mosaic from Heraklea makes us aware that the individual stones with different colours (sectors) need to be composed in order to display the attractive motives. Hence, the motives and their perfect balance visualize our sustainable development vision and state mission for a better quality of life (D-r Manfred Buch).

3.1 Key Challenges and Key Objectives

RM 1: Good Governance and Better Policy-Making

Key Objective: To set out an approach for Good Governance and Better Policy-Making based on better regulation and on the principle that sustainable development has to be integrated into policy-making at all levels. This requires all levels of government to support, and to cooperate with, each other, taking into account the different institutional settings, cultures and specific circumstances in the different regions of the Republic of Macedonia.¹

1) In this respect Government institutions at all levels should ensure that major policy decisions are based on proposals that have undergone high quality Impact Assessment (IA), assessing in a balanced way the social, environmental and economic dimensions of sustainable development and taking into account the external dimension of sustainable development and the costs of inaction. Other tools for better policy-making include ex-post-assessment of policy impacts and public and stakeholders participation. Government institutions at all levels should make wider use of these tools, in particular IA, when allocating public funds and developing strategies, programmes and projects.



RM 2: Diversification of Income in Rural Regions and Sustainable Development Challenges

Key Objective: To actively promote sustainable development in order to diversify the income in the rural regions of RM, to generate regional added value-cycles, to facilitate regional and urban sustainable development spatial planning, and to ensure that the Government of the RM's internal and external policies are consistent with global sustainable development and its international commitments.

RM 3: Economic Prosperity and Job Creation

Key Objective: To contribute to increasing competitiveness, economic growth and enhancing job creation by performing necessary structural changes which enables the economy at various levels to cope with the challenges of globalisation by creating a playing field in which dynamism, innovation and creative entrepreneurship can flourish whilst ensuring social equity and a healthy environment.²

RM 4: Sustainable Human Settlements

Key Objective: To improve the social, economic, and environmental quality of human settlements and the living and working environments of all people.

RM 5: Cross-Cutting Policies contributing to the Knowledge Society

Key Objective: To stimulate development of a Knowledge-based Society in the Republic of Macedonia which will embody citizens with the key competencies and functional literacy that determines global competitiveness, and will develop citizens' attitude towards sustainable development.³

EU 1: Climate Change and Clean Energy

Key Objective: To limit climate change and its costs and negative effects to society and the environment.

EU 2: Sustainable Transport

Key Objective: To ensure that our transport systems meet society's economic, social and environmental needs whilst minimising their undesirable impacts on the economy, society and the environment.

EU 3: Sustainable Consumption and Production

Key Objective: To promote sustainable consumption and production patterns.

EU 4: Conservation and Management of Natural Resources

Key Objective: To improve management and avoid overexploitation of natural resources, recognising the value of ecosystem services.

2) In this context investments in human, social and environmental capital as well as technological innovation are recognised as prerequisites for long-term competitiveness and economic prosperity, social cohesion, quality employment and better environmental protection.

3) Success in reversing unsustainable trends will to a large extent depend on high-quality education for sustainable development at all levels of education including education on issues such as the sustainable use of energies and transport systems, sustainable consumption and production patterns, health, media competence and responsible global citizenship.



EU 5: Public Health

Key Objective: To promote good public health on equal conditions and improve protection against health threats.

EU 6: Social Inclusion, Demography and Migration

Key Objective: To create a socially inclusive society by taking into account solidarity between and within generations and to secure and increase the quality of life of citizens as a precondition for lasting individual well-being.

EU 7. Global poverty and sustainable development challenges

Key Objective: To actively promote sustainable development worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments.⁴

3.2. Sustainable Development Synergies between Sectors and Cross-Cutting Issues

By first of all activating the country's inherent SD Potentials, sustainable development further on is very much based on a harmonic and synergetic development of various sectors and cross-cutting issues. To identify synergies between two and more sectors/cross-cutting issues, to implement modern day spatial planning and by this to facilitate coordinated SD investments is of utmost importance for the Sustainable Development of the Republic of Macedonia as a whole.

For example, Climatic Change and Clean Energy is no longer a Key Challenge for the classical Energy Sector alone, but it is at the same time of vital interest for Agriculture & Rural Development, Employment, Environment, Forestry & Rural Development, Infrastructure & Transport, Policy and Legal Issues, SMiLEs, Social Issues/Education and Tourism. This, in fact, demonstrates the economical, social and environmental benefits in parallel. For example at present Diversification of Income in Rural Regions and Sustainable Development Challenges can expect major support by Results and Measures formulated in 10 out of 11 sectors and cross-cutting issues. However, this perception might change and other Key Challenges will become equally or even more important. After the Government of the Republic of Macedonia enacted the present NSSD and the public debate is fully unfolded, future regular updates of the NSSD shall review the ranking of RM's Key Challenges priorities.

Secondly and on the other hand, the Sustainable Development Synergies help to identify **three Strategic Trust Building Blocks of Sustainable Development Macedonia** that contribute to all SD Key Challenges and corresponding Key Objectives as outlined above. These Strategic Trust Building Blocks are:

- Small and Medium Enterprises , which today make up 99.7% of all enterprises in the country, and in the future some of these might develop in Large Enterprises;
- Policy and Legal Issues;
- Education, understood as a life-long learning process, which uses modern day Information and Communication Technologies.

Hence, the **Strategic Trust Building Blocks** shall receive major attention and shall be multipliers in order to meet the Key Challenges and Key Objectives. Strategic Measures that are designed within the three Strategic Trust

⁴) EU 7 is taken up and reformulated as RM 2 Diversification of Income in Rural Regions and Sustainable Development Challenges according to the specific situation of the Republic of Macedonia.



Building Blocks are expected to have the greatest impact to stimulate Sustainable Development Macedonia, and this refers in particular to SMiLEs, which are considered to be the backbone for e.g. Diversification of Income in Rural Regions with a wide palette of business opportunities and creating jobs ranging from innovative environmental technologies, energy saving products and services, renewable energies production, (wellness) rural tourism services, healthy food production, eco-remediation services to social care for an aging population.

Thus, SMiLEs in the rural regions of the Republic of Macedonia come into focus of Sustainable Development and this should also motivate a reverse of migration process of young well-educated students from Skopje to the rural regions and make entrepreneurial spirit flourish.

All three Strategic Trust Building Blocks have in common that they are closely connected with **Information and Communication Technologies (ITC)**. SMiLEs in the 21st century shall utilize the Internet as a Virtual Market for offering their products on a global scale and communicate with their clients. This naturally addresses SMiLEs operating in tourism. Central Government institutions as well as Municipalities shall use

e-Government to offer professional services for their citizens and involve them in participatory decision-making. For any kind of spatial planning Geographic Information Systems (GIS) is imperative in the 21st century. Life-long learning - throughout all ages and generations - can best be provided by offering e-Learning products, which in return shall be designed by innovative SMiLEs.

Thirdly, the detailed evaluation of the objectives and results regrouped under the 5+6 Key Challenges provides a comprehensive picture of what variety of objectives/results need to be reached in the following 22 years to come, and this in particular addresses **SD Innovations blooming from the countries' SD Potentials as well as Investment Needs and Investment Opportunities.**

3.2.1 Good Governance and Better Policy-Making

The concept of good governance has been widely discussed on the global forum over the last decade, especially with regards to the world's progress towards sustainable development (SD). The three SD pillars' structure (economic, social and environmental ones) imposes a large variety of cross cutting issues that need to be efficiently managed to provide sustainable results. Therefore, the processes of decision-making and implementation of policies and legislation needs to be upgraded to the level of good governance that would provide an efficient and effective performance and sustainable outcomes. The shift towards good governance is a demanding process that presumes introduction of an integral policy-making based on participatory principle, respect of the best interests of the society and the rule of law, increased transparency, responsiveness and accountability of the institutions and higher efficiency and effectiveness of decision-making and implementation of policies and legislation.

The good governance aiming at SD should ensure achievement of a sustainable economy, which provides prosperity and opportunities for all; accomplishment of a strong, healthy and just society meeting the diverse needs of the stakeholders; and sustainable use of the resources within the environmental limits. These are long-term objectives requesting sustainable governance, as well. In that respect, promoting effective, participative systems of governance focused on engaging citizens' creativity, energy and diversity is also an objective of the good governance. SD governance tackles all present generations and bears large responsibility for the future generations, imposing an obligation to the policy-makers to provide science-based governance and to work towards building of a knowledge society.

The problem of installing good governance systems with regards to the SD is present even in the advanced countries, but more pronounced in the countries with lower capacities and experience in this area. The Republic of Macedonia belongs to the latter, as the concept of SD is poorly integrated in its governance system. The Constitution of the Republic of Macedonia enshrines the main philosophy of SD and stipulates equal economic and



social opportunities for all citizens, as well a specific protection for the natural resources, flora and fauna. Nevertheless, the processes of decision-making and implementation of policies and legislation in the Republic of Macedonia reflect limited awareness about SD at all levels of governance and society, absence of SD policy, insufficient co-operation among the policy-makers from different sectors and top-down approach of policy-making that cause difficulties to incorporate the SD dimension in the sectors' policies. The relevant national authorities mostly create the economic, social and environmental policies individually, rarely providing for SD cohesion among the policies. In addition, there is lack of such cohesion in respect to the sectors' legislation, as it insufficiently includes SD dimension.

Considering the current situation, the main challenges to install good governance practise for SD in the Republic of Macedonia are following:

- To raise public awareness for SD at all levels of governance and society;
- To create a sound SD policy, based on integral SD policy-making approach;
- To increase policy coherence through integration of SD dimension in sectors' policies;
- To accelerate the process of harmonisation with the EU acquis, with respect to SD;
- To strengthen public administration capacity for SD;
- To ensure implementation of the policies and legislation for SD.

Limited **awareness about SD** in the Republic of Macedonia imposes a need for actions towards its increase. Understanding of the SD concept at all levels of governance and ensuring continuous training and specialisation of relevant staff by policy areas (covering economic, social and environmental perspectives) is a precondition for design and implementation of a proper SD policy. Moreover, the SD awareness' rising should target all sectors of the society, from business entities to non-governmental organizations and citizens. Individuals are the core element of the SD and only aware, well-informed and trained people could contribute to the achievement of a strong balance between the economic growth, social prosperity and a healthy environment.

Elaboration of the National Strategy for SD will enable **formulation of the SD policy**, but substantial efforts need to be focused on its enforcement. The Republic of Macedonia is committed to the Policy Guiding Principles as outlined in the Renewed EU SDS as of June 2006, such as Promotion and Protection of Fundamental Rights, Solidarity within and between Generations, Open and Democratic Society, Involvement of Citizens, Involvement of Business and Social Partners, Policy Coherence and Governance, Policy Integration, Use of Best Available Knowledge, Precautionary Principle and Make Polluters Pay.

The three pillars structure and variety of SD cross cutting issues that occur across different actors, over short and long time frame, impose a need of an integral policy-making approach and adequate institutions. The integral policy-making approach is based on better regulation and on the rule that SD should be integrated into policy-making at all levels. In this respect, all institutions should ensure that major policy decisions are based on proposals that have undergone high quality Impact Assessment (IA), assessing in a balanced way the social, environmental and economic dimensions of SD and taking into account the external dimension of sustainable development and the costs of inaction. Other tools for better policy-making include ex-post-assessment of policy impacts and public and stakeholders (non) participation. Bearing in mind worsening environmental trends, the economic and social challenges of the Republic of Macedonia coupled with new competitive pressures and new international commitments, integral policy approach is crucial for proper dealing with the key challenges for SD.

Macedonian key challenges for SD correspond to the challenges identified in the EU Strategy for SD: climate change and provision of clean energy; sustainable transport; sustainable consumption and production; conservation and management of natural resources; public health; social inclusion, demography and migration; global poverty and sustainable development challenges, along with the specific Macedonian challenges: good governance and



better policy-making; diversification of income in rural regions and sustainable development challenges; economic prosperity and job creation; sustainable human settlement and cross-cutting policies contributing to knowledge society. Accomplishment of the sustainable interaction and management of these challenges is closely related to the **level of policy coherence among sectors' policies**. Although SD policy provides main strategic directions for SD, many areas relevant for SD remain within the sectors' competences, but the existing sectors' strategic documents do not sufficiently include SD dimension. This is clearly evident within the economic and social pillars. Enforcement of the SD policy should imply revision of the existing strategies from SD perspective and inclusion of SD component in further elaboration of strategic documents at national level. Policy coherence should be particularly focused to embedding the environmental protection in the economic and social strategic documents, optimal use of energy sources, enforcing favourable, yet sustainable business climate for economic prosperity and job creation in agriculture, industry and services, ensuring better demographic trends and utilisation of human capital, improved social inclusion and health protection for all citizens, as well as advanced education with respect to SD.

Policy coherence among sectors' policies could be also analysed from the perspective of practices of policy-making processes and outcomes, as vital part of the good governance. In this context, increased policy coherence presumes policy-making based on a participatory principle as stipulated in the Agenda 21, transparency and accountability, along with effectiveness and simplicity of the regulatory acts. Furthermore, policy coherence with respect to SD should be ensured among the policies within one sector or pillar, especially if they encompass many policies. Increase of the policy coherence require proper institutional set-up for SD, qualified staff and strong cooperation among the relevant institutions. The same applies to the legislation.

Absence of complete and relevant legal framework is a serious obstacle to the process of SD in the Republic of Macedonia, taking in consideration the time frame needed for its completion and enforcement. The complexity and size of the EU acquis, together with limited administrative capacity of the relevant institutions for harmonisation of the regulation with the EU acquis produce situation of lagging behind in setting the necessary regulations for SD. The situation is especially critical in the economic and social pillar, while basic environmental legal framework is in place, although its implementation is not supported with the necessary secondary legislation and institutional set-up. Therefore, **the process of harmonisation of the legislation to the EU acquis needs to be accelerated**. The harmonisation of the primary legislation is scheduled with the National Programme for Approximation of the Acquis (NPAA) and follows certain dynamic, but most often the enforcement of the primary legislation is not possible without secondary legislation and its completion needs to be speeded up. The other problem related to the legislation is narrow speciality of the lawmakers in particular fields that usually does not provide inclusion of the SD component in the sectors' regulation. Training and education for SD could contribute to alleviation of this problem, as well use of technical assistance from more advanced countries.

Identified weaknesses in policy-making practises and legislation drafting, as well in their implementation are largely attributable to the insufficient and/or inadequate public administration capacities specialised for SD. In addition, there is general problem with the efficiency and effectiveness of the public administration service delivery, especially with regards to the multi-sector issues, such as SD. Therefore, advancement of the SD process is inevitably related to **strengthening of the public administration capacity for SD**. General knowledge about the SD concept should be acquired at all governance levels, while in-depth knowledge and specialisation by policy areas should be acquired by the staff directly working on SD issues. Capacity strengthening should be done with respect of ensuring sustainability of the capacities, i.e. coupled with proper human resource policy in the institutions at the central and local level providing for valuation of knowledge and skills as primary criteria, as well continuous specialisation of the staff and active use of the acquired skills. Furthermore, **strengthening of the cooperation among the relevant institutions for SD** is another aspect of reinforcement of the institutional capacity for SD and better usage of the human capital in the public administration.

Strengthening of the public administration capacity and cooperation among the relevant institutions is also crucial for **implementation of the policies and legislation for SD**. The current situation with regards to the policy and



legislation implementation could not be assessed as satisfactory. This particularly refers to the implementation of strategic documents and legal acts that partially or completely regulate multi-sector issues. Considering the novelty of the SD concept in the Macedonian governance system, creation of a coherent policy and legal framework for SD is necessary. For that purpose, already mentioned targets - formulation of SD policy, increase of the policy coherence among sectors policies and acceleration of the process of harmonisation of legislation are necessary steps, along with proper institutional set-up. If institutions are inadequate, the country will hardly advance far towards a future that is economically, socially and ecologically sustainable.

Relevant and properly staffed institutions are vital to pursue SD policy, to structure interactions in the field of SD, to provide ground rules and to coordinate the activities of all stakeholders, including citizens. In this context, **institutional set-up for SD** should be based on clarified responsibilities among the sectors' institutions with regards to SD, identified SD synergies and mechanisms for cooperation, effective and efficient communication among the institutions, as well as strong cooperation. In addition to the proper institutional set-up, a step forward towards provision of sustainable results from implementation of the policies and legislation is **introduction of an e-government**. The Republic of Macedonia has already started an e-governance project with objective to develop online access of public services to citizens and business. It is a precondition for providing efficient public services, as well for building of competitive and dynamic knowledge-based economy, capable of sustainable economic growth and greater social cohesion. E-government is a signal of an increased openness of the public administration contributing to a stronger participation of the general public, but its usage is likely to be highly correlated with the overall access rate to the internet of the population. Therefore, governance system introducing e-government should also provide for better, easier and non-expensive internet access for all citizens.

Proper and prompt addressing of the main challenges to install good governance practise for sustainable development in the Republic of Macedonia is necessary. Good governance leads to stronger development and also, stronger development leads to stronger governance. Therefore, **actions must be undertaken immediately to ensure competent and sustainable management of the country's resources and affairs** in a manner that is open, transparent, accountable, equitable and responsive to people's needs. Only such approach, combined with strong administrative, financial and personal commitment for sustainable development to all levels of governance and society would ensure balanced economic prosperity, social cohesion and preserved environment for the present and future generations of the Republic of Macedonia.

Strategic Measures

Key Challenge Good Governance and Better Policy-Making:

- Increase the public awareness for SD at all levels of governance and society;
 - Formulate a sound SD policy, based on integral SD policy-making approach;
 - Increase the level of policy coherence among the sectors policies through integration of SD dimension into policy-making at all levels;
 - Promote a policy-making practise based on the principles of good governance;
 - Accelerate the process of harmonisation with the EU acquis, with respect to SD;
 - Increase the public administration capacity for SD;
 - Strengthen the cooperation among relevant institutions for SD;
 - Ensure the implementation of the policies and legislation for SD;
 - Provide more efficient public services via strong e-government system.
-



3.2.2 Diversification of Income in Rural Regions and Sustainable Development Challenges (DIRRSDC)

3.2.2.1. The Macedonian 21st century synergism of good traditional knowledge and new technologies

Until today the rural regions of Macedonia are fairly underestimated in terms of their sustainable development potentials as well as in terms of their potential to considerably contribute to economic prosperity and job creation for the benefit of all citizens. Although we have the general feeling that rural regions with their attractive and inspiring natural environments can offer a better quality of life, focus is on Skopje, and in particular young educated generations there tend to wait and hope for well-paid job opportunities, if they not use the capital as a step stone to leave Macedonia for ever.

This trend of unsustainable development needs to be reversed. Lessons learned from other regions in Europe teach us that the future of countries is rather allocated in the rural countryside than in the cities. Modern information and communication technologies (ICT) today make it possible to produce and offer services in a beautiful natural environment rich in bio- and geo-diversity. Such an environment provides the playing field in which dynamism, innovation and creative entrepreneurship can flourish whilst social equity and a healthy environment are ensured.

It is our overall objective to improve agriculture and rural economy, and to develop rural regions socially and environmentally balanced. Sustainable agriculture and integrated regional rural development is our central goal and this means to diversify the income in the rural regions, to generate regional added value-cycles, and to facilitate integrated regional and urban sustainable development spatial planning.

In fact, to have diversified income opportunities is nothing particular new and it is a well-known strategy of risk minimization of many societies. Sometimes, it is good enough to just first of all listen to our grandparents and to incorporate their knowledge and experience, which in terms of sustainable development might be more practical than any academic study or technical report. By saying this, we do not promote going back to our grandparents' style of living, but with sustainable development in the 21st century we do promote the synergism of good traditional knowledge and new technologies invented in a 'globalized' world. Thus, globalization provides us the best practise examples for regional and local prosperity. By heading towards the EU we need to shift our focus from quantity to quality.

3.2.3 Macedonians - future partners of their own national forestry

Although the Macedonian people commonly understood that the unique role of the forestry is provision of timber and full wood?! They are deeply wrong!

There are 12 sectors and services in the frame of the P.E. "Macedonian forests": Sector for silviculture, protection and forest ecology, Sector for commercial working, Sector for development, investments, plan and analysis, Sector for economic and financial matters, Sector for forests utilization and primary wood processing, Sector for legal, personnel and general affairs, Sector for forest management planning, Sector for hunting and hunting tourism, Service for marketing and information, Service for internal audit, Service for forest guarding and IT service. It means that forestry is able to create a lot of activities which will lead toward economic and social prosperity in the rural areas in Macedonia, such as: game tourism, mountain tourism, fishing, gathering of non wood products (medicinal plants, mushrooms, forest fruits etc.) etc. Many people from the certain rural regions could find their source of existence participating in those activities of the forestry. Even more, their SME's could be partners with the forestry. Very good example for such organization of the forestry is the forestry unit "Malesevo"-Berovo. They have capacities for randsom and storing of: forests seeds, medical plants and lichens. Also, they have small hotel and factory for



extraction of etheric oil. There is also a possibility for production of souvenirs or toys made from wood. A lot of people of that region, mostly from the rural areas, have find there existence working in those capacities permanently or temporary.

With an application of effective technologies and methodology in the forestry, we will create conditions for efficient and profitable environment in the forestry sector. It means that it will be able to employ more people and it will be able to invest into the new capacities, mostly in the rural areas.

With application of appropriate methodologies for determination of capacities for non-woods forestry products will be secured preconditions for their planed usage with out negative impact on the environments. The main role in these activities will belong to the local population from the certain rural areas.

3.2.2.3. Macedonia unique tourist precious of "originality of life and fairly undisturbed nature"

Many of our rural areas have good potentials to improve their future development as an opportunity "to become alive again". Among them, after agriculture as primary sector for contributing to such achievement, tourism is also identified as very important part of the chain of rural development. As socio-economic activity that involves different sectors (transport, communications, food and beverage, infrastructure, etc.) tourism can give significant input to rural areas' development as complementary income alongside more traditional agricultural activities. In addition, it is very closely connected to innovation and increased variety of tourist offer.

By introducing new ideas for farmers to invent a wide variety of "entertainment farming" options, tourism can make a strong socio-economic contribution in rural areas. Agri Entertainment and tourism is a new, highly consumer-oriented type that may offer additional activities for diversification and adding stability to farm incomes. Organic farming, organic and healthy food production, and particularly traditionally production of some products (i.e. cheese, wine), honey production, herbs farming, etc. The mentioned aspects are of high importance, and at same time very good basis for developing of wine trails/wine tourism and rural tourism with different types of activities as for example "rural life practicing", "farming life practicing", "entertainment farming", etc. This concept is actually developed on such issues where all elements are put in favour of enabling tourists to experience the "traditional life practicing". Development of different craft programs with elements of traditional woodcarving, knitting, cooking, harvest, and other, is additional input for increased incomes in rural areas. Therefore, very important is the improvement of typical rural products and traditional cuisine promotion as tool for particular niche tourist markets.

The presence spas (Katlanovo, Debar, Gevgelija, Strumica, Kumanovo, Kocani and Stip) in Macedonia create basis for development of spa centres aside the previous concept which has seen them as centres for medical treatment and rehabilitation, but as selfness and wellness spa centres with different health - care programs for relaxation, complemented with congress facilities. It will be a very valuable additional socio-economic input.

Having in mind the existing tradition, folklore and hospitality of Macedonian people, the Republic of Macedonia is a country that can be proud with areas recognized by their "originality of life and fairly undisturbed nature" which is becoming a rarity in many other countries. Since the sustainability principles of tourism development refer to the environmental aspect, as well as to economic and socio-cultural aspects, the sustainable tourism should make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity. On the other hand, environment plays very important role for tourism development, particularly in the field of the use of natural resources as tourist attractions. The link between tourism and environment is primarily accounting for the relation between the sustainable development of tourism and eco-tourism. In that way tourism will be a part of integrated regional rural development contributing to sustainable development in rural areas.



3.2.2.4. The "added values" of the Macedonian society from an unexpected direction

Better level of organisation and planning of the production in the Macedonian agriculture sector will create better environment in all the regions where diversification of income in rural areas is possible. However we need to know: if organisation in the sector is better the utilisation of different resources will become more feasible and proper from SD point of view, if properly planned, according future CAP of Republic of Macedonia, production in the rural regions will not be the significant generator of various never-ending problems of the Macedonian agriculture related with not existing or not-well organised internal market of prime-agricultural products! Finally if this issue is well resolved, the income of the producers from rural regions will not be so vulnerable anymore!

Moreover, the higher security of the income will make Macedonian farmers more open and dedicated to other type of activities which are not exactly related "only" with prime-agriculture (to invest in some sort of finalisation of prime-agricultural products from the farm, to combine the resources from the farm with SD resources in the municipality and in the region - renewable-energy production, to collect forestry products or to develop rural tourism on the farm).

Strong self-organisation of Macedonian farmers will bring multiple positive outcomes and further essential actions from DIRRSDC point of view. The diversification of the income in the rural regions could be more promising if our farmers are well organised and with clear understanding of the self capacities. Especially the small scale-backyard farmers which are recorded like "Individual agricultural holdings" in the latest agricultural census and which number according the first census results from July 2007 are 192.367 needs to be better self organised. Probably the major part of those farmers will not have the level of awareness and the capacity to become real and active member of some of the Macedonian pure agriculture associations or cooperatives. However, all those who will somehow become the member of "some" association or cooperative must be recognised by various authorities in the process of DIRRSDC.

The significant role of the government and public institutions will increase with the establishment of an effective farm register system. The proper and effective farm register system in the Republic of Macedonia will bring multiple positive outcomes and further essential actions from DIRRSDC point of view. The issue related with "farm and farmer types - separate target groups" from agriculture policy point of view needs to be supported by accurate and realistic data (the real arguments) and this we will be provided from the real and functional national FR system. More than one information need to be registered in the FR system like: the size of the farms (by production and by financial ability), their location - according "cadastre and real estate registration" (in which municipality/ region), type of the farmers by education and profession (professionally oriented or "half-time" backyard small scale producers), the age of the farmers (young/old), the type of the farm according the legal system (SME/company or individual) ... Such a comprehensive information resource will provide proper basis for better SD policy making in the sector of agriculture and rural development.

The proper agriculture and rural development policy will lead to better environment in the overall regions where the diversification of the income in rural areas is possible. The tools of future Macedonian CAP in this direction must be good combinations across sectors and across different Ministries and different Government and Non-Governmental organisations.

Macedonian Government needs to know the answer on these questions: - Is the Strategy for agriculture and rural development clear for the ordinary people from A&RD sector? Is the Strategy for agriculture and rural development easy to apply into Macedonian agricultural real life and will it contribute to the future diversification of income in the rural regions according to the SD principles? Is the national agricultural policy enforced and adjusted to the regional characteristics and micro specific at local-municipal level?



We will build the strong institutional capacity of the sector. Various institutions, within new institutional setup will bring the additional power in overall efforts in the process of DIRRSDC. Institutional capacity needs to be equally strong on the micro level where the real life related with rural regional development is happening.

The clear competences division between various Ministries and departments will strongly support the process of DIRRSDC. These levels of competences need to be implemented to the micro level. The farmer's needs to have very simple and free access to DIRRSDC information's via Rural Information Centres. The actions will be supported, monitored, and evaluated in the effective coordination by different Ministries and Departments.

Proper rewarding system of the administrative staff will ensure better services and prevention of any abuse of the administration system. The process of DIRRSDC very easy could be harmed if future actions and resources are not properly managed or used. More motivated administrative staff will work also on their own self-upgrading which could additionally bring the power into institutional capacity of the sector and finally on the local level this will lead to proper process of DIRRSDC.

We will improve our human resources in the line with sustainable development. This is essential for extending of the new creative ideas related to the process of DIRRSDC. Organisation of the comprehensive vocational training system for all the stakeholders in this sector will be additional support to the process of DIRRSDC. The essential problem for successful DIRRSDC process is well defined target groups for education and training. That's why we will define the target groups before such process starts!

Schools with more creative and innovative capacity in the rural areas will be the promoters of SD ideas and nucleuses for expanding the idea of DIRRSDC. For such a "mental jump" and proper operational capacity of the people involved into the process will be needed larger autonomy and decision-making power of the school boards in the rural areas.

For the proper DIRRSDC implementation funding and administrative capacity of the municipalities should be enforced. Priority funding through IPA funds will be given to the projects in primary and secondary education based on the SD principles. Also, the governmental budget will increase investment in education for the proper implementation of DIRRSDC and involvement of the future generations. Special attention should be paid to the talented students from the rural areas in the country. The idea related with DIRRSDC in the future will be lead by those "SD infected" students from rural regions of Macedonia. Particularly, practical aspects of DIRRSDC idea will be adopted into new curricula's and applied during the education process. The practical SD student projects will lead to "lovely process of learning" of the feasible elements of the sustainable development.

National health system will be strongly supported by A+F&RD sector. The idea of DIRRSDC will lead into GAP procedures and stronger support of organic and healthy food production. Such processes will contribute to development of Macedonian quality food production for the benefit of people from the urban and rural areas. Also, adequate health care provision for the people from rural areas will significantly contribute to creation of a better environment for DIRRSDC idea.

The agriculture sector will become the valuable instrument to keep the young people in the agriculture and in the rural areas. The "young people" from the rural communities will be recognised like special "target group" in the process of DIRRSDC. The new ideas related with various ways of (not) agricultural diversification of the income in the rural regions will penetrate more easily to the separate communities if young people are involved!

DIRRSDC process will support the optimal number of back yard production and part time farmers identified via FR system. The special multi-sector activities (pilot projects with strong elements of synergies between sectors) need to be adapted to this target group from the rural regions. The attraction of the agricultural sector for possible employment will increase within the period of time especially in the rural regions. The un-explored and un-used resources of various regions in the Republic of Macedonia will strongly support the idea "to stay at home" or "not to migrate to the cities". The comparative advantages of rural regions via different multi-sector programs for DIRRS-



DC need to ensure the prosperity of future generations and new values according the three pillars of sustainable development.

The age and gender structure in rural areas will become more proper with special programs of DIRRSDC that will be run at local level (municipalities).

Provision of a proper access to processing capacities within the agricultural areas will be possible through construction of local roads. Also, the quality of the water will be improved in the rivers and other open water sources, for a better irrigation which will lead to a better quality of the agricultural products. In addition, the better quality of the water in the rivers and lakes will lead to the improvement of fish production. Increase of the irrigation areas will lead to a greater production. Reduction of the water spoilage and loses during the transport will contribute to the decrease of the production costs of agricultural products. Such approach will strongly abate pollution from the A&RD sector. Also it will contribute to solve the huge problem with the water supply to Macedonian villages which are not connected to the city water pipelines or the villages without water at all.

The sustainable development challenges will bring new perspectives in the rural regions only if the sufficient motivation for changes and improvements of the local people are in force. That's why the special programs for education and public awareness will be implemented on the micro level about various possibilities of the sector via DIRRSDC. This approach will provide motivation for changes and improvements in this sector, and will be the foundation for DIRRSDC.

The power of the agriculture sector needs to be recognised by the Macedonian society in a very positive way. Good reputation of the sector will strongly support the process of DIRRSDC. Historically neglected rural and agricultural areas must be promoted into their very positive role of contribution to the universal values of this sector in "every layer" of our society. Special attention should be placed to the presentation of the new concept of SD agriculture for the kids and the young generations. The reputation of this sector will grow as soon as new benefits and advantages of DIRRSDC process become understandable and visible for ordinary people from the rural regions. In addition, the large and medium specialised agricultural companies who will become "the champions of sustainable development in the field of agriculture" on the national and regional level will push such process into a very positive cycle of cross-sector cooperation among different SME's from different rural regions across the Republic of Macedonia. The "good examples" from the agriculture and rural regions need to be a "refreshed focus" of the Macedonian media and the newspapers in the mission of positive influence on the Macedonian public opinion.

This sector will create and promote optimal number of adequate brands with much considerable added value for sales on domestic and foreign markets, in "classical" way or via other sectors' offers (within tourism it will export domestic products "on the spot" to our international guests). In the orchestrated way, the regional A&RD brands will link more then one idea related with DIRRSDC from "synergetic music" performed by various sectors! New added values products (organic and traditional products) will be created on the fundament of environmental friendly production. Production of generally healthy or special baby food is one of the strong ideas related with DIRRSDC. This will be recognised by farms but also by the government in the process of effective implementation of the Strategy for agriculture and rural development.

We will enforce favorable SMiLEs' environment especially for the initiatives in the rural areas. The idea of DIRRSDC will be recognised like great possibility for both sectors SMILE and A+F&RD. Efficient institutional capacity will facilitate creation of SME's for off-farm activities for diversification of income in rural regions. Proper legislation for dual agro and of-farm business activities within the SMILES in rural regions will contribute to the SMILES development and enforcement. Well developed business structure and information flow will significantly enforce diversified and sustainable SME's as an off-farm business additional to the basic farmer production. High technology utilization within the off-farm business activities will contribute to the creation of efficient and environmental friendly SME sector in diversified rural areas. Recycling of waste materials from the agricultural production will contribute to creation of diversified Smiles that will utilize raw materials and natural resources in sustainable way. Financial support



is crucial for development of the off-farm sector in the rural areas. We will provide sufficient working capital for SME especially in the rural areas. We will turn on this strong present weakness into great advantage with proper financial mechanisms and attractive bank credit programs for the benefit of the idea of DIRRSDC. Additional income resources for the population in the rural areas, thanks to the diversified off-farm SMILES will motivate the labour force (especially during non-agro seasons). Promotion and advertisement of the off-farm SMILES' products and services will increase the awareness of the potential businessmen as well as of the potential customers. Environmental friendly off-farm SMILES in the rural areas can significantly contribute to the proper waste management, production of energy from RES and utilization of equipment and technologies/processes that will control the pollution of the environment.

The new rural economy sectors should be promoted to encourage progressive and innovative opportunities, which would better utilize the existing human, natural and physical potential of the rural areas of Macedonia. Rural entrepreneurs or urban investors who are willing to invest in new innovative ideas related with production and proper utilization of renewable energies in the rural communities could be the one of the first champions of the sustainable development in the Republic of Macedonia. The "Energy Farming" like new stile of living and production in the rural areas will directly lead into more significant DIRRSDC. The high level of EU standards will be adopted before the idea of the "Energy Farming" will spread around the country. The level of standards is essential because of the safe and easy spreading of new technology to A&RD sector. The national level of awareness about the idea of "Energy Farming" will increase and spread around the country. Information about representative pilot projects and advisory packages (know-how) related with usage of energy practices need to be in the special focus of those awareness rising programs. This will be arranged on the national and local level. In addition, the successful stories all over the country (champions of SD) will be promoted and supported.

The generated diversification of the income in the rural areas on the principles of SD will strongly push forward our economy, social and environmental quality of life for all citizens of the Republic of Macedonia. The "added values" of our society will come from an unexpected direction, believe it or not from the rural development and improved quality of live in all geographical parts of our beautiful country. The lower migration pressure to the overcrowded and stressful urban zones will create balance in all aspects of modern living. The better quality of life in the rural regions will bring better conditions for balanced sustainable development of our society and the whole country of Macedonia.

Strategic Measures

Key Challenge Diversification of Income in Rural Regions and Sustainable Development Challenges:

- Intensify our focus on alternative energy resources, eco-tourism development and healthy food production, and utilize the environmental strengths and opportunities in RM to promote the regional cooperation and integrated regional management.
- Create conditions for efficient and profitable environment for the forestry sector under the sustainable development principles.
- Start with activities which will lead toward economic and social prosperity in the rural areas in Macedonia, such as: game tourism, mountain tourism, fishing and gathering of non wood products like medicinal plants, mushrooms, forest fruits...
- Apply appropriate methodologies for determination of capacities for non-woods forestry products under the secure preconditions for their planned use without negative effects on the environment.
- Contribute to the future development of rural regions by creating of specific tourist products, which leads to tourism socio-economic contribution in the rural areas. It will contribute to increased variety of tourist offer like "entertainment farming", "rural life practicing", "traditional life practicing", "wine trails" ...



- Develop different craft programs with elements of traditional woodcarving, knitting, cooking, harvest, and others who can create additional input for increasing the incomes in rural areas within creative tourist offer.
 - Improve the level of organisation and planning of the production in the Macedonian agro-food and rural development sector. Strong self-organisation of Macedonian farmers will bring multiple positive outcomes and further essential actions from DIRRSDC point of view.
 - Enact proper agricultural and rural development policy which will lead to better environment in all the regions where diversification of income in rural areas is possible.
 - Disperse the execution of the national agricultural policy at local level, first like a pilot project then like long-term policy adapted to regional characteristics and the micro specifics.
 - Establish an effective farm register system and define various target groups of farmers, necessary for proper and efficient execution of CAP of Macedonia.
 - Build strong institutional capacity of the sector. Various institutions and clear competences division within the new institutional setup, will bring the additional power in overall efforts in the process of DIRRSDC.
 - Improvement of the human resources in the line with sustainable development is essential for extending of the new creative ideas related with the process of DIRRSDC.
 - Support and promote the schools with more creative and innovative capacity in the rural areas.
 - especially the "SD infected" student from the rural parts of the country who will extend the idea related with DIRRSDC in the future. Particularly, practical aspect of DIRRSDC idea will be adopted into new academic curricula's and applied during the education process.
-
- Work on building the proper access to agricultural area or processing capacities via local roads. We will improve the quality of the water in the rivers and other open water sources, for a better irrigation which will lead to better a quality of the agricultural products.
 - Stop the water spoilage and lost during the transport and decrease the costs of the production of the agricultural products. This will strongly decreased the pollution from A&RD sector.
 - Solve the large problem with the water supply of the Macedonian villages which are not connected to the city water pup line or the villages without water at all. Behind this, we will improve the quality of the water in the rural areas.
 - Motivate the changes and improvements in the sector like a foundation of DIRRSDC. The sustainable development challenges will bring new perspectives in the rural regions only if the sufficient motivation for changes and improvements of the local people is in force. That's why the special programs for education and public awareness will be implemented on the micro level about various possibilities of the sector via DIRRSDC. We will put the special focus on the presentation of the new concept of SD agriculture for the kids and the young generations.
 - Organise overwhelming promotional campaign for diversification of rural income.
 - Support and promote the large and medium cross-sector agricultural companies, SME's in off-farm activities etc. who will become "the champions of sustainable development in the field of agriculture" on the national and regional level.
 - Create and promote optimal number of adequate brands and high technology utilization for recycling of waste materials from the agricultural production.
 - Promote and implement Good agriculture practices (GAP) around the country via active role of various SD champions from the A&RD sector.



3.2.3 Economic Prosperity and Job Creation

..... " It is not how much knowledge employees have, but what they collectively manage to do with that knowledge, that drives value creation.....The main message.....is that knowledge resources are enhanced through use; knowledge and skills must be activated and put into play in order to create future growth and social welfare. Work organisation plays a key role in this respect.....this approach is challenging, as it forces us to establish a closer connection between competence policy and other important areas such as industrial policy, innovation and labour market policy"⁵.

The intellectual justification for gearing government budgetary and monetary policies toward fine-tuning the economy (and, in particular, toward generating more employment) was provided by John Maynard Keynes (1936) in *The General Theory of Employment, Interest, and Money*. This landmark book laid the cornerstone for the economic doctrine that dominated macroeconomic policies for several decades following World War II. Indeed, since the mid-1930s, the dominant view of economic policymakers has been that a competitive marketplace will fail to generate adequate employment opportunities. This view underlies the advocacy of government programs to "create jobs."

In the simplest terms, there can be only two reasons for divergent levels of economic prosperity: (1) different levels of resources or (2) differences in the allocation of resources, which may be either how the resources are employed or how many of the resources are employed. Moreover, these two sources of economic prosperity are interdependent: how a nation decides to allocate its resources will ultimately determine how many resources it has to allocate. Growth should be driven by the commitment to maintain an economic, environmental and socially responsible company. However, business growth is not automatically related to job creation

Government's role in the economy was laid out a decade ago in a wonderful essay, "The Poverty of Nations," by the late economist Karl Brunner (1985). A person in an economy can use resources in only one of four basic endeavors: he can produce, trade, influence the political process to redirect greater resources to his advantage, or protect himself against the wealth-redistributing efforts of others. Government institutions--laws, rules, regulations, and the judicial system--influence private decisions to allocate resources among these different uses.

In the economic landscape of Europe today, growth has become a strategic objective for companies seeking to secure their market shares. On a larger scale, growth is also important to maintain 'decent work [which] can only exist in competitive, productive and economically viable firms' as stated by the International Labour Organisation. But companies do not just grow by themselves; they need a forward looking, pro-active approach, and must constantly adapt their business strategies and structures to realise that objective. It seems that growth has to be profitable and the company's approach innovative to create new employment opportunities. This involves a thorough management of change, not only for companies, but also for social partner organisations and governments. Whatever the approach, **aspects such as an entrepreneurial spirit, good work practices linked to job satisfaction, flexibility within the company and labour markets are key factors in achieving profitable growth and job creation.**

The function of a company is to create profit out of which shareholders can be paid dividends and employees their salaries. Thus, growth, from a company perspective, must be profitable. While job creation may be a welcome by-product of profitable growth, it is not what drives companies to change and grow. The first priority of company CEOs and their Boards is to create and manage profitable growth which is sustainable.

'Profitable business growth is important because it is the basis of growth. Companies measure everything in terms of growth through measuring indicators that show how many more customers, branches, market segments,

5) The conclusions of Norwegian Policy Makers in "Competence Report"- 2003, pg.24.



competitors there are this year in comparison with last year.' To achieve this companies frequently implement internationally recognised quality standards (e.g. ISO) as a guarantee for suppliers and customers. Such quality standards also represent a security for the company itself in the sense of being reassured that it is providing customers with a good quality product.

A company can take as its main framework the triangle of customer-employees-shareholders, or it can adopt a triple bottom line, expressed in the pillars of being economically viable, socially acceptable and environmentally responsible. **This reflects an integrated understanding of the company's performance, in which social, environmental and economic bottom lines are interdependent.**

Creating employment is not the sole responsibility of companies. It is through partnership with government, that job creation becomes not only possible, but also sustainable. While companies may provide the fertile ground for job creation, the labour market must supply the input. Government activation policies to create active and well-trained labour forces play an important role in job creation. By ensuring and guaranteeing a well-trained and flexible labour force, governments can encourage companies to create jobs.

Yet, planning is an essential element of growth and job creation

Like legislators and politicians, businesses too need to make strategic plans and policies. Anticipating growth and the means to achieve it are an essential aspect of a strategic and operational business plan. Plans can be shared and are not just tools for management and leadership. Business plans also constitute a basis for discussions with the social partners, labour market and investment authorities, and financial and business support agencies.

Companies in profitable growth do not always create jobs. Some may use additional income from sales or investors to invest in technology, or to divest and diversify. But when a company creates new jobs, management have to know where and how to recruit. Skills shortages exist, though not being able to fill a vacancy is not always a sign of lacking skills: it may signify that people are not willing to work for the pay and conditions offered.

The untapped potential of women workers remains an issue for governments and economic prosperity.

The fact that the number of young people available in the labour market will decrease in the next 30 years also needs to be considered. In short, **job creation will need to go hand-in-hand with strategies for recruiting and retaining female workers and an ageing workforce.**

A job is not for life anymore, but employment in one form or another can be. Understanding this is vital for employees and trade unions; recognising this reality is an important responsibility for employers and managers, as well as for workers and their representatives. Providing opportunities, within the business constraints, for employees to increase their employability and to develop skills in different parts of the business process and production becomes a pre-requisite for the flexibility which employers need, as well as for the security which employees seek.

A good company is able to re-organise in order to keep pace with change and growth. In this context, multi-skilled employees, who have been trained in this way, represent a considerable business asset. However, the employer does not have the sole responsibility. The individual employee also needs to take charge of his/her own development and lifelong learning plans. Thus, work becomes a process whereby workers learn how to enhance their personal development throughout their careers.

The old fashioned view that flexibility is purely a management obsession and security a union demand needs to be re-shaped. **All partners - employers, workers, policymakers and legislators - need to identify their own demands for flexibility and security, and must offer their own solutions for maximising these.** For the time being, this has to be done within the given legislation and regulation, providing companies with a minimum framework in which they can operate. Within this given framework, companies themselves create strategic and operational structures, usually in the form of shareholder agreements, corporate governance conventions, corporate visions and values, and business plans.



In terms of economic performance, higher levels of skills are a necessary but not sufficient condition for success. There are several drivers of economic success, of which skills is but one, such as:

- 1) High levels of R&D and innovation
- 2) High levels of capital investment in plant and equipment
- 3) A high quality public infrastructure, including communications and transport
- 4) Readily available sources of patient and knowledgeable capital
- 5) A domestic market for goods and services that demands high levels of product quality, specification and customisation

A domestic income distribution and public purchasing policy that can support point 5 above higher levels of skill supply may have very limited effects on economic outcomes. Skills can support a more productive economy, but on their own are fairly unlikely to create one. Creating more skills, using public money, is relatively easy:

You expand the education system

You subsidise employers' own training efforts

Making sure that those higher skill levels get used productively is much harder, and rarely attempted. We assume that once more skills are created, they will be used.

Despite the globalization effects, we can argue that Macedonian world of labour is far away from the so called Post-Fordist world and an end to Taylorised work patterns, evidence suggests that much work continues to have:

A low skill content

Highly routinised patterns

Low discretion

Low autonomy

Short job cycle times

Hierarchical organisation

Supply more skills, of itself, may do little to change this. The solution is to supply more skills AND simultaneously seek to help firms to move up market, become more profitable, increase productivity, develop new markets, organise work differently, and use skills better.

Since the 1) skills are only one component in leveraging improvements in business performance, besides 2) business support to firms and 3) cluster, network and supply chain development, the key policy goal should be : engineering mutually supportive interaction between the three components.

In order to create higher demand for, and better usage of, the skills being supplied, the governmental policy should be oriented toward a need to design interventions to impact on:

Product market strategies

Goods and service quality and specification

Investment strategies (plant, R&D, product development)

Production/service delivery systems

Employee relations

Work organisation

Job design



Is the current range of policies, programmes and interventions up to the task outlined above? Where, for example, are major programmes on employee relations systems and practices, work organisation or job design? In many Northern European countries, these are the focus of major action learning R&D programmes by government.

Similarly as Europe, Macedonia faces challenges from technological change, globalisation and population ageing. Globalisation brings opportunities for adaptable economies but punishes rigid ones, while ageing populations will put welfare systems under pressure. There are several ways that can help meet these challenges:

a) Market mechanisms should be used as much as possible to make sure that environmental goal (as one of the three sustainability pillars) is achieved with the lowest cost (such as for example, emissions trading scheme).

b) Cohesion policy aims to reduce regional disparities and encourage economic convergence. The budget is too small to make a real dent in income gaps, so the challenge is to get the maximum benefit from the available funds by making sure government focus on activities that will spark sustainable growth, such as education, research and important infrastructure projects

In principle, national strategic plans should allocate most money to the Lisbon goals but in practice the list of eligible activities is long and provides little focus. Moreover, it may be helpful to re-assess whether state aid and social housing schemes should be eligible. The Government could achieve more with its budget for underdeveloped regions if it were more performance-based so that money could be shifted to projects with the highest payoffs. There are several ways this could be done, including sunset clauses or a mandatory performance reserve in which a portion of funding is tied to results.

Greater labour mobility would strengthen Macedonia. A mobile workforce can act as a safety valve for the economy- and can significantly contribute to establishment of new companies, while making the existing companies more productive and innovative, by bringing fresh perspectives and new skills and ideas.

26 This will be possible if the Government continues to improve the recognition of qualifications, eliminate barriers in the regulated professions, reduce transaction costs on house sales and ensure that measures that provide housing for the poor are implemented.

Although Macedonian Government has already started to create business friendly environment, it should further enforce and enhance both monetary and fiscal policies and to contribute to economy recovery and to cause accelerated growth. The common thread in these measures is that each of these elements seeks to make it easier for people to do business:

- tax relief package that include immediate refunds to individuals and small businesses. This, as well as the stimulative effect of the tax cuts, puts money into circulation.
- development of sound financial market with provision of low interest rates are also important in stimulating investment and consumption, and if consumer confidence continues to be positive, we should have a sustained recovery.
- creation of employer confidence through a package of measures that include a reform of the health care system to allow small businesses, which are the largest potential source of new jobs, to provide affordable health coverage for their workers.
- Guillotine - the plan to reduce the burden of frivolous lawsuits, improve the infrastructure, and simplify and streamline regulations and reporting requirements. The regulatory reform should be aimed to reduce costs and speed up the decision-making process. This is especially important for start-up businesses, and for exporters that wish to remain competitive.
- To continue the efforts toward the EU accession since enlarged market will enforce trade and investment which are the keys to development, and development is the key to security and prosperity.



- The challenge of ever-increasing social payments, the current system of social payments will soon become unsustainable. A smaller working-age population will not be able to support a larger, elderly, retired population at current benefit levels.
- Awareness rising to balance the lessons of experience with a willingness to adapt to change. We must remember that advances in telecommunications and information technology have been crucial to advances in productivity and growth. Having in mind that a free market encourages innovation and entrepreneurship. At the same time, it takes money to implement innovative ideas. The Macedonian market should feature easy access to venture capital.

An efficient economy features a smaller government as a percentage of GDP and less government involvement in business - this should be the final effect of the macroeconomic policies for economic prosperity and job creation. The government must establish and enforce laws that govern safety and fairness. However, government meddling in business has never worked efficiently. It raises costs and reduces competitiveness as well as sapping energy and creativity from the private sector. Our increasingly globalised economy needs the collective effort of entrepreneurs and investors in order to thrive within the framework provided by the Government.

Strategic Measures

Key Challenge Economic Prosperity and Job Creation:

On the basis of the Lisbon Strategy and Oslo declaration in the perspective of the Agenda 21, and harmonized with the Integrated guidelines for growth and jobs (2005-2008) (Commission Recommendation COM(2005/141/0057) Macroeconomic policies for growth and jobs will be oriented toward:

- Secure economic stability to raise employment and growth potential through adequate monetary and fiscal policies ;
- Safeguard economic sustainability through strengthen public finances, reformed pension and health care systems to ensure that they are financially viable and socially adequate and accessible and take measures to raise employment rates and labour supply;
- Promote efficient allocation of resources and direct public expenditure towards growth-enhancing categories, adapt tax structures to strengthen growth potential;
- Ensure that wage developments contribute to macroeconomic stability and complement structural reforms allowing for productivity, capacity and employment-enhancing investment.

Microeconomic policies to raise growth potential:

- Ensure open and competitive market through removal of regulatory and other barriers, enforcement of competition policy, redeployment of aid in favour of support for certain horizontal objectives such as research and innovation and the optimisation of human capital;
- Create more attractive business environment through a systematic and rigorous assessment of the economic, social and environmental impacts;
- Create a more entrepreneurial culture and create a supportive environment for SMEs through improved access to finance, better adapted tax systems, strengthen the innovative potential of SMEs, and provide relevant information and support services in order to encourage the creation and growth of start-ups in line with the SMEs Charter, reinforce entrepreneurship education and training;
- Develop adequate transport, energy and ICT infrastructures. In addition we will introduce appropriate infrastructure pricing systems, as a means to internalise environmental costs to ensure the efficient use of infrastructures and the development of a sustainable modal balance;
- Increase and improve investment in R&D through development of the mix of measures to foster business R&D, strengthening centres of excellence, making better use of support mechanisms, such as fiscal measures to



leverage private R&D, ensuring a sufficient supply of qualified researchers by attracting more students into scientific, technical and engineering disciplines and enhancing career development and the trans national and inter sectoral mobility of researchers;

- Facilitate innovation and the uptake of ICT through improvements in innovation support services, in particular for technology transfer, the creation of innovation poles and networks bringing together universities and enterprises, the encouragement of knowledge transfer through FDI, better access to finance and affordable and clearly defined intellectual property rights. Also we will facilitate the uptake of ICT and related changes in the organisation of work in the economy;
- Encourage the sustainable use of resources and strengthen the synergies between environmental protection and growth through increasing energy efficiency and development and application of environment-friendly technologies;

Sound policies will contribute to stronger industrial base through focussing on the development of new technologies and markets, commitment to the setting up and implementation of joint European technology initiatives (FP7) and public-private partnerships that help tackle genuine market failures, as well as the creation and development of regional or local clusters.



3.2.4 Sustainable Human Settlement

According to the result from census 2002 more than 65% of the populations in Macedonia are living in cities. Urban settlements in Macedonia are showing many of the symptoms of the global environment crisis. The sustainability of urban development is defined by many parameters relating to the availability of water supplies, air quality and the provision of environmental infrastructure for sanitation and waste management. The overall human settlement objective is to improve the social, economic and environmental quality of human settlements and the living and working environments of all people, in particular the urban and rural poor. An integrated approach to the provision of environmentally sound infrastructure in human settlements, in particular for the urban and rural poor, is an investment in sustainable development.

In order to relieve pressure on urban agglomerations, policies and strategies should be implemented towards the development of intermediate cities that create employment opportunities for unemployed labor in the rural areas and support rural-based economic activities, although sound urban management is essential to ensure that urban sprawl does not expand resource degradation over an ever wider land area and increase pressures to convert open space and agricultural/buffer lands for development.

The Macedonia should assess the environmental suitability of infrastructure in human settlements, develop national goals for sustainable management of waste, and implement environmentally sound technology to ensure that the environment, human health and quality of life are protected. In line with it, the government will strengthen the capacities of local self government's bodies to deal more effectively with the broad range of developmental and environmental challenges. The local self governments will adopt and apply urban management guidelines in the areas of land management, urban environmental management, infrastructure management and municipal finance and administration. Establishing of the EU standardized monitoring system covering all environmental media and based on principle of super vision by relevant EU institutions will monitoring human settlements influence on environment.

Human settlements management must be strengthened, so as to be able to steer physical development in a way which reduces the demand for transport and prevent damage to environment. Properly located and timed investment in transport infrastructure might be guiding force to induce development in defined direction. Government will develop or enhance, as appropriate, mechanisms to integrate transport planning strategies and urban and regional settlement planning strategies, with a view to reducing the environmental impacts of transport. Development of affordable, reliable and efficient public transport must be given top priority in urban transport plans and development programs. In line to improve existing urban public transport and establish urban public transport in some of the biggest towns, local authorities will provide conditions to enlarge the involvement of private capital. The local authorities have to develop urban public transport sector by giving priority to less polluting and less noise transport means. In line with the improvement in public transport, restriction on car traffic should be imposed in congested and environmentally sensitive areas. In line with the Sustainable Human Settlements key challenge, local authorities should develop and implement urban transport plans and systems taking into account sustainable transport principles and considering closer co-operation between cities and surrounding regions. The local authorities will optimize urban transport flows reducing loads on urban centers and traffic jams. Urban transport infrastructure will contribute to the mobility of all production factors, outsourcing as well as inclusion in the global market - contributing to the well being settlements.

The local authorities in cooperation with non-governmental organizations and private sector will promote and implement projects for increasing the use of bio transport (bicycles, role-skates) and they will provide safe cycle way and footways. Local authorities in cooperation with non-governmental organizations and other stakeholder will take measures to promote public awareness of the transport environment impact and they will enhance the development of environment friendly travel behavior.



Government will implement new law for water and will establish integrated water management system at all levels. The government will promote policies aimed at recovering the actual cost of infrastructure services, while at the same time recognizing the need to find suitable approaches (including subsidies) to extend basic services to all households. In line to secure that all population have adequate condition for life and the better environment the local authorities will improve the level of infrastructure and service provision in poorer urban areas.

The local authorities will build new sewage systems in rural areas and they will upgrade and expand existing sewage collection system. The local authorities must construct new waste water treatment plants for all agglomerations with more than 2000 e.c.

With a view to reduce water losses through water supply distribution systems as well as reducing the consumption of water, the local self governments in cooperation with the government will renovate existing water supply infrastructure. In line to secure that all urban and especially rural population is supplied with safe drinking water, the government will work with local authorities to expand existing and to construct new water supply systems.

The local authorities will make effort to close landfills those are not in compliance with EU requirements and on regional level will establish modern regional municipal waste management system.

Increased awareness and appropriate consideration of potential tourist products by competent authorities for tourist products is potentials that contribute to sustainable development of tourist destinations.

Promote the formulation of environmentally sound and culturally sensitive tourism programs as a strategy for sustainable development of urban and rural settlements and as a way of decentralizing urban development and reducing discrepancies among regions. Government and local authorities will improve water and waste management in tourist destinations.

Government on state level and local authorities on local level will force the high level of implementation of laws for different environment media, by implementing the polluter payer principle and they will establish efficient eco-police.

Strategic Measures

Key Challenge Human Sustainable Settlements:

- Adopt and applying urban management guidelines in the areas of land management, urban environmental management, infrastructure management and municipal finance and administration.
 - Assess the environmental suitability of infrastructure in human settlements, develop national goals for sustainable management of waste, and implement environmentally sound technology to ensure that the environment, human health and quality of life are protected.
 - Strengthen human settlements management.
 - Develop affordable, reliable and efficient urban public transport.
 - Promote and implement projects for increasing the use of bio transport (bicycles, roller-skates).
 - Establish integrated water management system.
 - Promote policies aimed at recovering the actual cost of infrastructure services.
 - Reduce water losses through water supply distribution systems.
 - Build new sewage systems in rural areas.
 - Upgrade and expand existing sewage collection system.
 - Construct new waste water treatment plants for all agglomerations with more than 2000 e.c.
 - Close landfills those are not in compliance with EU requirements
 - Establish modern regional municipal waste management system.
 - Promote the formulation of environmentally sound and culturally sensitive tourism programmes as a strategy for sustainable development of urban and rural settlements
-



3.2.5 Cross-Cutting Policies contributing to the Knowledge Society

In the 21st century, a new society is emerging where knowledge has become the most important factor determining the wealth generation and sustainable development (SD). The core element of the knowledge society is information economy, based on advanced information and communication technologies (ICT). Technological change imposes reconfiguration of the economic, social, cultural, political and organizational structures, as well adaptation of supporting legal and regulatory frameworks. Maximisation of the possibilities to benefit from the technological changes highly depends from the pro-activity towards the changes. Only proactive approach could ensure an optimal balance between the knowledge and utilization of the available resources in a sustainable way, resulting in a comprehensive wealth for the country, combined with social cohesion and a healthy environment.

The strategic goal for 2010 set for Europe at the Lisbon European Council (March 2000) was "to become the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion." The Republic of Macedonia, as a candidate country for EU membership, could not follow the time frame set for the more advanced EU countries, but needs to start its transformation towards knowledge society without delay. Building of a knowledge society in the Republic of Macedonia is not just relevant for faster integration of the country into the EU, but it is primarily essential for provision of better standard of living of macedonian citizens. In view of the current economic situation in the country, along with the changing economic environment on the global level, holding the status quo is not an option. The Republic of Macedonia needs to move forward and embrace the conditions necessary to underpin higher value added economic activities, better and more productive jobs, new social prosperity and sustainable use of the resources within the environmental limits. In that respect, governance's vision and quality of the policy-making and strategies determine country's success in transition towards knowledge society.

Knowledge society encompasses variety of aspects of the modern society - primarily education, technology, research and development (R&D), employment, infrastructure, industry, services and agriculture. Therefore, **the governance focused on building knowledge society needs to provide optimal balance among the relevant policies.** Policies related to science and technology, industry and education will need to emphasize the role and importance of innovation systems, as well as necessary infrastructure and incentives to boost investments in research and development. In parallel to the technological advancement that is crucial to build competitive economy, societal transformation of the people should be also encouraged, aiming towards preservation of human values, cultural identities and historical heritage. In addition, a strong sense about the nature and the significance of the environmental protection needs to be interwoven into all levels of policy-making for knowledge society. These two components are important for preservation of the human dimension of the knowledge society, which could be seriously jeopardized by the technological dimension of the information economy. Therefore, knowledge as an essential asset of the new society should be managed through governance system based on an integral policy-making to ensure interrelation of all policies regulating or contributing to some aspects of the knowledge society. Still, **the main challenges to build knowledge society in the Republic of Macedonia should be addressed within three core policy areas - education and training, research and development and industry,** along with the necessary interrelation with other policies.

Education is widely recognized as a fundamental key to wealth creation and competitiveness, as it creates knowledge, generate skills and serves as an enabling force for other industries. **The policy on education and training should aim towards creating values and knowledge that correspond to the demands of the domestic economy, as well as changing global society in all sectors.** In that respect, the policy on education and training needs to ensure that all citizens possess functional literacy, technological competence and skills for real-life. Moreover, educational policy has a broader role of developing ethics, moral and social behavior aiming at reducing inequalities and exclusion. Accomplishment of these tasks imposes the responsibility of the policy-makers to:



- Develop a comprehensive policy and regulatory framework for education and training to support the information economy and knowledge society;
- Establish a system for professional development of teachers, trainers, researchers and all workers in the education and training sector;
- Enable access to advanced information technology and telecommunications infrastructure at an affordable price for all citizens and education, training and research institutions and
- Promote cooperation between industry and education in the development, promotion and delivery of services.

Reforms in education and training towards information economy and knowledge society should derive from a comprehensive and coherent policy framework, addressing specific problems in the sector. In that respect, policy-makers need to play a catalytic role to ensure that the education and training sector will turn into an effective system for applying new technologies and methods that will enable delivery of proper skills for knowledge society. The policy on education and training is a complex policy as it focuses at the same time on people, infrastructure, institutions and regulatory framework and addresses variety of issues related to different segments of the society. Cross cutting of all these segments is challenging, but inevitable process as the current policy and regulatory framework on education and training in the Republic of Macedonia does not provide coherent vision for knowledge society and holistic approach to the needed reforms. Therefore, **the comprehensive policy framework on education and training for information economy and knowledge society needs to be developed promptly in the Republic of Macedonia, and supported with adequate regulatory framework.** Lifelong learning must become a key policy focus, highlighting the mutually reinforcing importance of the economic and social strands to the knowledge society development. The policy framework should ensure sufficient public investment in education, but also needs to encourage effective partnership with the private sector that can provide access to a wider pool of expertise and technology, open up new market opportunities and create more favourable climate for innovation of efficient and effective methods of education and training adopted to the specifics of different economic sectors - industry, agriculture and services.

Professional development of the educational and training personnel is vital for the knowledge society. The industries of the future are knowledge-based industries and the ability of the workforce to respond promptly to the changing domestic and international environment is a critical source of competitive advantage in the information economy. The education and training sector's ability to adjust quickly to the demands of the information economy will significantly determine the pace of adjustment of the workforce and community as a whole. Therefore, **the policy on education and training in the Republic of Macedonia needs to ensure that the personnel in this sector will acquire substantial ITC competences and will continuously upgrade their specific field knowledge in order to be able to supply the population with skills necessary to drive the information economy.** This includes development and management of a new philosophy of education and training, based above all on the recognition of substantial (output-acquired) knowledge. In this respect, professional development of personnel in this sector needs to impose very high standards in their own education and training processes, as well demand for their continuous upgrading through lifelong learning. This is an essential precondition for education and training sector's capacity to diffuse substantial knowledge in the society and produce workforce able to cope with the competitive pressures of the global information economy.

Creation of a knowledge society is not possible without advanced ITC infrastructure in the country, available to all citizens under favourable terms. Better access to the current ITC infrastructure in the Republic of Macedonia has been partially enabled within the e-government project. Still, more efforts need to be done as the country is seriously lagging behind other countries of similar size and performances. Furthermore, establishment of reliable, sustainable, affordable and mutually compatible infrastructure support systems and high capacity networking within and between education, training and research providers is necessary for this sector to conduct its activities efficiently and effectively. The modern trends in the education and training encourage wider use of e-learning as key mode of



education. Use of e-learning systems in the Republic of Macedonia is rather limited, due to the insufficient infrastructure in the education and training institutions, as well to the limited equipment that end-users need to access and use online services. **The policy on education and training should promote effective methods of teaching and learning through providing access to advanced ITC infrastructure at an affordable price for all citizens, as well as education, training and research institutions.**

The policy on education and training should also enhance cooperation between industry and education, as the emergence of a knowledge society implies an increasing demand for a well-educated and skilled workforce. Therefore, **the education and training sector needs to produce knowledge and skills necessary to underpin development of competitive and technologically advanced industries that could create better jobs and higher standards of living.** Rapid technological changes in the world impose a need for prompt adaptation of the national economy that should be based on carefully selected industries for development, with highest potential for technological advancement and innovation. In this respect, **the policy on education and training sector should be focused on establishment of educational clusters of excellence in the selected areas for development.** Also, the policy needs to promote Vocational Education and Training (VET) in order to enable the workforce to acquire specific skills that could provide jobs more easily and could contribute to the economic growth. Without establishing a strong link between the education and industry, the possibilities for production of proper knowledge and skills for the knowledge society are greatly reduced. Non-existing or weak link will also reflect on low effectiveness of the personnel engaged in the education and training sector, due to the design of curriculums and production of knowledge and skills with limited practical value.

Promoting more and better jobs necessarily involves improved link between education and labour market. Better cooperation between the education and job providers, supported with enhanced flow of information, would facilitate school-to-job transition of the students. In this respect, introduction of a unified system of student's testing about the level of knowledge acquired during the educational or training process will provide more accurate signals to the potential employers about the quality of the work force. This would reduce information asymmetry, cut the companies' costs for recruiting staff and eventually, increase the demand for workers. In addition, the quality of the matching process of education and jobs could increase to the extent when the job match is of high quality. On the other hand, firms should plan and announce their demand for certain skills and knowledge in advance, and should also participate in the formulation of the education policy to ensure it reflects the needs of the private sector.

Another core policy area contributing to the knowledge society is research and development (R&D). The importance of R&D has been recognized as a priority in the EU Lisbon Strategy aiming at boosting employment and growth in Europe. The rapid pace of technological change on the global level imposes need for immediate actions for research and development on the local level, especially in the countries that are economically and technologically lagging, such as Republic of Macedonia. The current situation in the country reflects lack of real support for this sector, represented through low technological level in the industry, very low funds for research and innovations, negligible investment in talents and narrow embedding of research in policy and practice. **Better R&D policy in the Republic of Macedonia, geared to a more effective use of knowledge, is essential to accelerate the achievement of the knowledge society goals.** The focus of the research policy should not be only on individual research institutions and researchers, but on the interaction between research and various business and social actors that are crucial for applying knowledge and delivery of better jobs and higher standard of living.

R&D determine competitiveness in the knowledge society at great extent, as information economy is based on knowledge-based industries. Despite low competitiveness of the Macedonian industry, the country does not have an integral industrial policy nor policy on technology and innovations to strengthen the technological capacity of the industry, that mostly consist of SMEs. Therefore, **the policy-makers in the Republic of Macedonia need to formulate and implement coherent industrial policy focused on technological advancement, higher growth and prosperity for a country.** The industrial policy needs to ensure higher technological base that will underpin higher value added economic activities, optimal utilisation of human and other resources, increased employment,



growth in productivity and higher international competitiveness. Accomplishment of these tasks requires not only a strong science and technology base, but also strong capacities in industry to convert fundamental and applied research into new products, services or processes, as well to bring these innovations quickly to the market. In this respect, industrial policy should be closely linked with the policies on education and training and R&D to provide input for formulation and implementation of other interrelated policies like employment, SMEs, telecommunication infrastructure, services, tourism, agriculture and environment, as well SD policy.

Considering the variety of specific challenges for development of a knowledge-based society in the Republic of Macedonia, the policy-makers should promptly develop better key policies and build coherent policy framework that will encompass all policy aspects relevant for the knowledge society. Sustainable future of the country could be ensured if citizens are embodied with the key competencies and functional literacy that determines global competitiveness, social cohesion and a healthy environment. As Charles Darwin said: "it is not the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change".⁶ In the knowledge society's terminology, only nations acquiring and effectively using knowledge could be the winners in the modern world.

Strategic Measures

Key Challenge Cross-Cutting Policies contributing to the Knowledge Society:

- Develop better key policies and build coherent policy framework that will encompass all policy aspects relevant for the knowledge society;
- Create a policy on education and training aiming at creating values and knowledge that correspond to the demands of the changing global society in all sectors;
- Create an adequate regulatory framework on education and training for information economy and knowledge society;
- Ensure that teachers, professors and instructors will acquire substantial ITC competences and will upgrade their specific field knowledge in order to be able to supply the population with skills necessary to drive the information economy;
- Promote lifelong learning and effective methods of teaching and learning through providing access to advanced information technology and telecommunications infrastructure at an affordable price for all citizens and education, training and research institutions;
- Ensure that education and training sector will produce knowledge and skills necessary to underpin development of competitive and technologically advanced industries that could create better jobs and higher standards of living;
- Establish the educational clusters of excellence in the selected areas for development;
- Improve the link between education system and labour market to improve job matching in terms of the speed, quality and persistence;
- Create better research and development policy and regulation in the Republic of Macedonia, geared to a more effective use of knowledge, as essential to accelerate the achievement of the knowledge society goals and
- Formulate and implement coherent industrial policy and regulation focused on technological advancement, higher growth and prosperity for a country.

6) <http://www.worldofquotes.com/author/Charles-Darwin/1/index.html>



3.2.6 Climate Change and Clean Energy

Climate Change is a worldwide threat to the way we live today. Or is it rather vice-versa? Now we can say "yes, it is rather vice-versa", as the Intergovernmental Panel on Climate Change has recently confirmed that the evidence for global warming is unequivocal; no doubt that anthropogenic climate change is real or that steps must be taken to deal with it. Indeed, an effort is under way to develop a successor to the Kyoto Protocol and provide a roadmap towards the lower carbon world of the future.

Climate change engages the energy sector particularly closely because energy is central both to the problem and to its resolution. Energy-related emissions account for over two thirds of anthropogenic greenhouse gas (GHG) emissions. On the other side, all sustainable energy projects/interventions/practices result in corresponding reduction of GHG emissions, contributing effectively to climate change mitigation. From that reason, the Energy and Climate Change together are top priority in the European agenda for achieving sustainability.

No matter, how small the territory of Macedonia might be, as citizens of this Planet Earth we have the duty to shoulder the parcel that we are able to carry, in order to reduce human induced climate change and limit its costs. This duty coincides with the third of our **"3A" overall objectives in the energy sector**, which are: to reduce our dependence on energy import (economic - Affordability), to ensure reliable energy supply for all our citizens (social - Accessibility) and to reduce energy-related environmental pollution, both global and local (environmental - Acceptability). To achieve these objectives, the Macedonian government must foster the adoption and realization of a **comprehensive long-term Energy strategy (Strategic Measure 1)**. Recognizing the fact that Macedonia should actively promote its interests in the future energy projects in the frame of the common South European Energy market and in the wider European energy market, there is an urgent need for Macedonia to define the national priority energy projects and to include them in the new Energy Strategy. The prioritization must always favour projects based on lower carbon intensive fuels, technologies, practices (**diffusion of Climate Change Mitigation into Energy Policy and Energy Strategic Planning - Good Governance and Better Policy Making**)

Providing a legal framework for exploitation of renewable energy sources (RES) and energy efficiency (EE) improvement the **new Energy Law** (May 2006) is the most important achievement along this line. This law governs the objectives of the energy policy and the manner of its realization, energy activities and the manner of regulating the energy activities, construction of energy facilities, functioning of the Energy Regulatory Commission, introduction of market for electricity, market for natural gas, market for oil and oil derivatives, market for thermal or geothermal energy, and contains as a **special chapter on EE and RES**. On the other side, the implementing legislation on energy efficiency and renewable energy (rulebooks, regulations, procedures, standards) is not in place or in early stage of development. Considerable efforts for **adoption of secondary legislation (Strategic Measure 2)** are yet to be undertaken including harmonization of the laws and regulations from different sectors (construction/building, transport, environment, etc) which address sustainable energy issues.

As to the national Climate Change policy, Macedonia ratified the UN Framework Convention on Climate Change in 1997 as a non-Annex I Party to the Convention, and ratified the Kyoto Protocol in July 2004. The National Climate Change Committee was established as an advisory body for policy-making related to climate change issues. Climate change is incorporated in the Law on Environment, including details on preparation of inventories of GHG emissions and removals by sinks, as well as action plan on measures and activities to abate increase of GHG emissions. In the amended Law on Environment (2007) an Article on Clean Development Mechanism (CDM) was introduced assigning responsibility to the Ministry of Environment and Physical Planning (MoEPP) to act as country's Designated National Authority (DNA) and to evaluate the CDM projects against the sustainable development criteria.

One of the most important issues to be addressed in the relevant policies is **the way we produce and consume energy (Sustainable Production and Consumption)**. On the energy supply side we will **progressively change the energy mix (Strategic Measure 3)** by intensified utilization of the natural gas and renewable energy sources.



The energy system should be expanded in terms of production capacities and infrastructure, but always having in view cleaner and more efficient energy technologies (Combined Heat and Power (CHP), Clean Coal , etc.)

On the energy demand side we will promote energy saving and efficient use. This in first line involves stimulation of **structural changes in the industry (Strategic Measure 4)**, favouring less energy intensive industries and Small and Medium-sized Enterprises (SMEs). As to the households and public sector, we need a highly publicised **Action Plan for Efficient Use of Energy - Energy Efficiency at demand side (Strategic Measure 5)** including thermal retrofit of buildings, with public sector playing an exemplary role; assessment of heating alternatives; developing incentives for switching to alternative heat sources, supporting low-income and vulnerable groups of the population to switch from electricity to other types of heating and to implement retrofit measures. Very simple, basic measures for energy saving in our homes include: improving the house envelope (outer walls, ceiling, windows and floors) - sealing air leaks and adding insulation; Buying energy-efficient appliances; Efficient lighting. As far as the transport is concerned, efficient use of energy implies more intensive use of **public transport** with promotion of environmentally friendly vehicles, improvement of **fuels quality**, as well as breakthrough of **biofuels (Sustainable Transport)**. The implementation of these technical measures should be supported by launching targeted public awareness raising programmes as well as by developing appropriate curricula for each educational level. Also properly accredited training on EE and RES for experts and local energy managers should be organized ensuring that trainees can practice in governmental programmes.

In order to make these energy demand side measures more effective, the long term trend of treating the energy price as a social category should be abandoned, and instead a **market price of energy (Strategic Measure 6)** to be introduced which will improve the operational condition of the energy producers and also will provide significant motivation for energy saving.

Moreover, the market prices of energy will increase the competitiveness of **renewable energy sources**. Although the RES potential in the country is high, its realization is almost negligible. With so many sunny days and even having the sun in our national flag, we afford not to use solar energy for producing hot water and electricity for our homes !!! Our farmers neither use it for crop and grain drying, greenhouse heating nor for remote electricity supply or water pumping.

?The worldwide public debate on Climate Change and at the same time the promotion of RES based technologies as Clean Energy Technologies offer new opportunities for our businesses and for the creation of new jobs (**Economic Prosperity and Job Creation**). The rural regions of Macedonia provide a great variety of possibilities for traditional farmers to have at least a second main pillar of income as energy farmers. This objective considerably contributes to the **Diversification of Income in Rural Regions**. In the future, we will focus our efforts to attract foreign and domestic investors in order to support RES, including hydropower, geothermal energy, solar energy, biomass (wood, biogas, biofuels, agricultural and forest residues) and wind energy. The RES will be utilized through the following practices: Biomass based practices - ?Combustion systems for burning biomass; Combined heat and power (CHP) systems;? Anaerobic digestion of animal waste; Growing energy crops; ?Pelleting; Geothermal energy based practices - Space and water heating; Greenhouse heating; Wind energy based practices - Stand alone systems for electricity generation. In addition to agricultural application, geothermal energy is the fundament for wellness tourism, which requires a palette of supporting services and products that attract foreign tourists. The utilization of geothermal energy in tourism is regarded as to be a great multiplier for economic prosperity and job creation, again in particular in the rural regions.

An important step forward are the appropriately created **incentives (Strategic Measure 7)**, first of all - the adoption of **feed-in (preferential) tariffs** for electricity generated from small hydro, wind and biomass power plants. This was accompanied with two tenders for small hydro power plants - the first for 40 locations, and the second for 28 locations. In order to stimulate the usage of solar energy in the country the Government established a **subsidizing scheme**, according to which the Ministry of Economy provided repayment in amount of 30 % (not more than 300



EUR) of costs for the first 500 buyers of solar thermal collector systems, who have properly installed it in their homes. Next to this is the adoption of the Law on amending the Law on VAT, which anticipates **reduction of VAT** from 18 % to 5 % for the thermal solar systems and components.

A **Sustainable Energy Project** in Macedonia has been approved by the Global Environment Facility (GEF) in December 2006. Under this project a grant of USD 5.5 million will be received, through the World Bank as an implementation agency. The project started implementation in March 2007 and will be completed in September 2010. The development objective of the project is to develop a sustainable market for EE and RES by supporting the development of an enabling framework, institutional capacity, and necessary financing mechanisms. One of the components will be a **Sustainable Energy Financing Facility (SEFF)** consisting of a loan guarantee facility and a loan facility (a revolving fund), on a co-financing basis with commercial institutions and the Macedonian Bank for Development Promotion. Other component supports the development and start-up of a utility-based **Energy Service Company (ESCO)**. The ESCO will help to stimulate the market for energy services by providing turnkey and performance-based contracting for EE and by demonstrating the financial performance of such projects using third-party financing for publicly-owned buildings. The direct impact of the GEF project is expected to be the implementation of 10 MW of RES among small hydro, biomass and geothermal, with 1,130 GWh of life-cycle generation, and 730 GWh of electricity saved through EE investments (**Strategic Measure 8**).

As a country that does not have a binding GHG emissions commitment under the Kyoto Protocol (Non-Annex I country), Macedonia can undertake GHG mitigation activities and create carbon credits through the CDM. By generating additional revenues related to the reduced GHG emissions, the CDM is an opportunity to improve the economic feasibility of the sustainable energy projects, thus enhancing their potential to attract foreign investment.

In February 2007, a National Strategy for CDM for the first commitment period of the Kyoto Protocol 2008 - 2012, was adopted by the Government. The goal of National CDM Strategy is to facilitate transfer of investment and technologies through CDM for implementation of projects that reduce GHG emissions and contribute to Macedonia's national sustainable development priorities. Within this strategy the following priority areas were identified in the energy sector: Rehabilitation of large power plants; Fuel Switching to Natural Gas; CHP for District Heating; Industrial Efficiency Improvements; Hydro Power and Geothermal Energy. In addition some projects were identified within the waste sector (municipal and industrial waste, waste in agricultural and forestry sector).

Having the required national institutional setting established and the potential projects identified, the key challenges regarding the carbon financing are of legal and operational nature as the Government should establish rules and procedures concerning the ownership of the generated certified emission reductions (CERs) and taxation policy with regards to the income gathered by selling the CERs. Another key challenge is to invest in technical capacities for identification of projects and preparation of necessary documentation.

Finally, in line with the significant role of the local authorities in the realization of RES and EE projects, definitely the concept of Programmatic CDM projects is a key issue providing possibility for carbon financing of initiatives/programs such as "X roofs with solar collectors", or "EE interventions in buildings of the city Y (or some part of the city Y)", or "Efficient street lighting in the cities X, Y, Z". The start-up along this line should involve estimation of the country's potential and development of a pipeline of Programmatic CDM projects. (**Strategic Measure 9**).

Alternatively to the RES and EE projects which reduces the amount of GHG in the atmosphere following the less- (or in the best cases zero-) emissions approach, forests act as GHG sinks (absorb the emitted GHGs). In the fight to mitigate climate change, this makes us focus on Macedonia's forest resources, which means that we need to invest more efforts in the **Conservation and Management of our Natural Resources**.

No matter to which extent our fight with the GHGs is successful, we can not escape from the impacts of the climate change as it can not be stopped but only mitigated. For this reason an Environmental Monitoring System based on the National Program for Environmental Monitoring and meeting international standards shall be established for professional operation. We want to define appropriate adaptation measures, be they anticipatory or



responsive, and to monitor whether our efforts to minimize the effects of climate change are appropriate. We also want to observe and forecast any kind of threat for the **Public Health** and inform the public (**Strategic Measure 10**).

Decisive factor in all these efforts to limit climate change and its costs and negative effects to society and the environment is the **Research and Development (R&D)**, seen in a wider sense as to include research, development, demonstration, technology choice and deployment and technology transfer. All these aspects of the technology issue are accountable for synergies among various sectors, so that the best and most balanced technology solutions emerge from the cross-cuttings (**Cross-Cutting Policies contributing to the Knowledge Society**)

Our energy-and-climate-change-related R&D will be built upon the following two elements: translational research (establishing/strengthening the partnerships of type academia-businesses, academia-policy-making or even academia-businesses-policy-making) and international cooperation (in particular, participation in EU Framework Program 7, where energy and climate change are among the top priorities for cooperation).

Finally, goes without saying that the sooner we act against climate change, the better. Action is needed now and we firmly believe that with the proposed Strategic Measures the energy sector can make a positive contribution to solving the problem.

Strategic Measures

Key Challenge Climate Change and Clean Energy:

- Develop and adopt a comprehensive long term Energy Strategy which will also incorporate Climate Change Mitigation.
 - Adopt a secondary legislation to support the implementation of RES and EE projects.
 - Progressively change the energy mix (utilization of the natural gas and renewable energy sources for energy production).
 - Stimulate structural changes in the industry, favouring less energy intensive industries and SMEs.
 - Improve the EE at demand side through targeted programs, education, training and awareness rising.
 - Introduce market price of energy (rationalization of energy prices) which will improve the operational condition of the energy producers and will provide significant motivation for energy saving.
 - Enhance the existing and introduce more incentives for EE and RES projects.
 - Promote sustainable energy financing facility and encourage RES and EE projects to make use of it.
 - Host as many as possible CDM projects and identify and promote as many as possible Programmatic CDM projects.
 - Monitor and assess the climate change vulnerability (particularly health impacts) and undertake appropriate adaptation measures.
-



3.2.7 Sustainable Transport

The Key Challenge Sustainable Transport and its corresponding Key Objective is addressed and supported with the Objectives and Results formulated in various sectors and cross-cutting issues:

Transport plays a vital role in the development of Macedonia. Transportation is fundamental to economic prosperity and quality of life. To increase our competitiveness, we must ensure our transportation system is efficient and responsive to new challenges. To improve our quality of life, we also need to ensure that our transport system is safe, secure, and environmentally responsible. Government of Macedonia recognizes that development of sustainable transport system is one of the key challenges for Macedonia.

Transport sector involved many stakeholders and the government will take a leadership role on establishing sustainable transport and act as a facilitator in bringing key players together. Government will use policy, programs and innovative approaches to support the productivity and efficiency of transport sector and its contribution to the national economy and will allocate resources, and apply tools to create integrate sustainable transport system. Government will establish efficient system for data collection and the standardization of data formats, and ensure that data is shared and made readily accessible. Government should annually measure and report its progress in achieving its sustainable transport objectives and targets.

The transport sector has considerable need of new investment and rehabilitation. Government should support partnerships between public and private sectors to promote investment in the transport sector that will facilitate the introduction of appropriate technologies and infrastructure consistent with sustainable development goals based on national priorities. This will include initiatives addressing urban transportation needs, such as public transit and trade and passenger corridors, while remaining sensitive to the needs of rural and remote areas. Having adequate infrastructure is basic for development of tourism Government should focus on development of freight and passengers railway transport, including the appropriate development of railway infrastructure of the Trans-European Corridors (8 and 10). In line to improve existing airports, the government will continue to modernize international airports.

Construction of adequate infrastructure and vehicle equipment in line to provide access to appropriate transport for all, including vulnerable persons, is one of the key measures which will increase accessibility of our transport system.

Improving traffic flow is recognized as a basic condition for successfully implementation of sustainable transport policy. All authorities on different levels have to work closely for improving urban traffic flow operations and circulation and providing facilities and urban transport infrastructure, which will reduce emission of green house gasses.

We have to be ensuring that transportation needs are met in a way that avoids or minimizes the creation of pollutants and waste, and that reduces the overall risk to human health and the environment. In the aim of it, establishing an Environmental Management System (EMS) is one of the key steps for monitoring negative environmental impacts from transport. Developing and promoting the use of new and innovative technologies that reduce the environmental impacts of transportation while meeting the transport needs is an important challenge for sustainable transportation. Government with import tariffs, taxation and vehicles registration policies and fuel pricing policies will prevent, in particular, growth in the number of energy-inefficient, highly polluting types of vehicles. In partnership with other levels of governments, the private sector, and all others transport stakeholders, government will forced applying of sound environmental protection and conservation practices and will support transportation systems that make efficient use of land, and natural resources preserve vital habitats and maintain biodiversity.

Government will take measures to improve the economic and environmental performance of all modes of transport and, where appropriate, measures to effect a shift from road to rail, public passenger transport including lower transport intensity through production and logistic process reengineering and behavioral change combined with a better connection of the different transport modes.



Improvement of public transport is one of the key points within a well-planned and integrated transportation system adapted to local needs for sustainable development. Public transport routes need to be located as close as possible to the origin and destination to people's travel. Convenience and ease of use is a very important factor in making public transport a viable alternative to the private car. Government with the Ministry of Finance will work on a taxation policy that would promote and support of all modes of public transport. Government will promote the use of Public Transport and support the Public Transport System to offer efficient, affordable services and consider price regulation measures and subsidies in the case of public interest. In line to replace old vehicles, especially in public transport, with fleet that uses improved technologies and have clean engines, the government should prepare and implement plan for replacement of old vehicles. Government and local governments should be focus on possible alternatives to road urban public transport for passengers.

Government committed to facilitating the development of a competitive transport sector, in which modal efficiency is optimized. Government will place a high priority on investing in multi modal freight transportation, Intelligent Transportation Systems, and planning and feasibility studies in support of these investments. In aid of this effort, Ministry of transport and communication will conduct a series of regional consultations with stakeholders, in order to identify barriers to multi modal freight, opportunities to advance inter and multi modal's, and opportunities for partnerships.

In promoting sustainable transportation, Government will work on increasing awareness for SD Transport, in cooperation with other levels of government, academia, non-governmental organizations, and others.

In line with international best practices the government should implement transport safety standards covering each mode of transportation. Government will continue with harmonization of signs and road markings in line with EU best practices. With a view to reduce road transport deaths as well as reducing the number of injured in road traffic and increasing road safety, the government in cooperation with local self governments will improve local road infrastructure.

In order to cater to the demand for improved access to tourist destinations, recreational attraction, the government with promotion and support of projects for the construction, modernization, and maintenance of transport infrastructure will improve and facility the access to the tourist destinations.

Strategic Measures

Key Challenge Sustainable Transport:

- Use policy, programs and innovative approaches to support the productivity and efficiency of transport sector and its contribution to the national economy and will allocate resources, and apply tools to create integrate sustainable transport system.
 - Support partnerships between public and private sectors to promote investment in the transport sector that will facilitate the introduction of appropriate technologies and infrastructure consistent with sustainable development goals based on national priorities.
 - Improve urban traffic flow operations and circulation and providing facilities and urban transport infrastructure, which will reduce emission of green house gasses.
 - Force applying of sound environmental protection and conservation practices and will support transportation systems that make efficient use of land and natural resources preserve vital habitats and maintain biodiversity.
 - Take measures to improve the economic and environmental performance of all modes of transport and, where appropriate, measures to effect a shift from road to rail, public passenger transport including lower transport intensity through production and logistic process reengineering and behavioural change combined with a better connection of the different transport modes.
 - Promote the use of Public Transport and support the Public Transport System to offer efficient, affordable services and consider price regulation measures and subsidies in the case of public interest.
 - Place a high priority on investing in multi modal freight transportation, Intelligent Transportation Systems, and planning and feasibility studies in support of these investments.
 - Implement transport safety standards covering each mode of transportation.
-



3.2.8 Sustainable Consumption and Production

*"If we look 25 to 30 years ahead, we would like to continue to have a good quality of life in the 2030s - a human well-being based on secure access to clean water and healthy food, to mobility and decent housing, with equity in access to education and social security. To be on the pathway to this vision, we will have to substantially improve the efficiency of our energy, material and land use and reduce emissions of both climate change gases and pollutants. We should be looking more carefully at the delivery of products and services from cradle to cradle rather than from cradle to grave, at entire supply chains and at eco-design and enhanced environmental performance using such ideas as zero emissions and low carbon projected by leading businesses in a number of major industries."*⁷

We promote sustainable consumption and production patterns. Let us make our footprint on our part of planet Earth a bit smaller.

In a market system based economy, the close links between consumers and producers play a vital role in order to achieve sustainable consumption and productions. The recent emergence in many countries around the world of a more environmentally and socially conscious consumer public, combined with increased interest on the part of some industries and SMEs in providing environmentally and socially sound consumer products, is a significant development that needs to be further encouraged (Agenda 21, 4.20). We, the citizens of the Republic of Macedonia, whether we are consumers or producers, join this worldwide movement, and by doing so we considerably contribute to shaping Sustainable Development Macedonia. The Agenda 21 document of the UN Conference on Environment and Development at Rio de Janeiro 1992 serves us a compass to find our way ahead.

It is the obligation of Government institutions at all levels to encourage an **informed consumer public** and assist individuals and households to make environmentally and socially informed choices by:

- (a) Providing information on the consequences of consumption choices and behaviour so as to encourage demand for environmentally and socially sound products and use of products;
- (b) Making consumers aware of the health and environmental impact of products, through such means as consumer legislation and environmental labelling;
- (c) Encouraging specific consumer-oriented programmes, such as recycling and deposit/refund systems.

There can be no doubt that until 2030 we step by step need to move towards environmentally sound pricing. Without the stimulus of prices and market signals that make clear to producers and consumers the environmental costs of the consumption of energy, materials and natural resources and the generation of wastes, significant changes in consumption and production patterns seem unlikely to occur (Agenda 21). In other European countries some progress has begun in the use of appropriate economic instruments to influence consumer behaviour. These instruments include environmental charges and taxes, deposit/refund systems, etc. This process should be encouraged also in Macedonia in the light of our country-specific conditions (Agenda 21, 4.25).

Reducing the amount of energy and materials used per unit in the production of goods and services can contribute both to the alleviation of environmental stress and to greater economic and industrial productivity and competitiveness (Agenda 12, 4.18). The Government, in cooperation with industry and SMEs, will therefore intensify efforts to use energy and resources in an economically efficient and environmentally sound manner. Citizens of Sustainable Development Macedonia have dramatically increased utilization of renewable energy sources (RES) and very much appreciate environmentally friendly vehicles for public transport !

7) Professor Jacqueline McGlade's speech at Conference "Time for Action: Towards Sustainable Consumption and Production in Europe", Ljubljana, Slovenia, 27-29 September 2007



Sustainable production in the public perception is closely connected to reduced pollution. Having in mind the Precautionary Principle and Make Polluters Pay Principle (it is only fair that citizens do not want to be polluted for the sake of private companies' profit and additionally also pay all the expenses for their own health rehabilitation. In terms of sustainable development providing contemporary equipment for pollution abatement shall in any case be more feasible. However, in some way citizens are also producers, and this immediately refers to waste. We have it in our own hands of how much package material we tolerate and we can also choose products in this respect. In our own responsibility we can take care for not throwing any kind of waste on our street. Additionally, we can demand recycling of solid waste from our neighbourhood local authorities and at the same time we personally contribute to solid waste management implementation.

Sustainable consumption and production patterns also have an immanent spatial planning dimension. 21st century spatial planning using GIS (Geographic Information System) technologies take in consideration and assist to solve utilization conflicts. A basic metals production industry in the centre of a wine region is only one of the classical utilization conflicts identified in our country. It is simply a fact that experienced wine lovers who have seen other wine regions around the world won't enjoy wine route and gourmet tourism while at the same time they are surrounded by pollution and smelly air. We need to make our choice locally and regionally of what we want to produce where and how we anticipate creating economic prosperity and new jobs !

The common challenge for all countries is to break the link between economic growth and environmental impacts from production and consumption, resource use and waste generation. But changes in production have to be accompanied by a shift in our consumer model. One proposal is to gradually move from a society of assets and ownership of goods to one where access to services is the driver. Long-life products and urban settings where most trips can be made by bike, foot or public transport could help deliver this part of the vision.

Levels of consumption in Macedonia, while growing slowly, remain significantly lower than in Western Europe. However, energy intensities (i.e. energy consumption per unit output) of industry, transport, community services and buildings are generally much higher. Country also experience more localized environmental problems such as inappropriate management and regulation of waste, industry, urban transport and agricultural development. Looking to the future, environmental pressures may grow with increasing wealth. Rapid changes in lifestyle, particularly in urban areas, are already noticeable. This can be seen in increasing ownership of private cars, the growing quantity and variety of available imported goods, and in the increasing quantities of waste generated. At the same time public services, including public transport, district heating and waste and recycling systems established under a central planning system, have significantly deteriorated and declined.

Promote clean technologies. Today many of the most successful and competitive industries in the world come from countries with the strictest environmental standards. In the process of joining the European Union, the economy will have to become competitive in the global market and generate the economic growth needed to secure an increasing living standard. In the process, the industry that includes several heavy polluters today will have to upgrade its technology and improve its environmental performance i.e. reduce pollution. The high cost of investing in cleaner technologies could put at risk many workplaces, but on the other hand these investments in cleaner technologies may even increase the profitability and viability of the industry due to lower consumption of energy and raw materials, less waste and better motivation of staff.

Develop environmental market. More and more environmental services are provided on the market by companies, NGOs, and scientific institutions. Ministries and agencies contract out legal drafting, policy development, public relations and management of dialogue with the public, studies regarding specific environmental problems, monitoring, laboratory services, etc. Municipalities contract out provision of public utilities such as waste collection, water supply, waste water collection and treatment, provision of natural gas, development of urban plans and LEAPs, etc. According to the "polluter pays principle" the burden of self-monitoring, EIA studies, reporting, as well as services needed for pollution control should be taken by the polluters, i.e. industrial companies themselves. In



the developed countries the environmental services are one of the sectors generating the highest number of new jobs. Other benefits of the market of services are that it is more flexible, that the costs can be more easily allocated to the polluters and that the importance of environmental policy for the private sector increases.

With household expenditure accounting for more than half of the GDP, individual consumers are potentially a powerful economic player in the Macedonian economy, but they tend not to be very active in applying pressure for more sustainable products and services. Public awareness and the level of public pressure for more sustainable consumption policies (SCP) policies are rather low, and this situation will need to be addressed in the future.

The Government itself is a major player in consumption and can exercise leadership through government purchasing, thus considerably influencing both corporate decisions and public perceptions. Our Government institutions therefore will review the purchasing policies of their agencies and departments so that they may improve, where possible, the environmental and social content of government procurement policies, without prejudice to international trade principles.

The Government and private-sector organizations will reinforce values that support sustainable consumption through education, public awareness programmes and other means, such as positive advertising of products and services that utilize environmentally sound technologies or encourage sustainable production and consumption patterns (Agenda 21, 4.26). We will promote more positive attitudes towards sustainable consumption by individually assessing environmental impacts and resource requirements throughout full life cycle of products and processes.

There is a need for policies to give consumers an incentive to move towards more sustainable patterns of consumption. National SCP initiatives should focus on economic growth and social change which improve the quality of life, and not only concentrate on the increasing level of individual consumption, with the related negative environmental impacts. Simultaneously, much of the SCP policy and action in Macedonia will need to target the production side with a view to reducing impact intensities and to improving efficiency of production and resource use. On a positive note, the on-going economic and social restructuring offers a unique opportunity to establish more resource-efficient, safe and sustainable production patterns.

A strong and independent Macedonian Consumer Organization shall play a prominent role in the promotion of sustainable consumption and production patterns. Progress can be made by strengthening positive trends and directions that are emerging, as part of a process aimed at achieving significant changes in the consumption patterns of Government institutions, households and individuals as well as the production patterns of SMEs and industries.

Even though economic and environmental benefits from improved eco-efficiency in industry are substantial, such initiatives have not been undertaken consistently. There are emerging signs that decoupling between industrial output and pollution and resource use has taken place in some areas, but the efficiency of use resources and energy is still low. While services are the most rapidly growing economic sector across most of the region, industrial output is also increasing in almost all countries, with growth exceeding that of services. Moreover, this growth is largely based on pollution-intensive, resource-extracting and processing industries.

Current car ownership levels remain relatively low but are increasing rapidly, particularly in urban areas. Traffic congestion is on the increase in urban areas, leading to health, environmental and social problems. At the same time, public transport, which is potentially more sustainable, is in decline, partly due to dilapidated infrastructure and partly due to the withdrawal of subsidies. Integration of social, health and environmental considerations into spatial planning, and re-investment in existing collective transport infrastructure, are urgently required if Macedonia is to avoid the large-scale transport problems plaguing Western European countries.

The dramatic changes in agricultural management and ownership, and increased exposure to global competition, caused a sharp reduction in food production during the early to mid 1990s. Economic recovery has seen



this partially reversed, although the food production remains lower now than pre-transition. Access to food and efforts to reduce malnutrition have improved in recent years, but these issues still remain significant problems. Economic transition brought with it much reduced inputs of artificial fertilisers, energy and pesticides with corresponding reductions in environmental pressures. Nevertheless, the environmental legacy of centrally-planned, high-input agriculture remains and the lack of appropriate management of irrigation, soils and manure from livestock continue to create localised environmental problems. Opening of the markets and globalisation of trade may lead to a return to more intensive agriculture in the future with negative environmental consequences. Imports and exports of food are also increasing rapidly, and that leads to growing pressures from the transport of food.

On a regional scale and beyond Macedonia is well-known for its tasty and fresh agriculture and forest products. We in particular promote the production of certified organic food. In terms of the conventional farm production the good reputation of our agricultural sector will be secured, and this refers in particular to any abuse arising from over-utilization of fertilizers, pesticides and hormones, which threaten our ground water resources as well as the health of those who work in the agriculture sector.

By its nature Sustainable Development promotes local products and local added-value cycles. Therefore, we will improve the promotion of typical rural products and traditional cuisine in particular addressing foreign tourists. Foreign tourists from EU countries already have internalized the new way of consumption patterns thinking and it is only wise to provide adequate offers for the benefit of our tourism. This starts from offering home made jam from the next village, rather than to place a mountain of unsustainably packed metal jam potties on the breakfast buffet.

Macedonian tourism in general needs to respect a more environmentally and socially conscious consumer public. Therefore, we want to cooperate more closely with those specialist foreign and domestic travel agencies that follow this world-wide trend. We might not be aware of the values and therefore do not appreciate our traditional stone houses. However, tourists from other European countries are aware, do appreciate, and want to spend their holidays in renovated, homey, traditional stone houses, and during the evening they enjoy high quality Macedonian wine in front of a warm open fireplace ! Therefore, we need to re-orientate our perception and (re)construct tourism facilities according to the actual high consumer demands of foreign tourists and the expected increasing consumer demands of domestic tourists alike.

Buildings are responsible for a third of total energy consumption across the country, particularly in the North regions. Residential energy consumption is particularly high all over the country. This is partly explained by continental climate, but other important causes include widespread but inefficient district heating, inefficient distribution systems, and the low thermal efficiency of buildings. Low energy prices and the absence of economic incentives and apartment level controls do not encourage householders to reduce heat consumption. Water consumption in buildings is high, whether in cities where distribution losses are high whether in the rural areas where drinking water is used for farming.

Proper treatment of waste remains a problem, especially for municipal and hazardous wastes. Furthermore, given the current construction boom in some areas and regions, quantities of construction and demolition waste will increase. End-of-life (obsolete) vehicles, waste electronics, household appliances and packaging waste are also set to increase. Some of the challenges that Macedonia faces include improving waste management systems, introducing proper waste treatment and disposal techniques, making use of more waste resources, and reducing and preventing waste at source.

There are many promising opportunities to 'leapfrog' and avoid some of the consumption-related problems common in Western Europe. **Taking advantage of those opportunities will require a political commitment to develop appropriate policies and establish regulatory frameworks, economic incentives, and implementation mechanisms.** On a positive note, some elements of the legacy of the past have a major potential to support a society with more sustainable production and consumption patterns. These include:



- the widespread development of district heating systems, railway infrastructure, or reuse and recycling systems. All these systems need significant investment and upgrading to realize their sustainability potential. For example, heating systems require modernisation to eliminate losses and inefficiencies and could be fed by combined heat and power or waste heat from industry;
- there is a well established tradition of using public transport. Even though the rates of car ownership are increasing, opportunities remain for satisfying the public's demand for mobility through extensive collective transport networks;
- various business opportunities exist for more SCP-oriented practices. Current low use of synthetic fertilisers and pesticides in agriculture, along with the availability of agricultural workers, creates good opportunities for organic farming and the export of organic food products to Western Europe. There is a high potential for economic and environmental benefits through recycling and reuse of industrial and municipal waste.
- significant potential exists for increasing energy efficiency in industry, household, and public sectors, again with both economic and environmental benefits. In the building sector the current construction boom offers a huge chance to improve the thermal efficiency of new building stock. This, and the task of retrofitting the dominant existing stock of low-efficiency multi-apartment buildings, would significantly reduce environmental pressures and bring considerable social benefits.

Finally, policy efforts should not focus only on the technical 'fix'. Experience from Western countries shows that technological improvements and efficiency gains are not sufficient on their own and need to be supported by measures, both economic and information-based, aimed at influencing consumer behaviour. Without this, technological and efficiency gains risk being undermined by increased consumption resulting from reduced prices (known as the rebound effect). The environmental and social benefits that can be gained by increasing the public's awareness of SCP issues and empowering them to act should not be underestimated. With respect to housing and community services, significant reductions in heat and water consumption can be gained by installing apartment-level controls and metering, starting payments by use, and providing householders with information on how they can reduce costs.

Similarly, consumers in a number of countries have expressed preferences for local high quality food grown with reduced inputs of pesticides. This potential market for local organic food can be harnessed by developing national certification systems, supporting organic farmers and spreading awareness of organic labels and the advantages of this agricultural system.

The following challenges seem to be first to be resolved:

- Lack of reliable data on pollution and resources use, industrial emissions, or environmental impacts of consumption are major obstacles to the development of targeted and effective policies and goals. Even in those sporadic cases where data exist on a local level, no efforts have been made for the systematic collection of data and the use of the information for more effective policy-making.
- Existing institutional settings do not favour planning and implementation of SCP. Better coordination is needed among the various institutions responsible for environmental protection and sectoral policies. It is also essential to improve institutional capacity to achieve more sustainable production and consumption.
- There is room for dramatic improvement in environmental management in enterprises. It is an imperative the environmental legislation to be tightened and enforcement will start getting stricter, improvements in industry will occur. However, more effort is needed to improve compliance with environmental legislation.
- Integrating sectoral policies and environmental concerns is still a distant goal. For example, spatial planning and municipal management are still not well coordinated with environmental and SCP considerations, although they could be used to good effect in energy supply, building, transport and waste management. This is also the case



for agriculture. While the government is beginning to develop agricultural strategies, hence integrating environmental, social and economic interests, have not yet been properly included. There is also a lack of agro-environmental advice for farmers.

- Some policy tools for SCP are in place but in a piecemeal fashion. Various relevant strategies and programmes (e.g. energy efficiency programs, waste strategies, etc.) have been established, but their implementation has still to follow. Policy action should build SCP considerations into these strategies and programmes.
- In the light of the variety of situations in all the countries, it is necessary to develop - in partnership with a wide range of stakeholders - national SCP strategies or plans reflecting a country's specific priorities, and with concrete actions to carry them out.
- Despite their effectiveness, limited economic incentives and technical tools are in place to stimulate government, businesses and private consumers to reduce the environmental pressures they exert. Policy tools already exist in many sectors to promote energy efficiency, public transport, or waste recycling. More effort will be needed to support implementation.
- Consumer behaviour is one of the crucial factors for SCP, and more efforts must be made to raise public awareness of environmental issues and of the potential economic gains from more SCP. Information should be provided (e.g. labelling) which will enable consumers to make informed choices and to influence governmental policies.

A key opportunity for addressing these challenges in Macedonia, also lies in regional cooperation. This is in some cases facilitated by common languages, but first and foremost, by the fact that countries in the Western Balkan Region often face similar problems.

Market-based instruments and environmental tax reform need to achieve sustainable consumption and production. Sustainable consumption and production both requires and stimulates competitiveness and employment. Franklin D. Roosevelt illustrated this when introducing a US income tax for the first time in the 1940s, declaring that: 'Taxes are the price of a civilised society'. **Maybe environmental tax reform is the price of a sustainable society? Government, business and consumers alike have responsibility to take action in order to provide Sustainable Consumption and Production.**

Strategic Measures

Key Challenge Sustainable Consumption and Production:

- Combine legal instruments with market-based instruments (taxes, charges, subsidies, tradable permits). Thus providing that the market based instruments take into account the "hidden costs" to society of production and consumption in a cost-effective way;
- According to the previous goal, we will undertake a green tax reform, one that gradually shifts away taxes from labor and investments towards taxes on pollution and the inefficient use of materials and energy. From taxing the "goods" (employment) to taxing the "bads" (resource use and environmental damage). Because, increasing efficiency of resource and energy use can improve competitiveness;
- Enact such policies that will enhance eco-efficiency and give economic incentives for steering consumption and production in a more sustainable direction. For example measures that will enforce greener products and better consumer information.
- Actively contribute to awareness raising amongst the population and providing clearer signals of why action is necessary. According to our convenience it is not appropriate to think only of regulating people, but rather to motivate people by ensuring that changes in their behaviors will result in a particular set of eco-efficient outcomes.
- Have environment-related employment approach. Employment effects of market-based instruments. Integration of environment and employment at national and local level as well.



- Improve the pollution management: e.g. waste and waste water management, air pollution control, noise abatement, R & D. In order to provide cleaner technologies and products: technologies and processes, products;
- Improve the resource management: water supply, recycling, renewable energy plants, forestry, fisheries, eco-tourism;
- Enable friendly environment so that the principle of local approaches can be widely accepted. Various types of local approaches (private sector, public sector, NGOs, multi-sector partnerships) will be allowed within the eco-friendly legal environment framework.

3.2.9 Conservation and Management of Natural Resources

We might think that to improve management and avoid overexploitation of natural resources, recognising the value of ecosystem services, is something for so-called developed countries that don't know what to do else. Well, this perception can be the very last serious mistake! The atmosphere does not care about who is living on the ground, anthropogenic climate change is real, as it is climatic change throughout human history and during the geological record. The only thing that we realistically can do is to take actions to reduce our production of green house gases (GHG) and to deal with the situation as it is by **minimizing the landscape-ecological impacts of climatic change**, which in fact are already reality in terms of increased frequency and magnitude of flooding events as well as draught periods in other parts of Europe.

All this first of all makes us focus on our forest resources. Forests cover approximately 37% of the Macedonian state territory, which is more than in many other European countries, and it is this forest cover that naturally regulates the water cycle and is a sink for green house gases (GHG). In the past, forestry in Macedonia has done many positive things, for example: afforested about 150 000 ha (Vodno, Gazi Baba, etc.), well organized forest fire protection network, breeding of wild animals during the cold winters etc. At the same time there is very small publicity for that and very big publicity for some bad things, in the forestry and forest, i.e. illegal logging, even they are not caused by foresters. Forestry by its nature is a sector where physical results of its work and financial benefits are visible only after a long period, sometimes even after 30 years. This is one of the reasons why "nobody" wants to invest in forestry, although "everybody" - without thinking about details - enjoys the public forest functions, such as production of oxygen, protection of soils, positive influence on the local climate, carbon sequestration and many more. Just imagine Vodno and Galicica Mountain today without forests - like pictures show from the 30ies of the last century: Mud flows after intensive or long lasting rainfalls might reach and damage houses in Skopje and Ohrid. Who will pay for these damages which are realistically based on scenarios for a climate change world?

Awareness of the public in large for forestry issues should be increased and it is the Government that needs to be informed more precisely upon the role and values of forestry in ecology, economy and rural development. At the end of the day, decisions need to be taken and implemented on new financing mechanisms of forestry, such as e.g. a valorisation of the public forest functions. On the other hand forestry needs to do its own homework, which includes to establish an appropriate organized and managed sector, to implement strong and efficient administrative institutional capacity, to ensure application of effective technologies and methodology, and last but not least to enforce law and implement General Management Plans.

Let's broaden our view to the environment in large. **The rich natural resources of our country, especially fresh water, biological and landscape diversity represent an important opportunity for the development and quality of life of the present and future generations in Macedonia.** By integration of environment, nature and physical space in the concept of sustainable development, Macedonia will secure a place and competitive position for its people, companies and the country itself in Europe of tomorrow by: reduction of pollution and threats to



human health; improved quality of environment; preserved natural wealth enabling its sustainable use; coordinated spatial development; innovative technologies and solutions, which all together provide a sound base for future economic and social development.

According to the Macedonian Constitution, everyone has the **right to healthy environment** as well as **responsibility** to protect and improve it. This means that environmental protection is a task and a responsibility of every citizen, company and institution, within their capacity and freedom to act. According to the "**polluter pays principle**", the polluters are responsible for solving environmental problems resulting from their activities, including covering the costs of pollution control, monitoring, reporting, assessments, remediation, compensation for damage etc. Only in cases where the responsibility cannot be assigned directly (diffuse pollution sources, disappeared legal entities) or in case of urgency, the responsibility to act relies on the Government.

By recognizing the importance of conservation and sustainable management of natural resources, the Government of Macedonia is in charge of:

- Achieving the EU standards for environment quality by developing and implement the framework of the physical planning law and the laws related to water, air, nature, noise and waste management as well as related programs and strategies;
- Developing the capacity of the environmental sector in Macedonia - including local self government, industry, environmental service providers, government institutions and non-governmental organizations - to fulfil its responsibilities;
- Reducing the risks to human health and natural ecosystems by focusing on environmental solutions with the highest impact;
- Develop open dialogue and partnership with all the stakeholders in the environmental field;
- Mobilizing domestic and international funding needed for the environmental investments in the country and apply the polluter pays principle;
- Securing environmental information and access of the public to it;
- Raise awareness and educate the public about their environmental rights and responsibilities;
- Maintaining an active role of Macedonia in environmental cooperation with the EU, the neighbouring countries and in multilateral mechanisms.

Being the third pillar of sustainable developing and fully integrated in economical and social issues, the Government of the Republic of Macedonia in future will recognize the environment as a priority of its politics as outlined in the RENEWED EU SUSTAINABLE DEVELOPMENT STRATEGY June 9, 2006 - 10117/06 (NSSD TBR Chapter 4.2). Consequently all Governmental institutions from central to local levels will highly support and enforce the following:

Framework of environmental responsibilities. Differently from the traditional view of protecting individual environmental media separately, Macedonia will achieve integrated environmental protection through general - sometimes also called "horizontal" - framework law on environmental protection, which addresses all environmental aspects in a general way and provides a framework of responsibilities for the entire field. It introduces common terminology, common procedures for environmental assessment and gives the framework for environmental monitoring. It introduces the concepts of environmental impact assessment, integrated environmental permitting, public access to environmental information and the possibility for the government to efficiently transpose the growing body of European legislation. The framework law is followed by sectoral laws on nature conservation, water, air and waste. The Law on physical and urban planning provides the framework for achieving sustainability in a preventive



mode through carefully planning the use of space at the national and local level. This law also introduces the process of public participation in the process of developing and deciding upon the spatial plans.

Decentralization. Many services that are today performed by the national administration can (and many times should) be delegated to the local or regional authorities. Activities such as municipal services, urban planning, local monitoring and local regulations are in most countries performed by municipalities or some kind of regions. The benefits of decentralization are that the environmental problems are solved closer to their origin and to the citizens.

Promote clean technologies. Today many of the most successful and competitive industries in the world come from countries with the strictest environmental standards. In the process of joining the European Union, the economy will have to become competitive in the global market and generate the economic growth needed to secure an increasing living standard. In the process, the industry that includes several heavy polluters today will have to upgrade its technology and improve its environmental performance i.e. reduce pollution. The high cost of investing in cleaner technologies could put at risk many workplaces, but on the other hand these investments in cleaner technologies may even increase the profitability and viability of the industry due to lower consumption of energy and raw materials, less waste and better motivation of staff.

Develop environmental market. More and more environmental services are provided on the market by companies, NGOs, and scientific institutions. Ministries and agencies contract out legal drafting, policy development, public relations and management of dialogue with the public, studies regarding specific environmental problems, monitoring, laboratory services, etc. Municipalities contract out provision of public utilities such as waste collection, water supply, waste water collection and treatment, provision of natural gas, development of urban plans and LEAPs, etc. According to the "polluter pays principle" the burden of self-monitoring, EIA studies, reporting, as well as services needed for pollution control should be taken by the polluters, i.e. industrial companies themselves. In the developed countries the environmental services are one of the sectors generating the highest number of new jobs. Other benefits of the market of services are that it is more flexible, that the costs can be more easily allocated to the polluters and that the importance of environmental policy for the private sector increases.

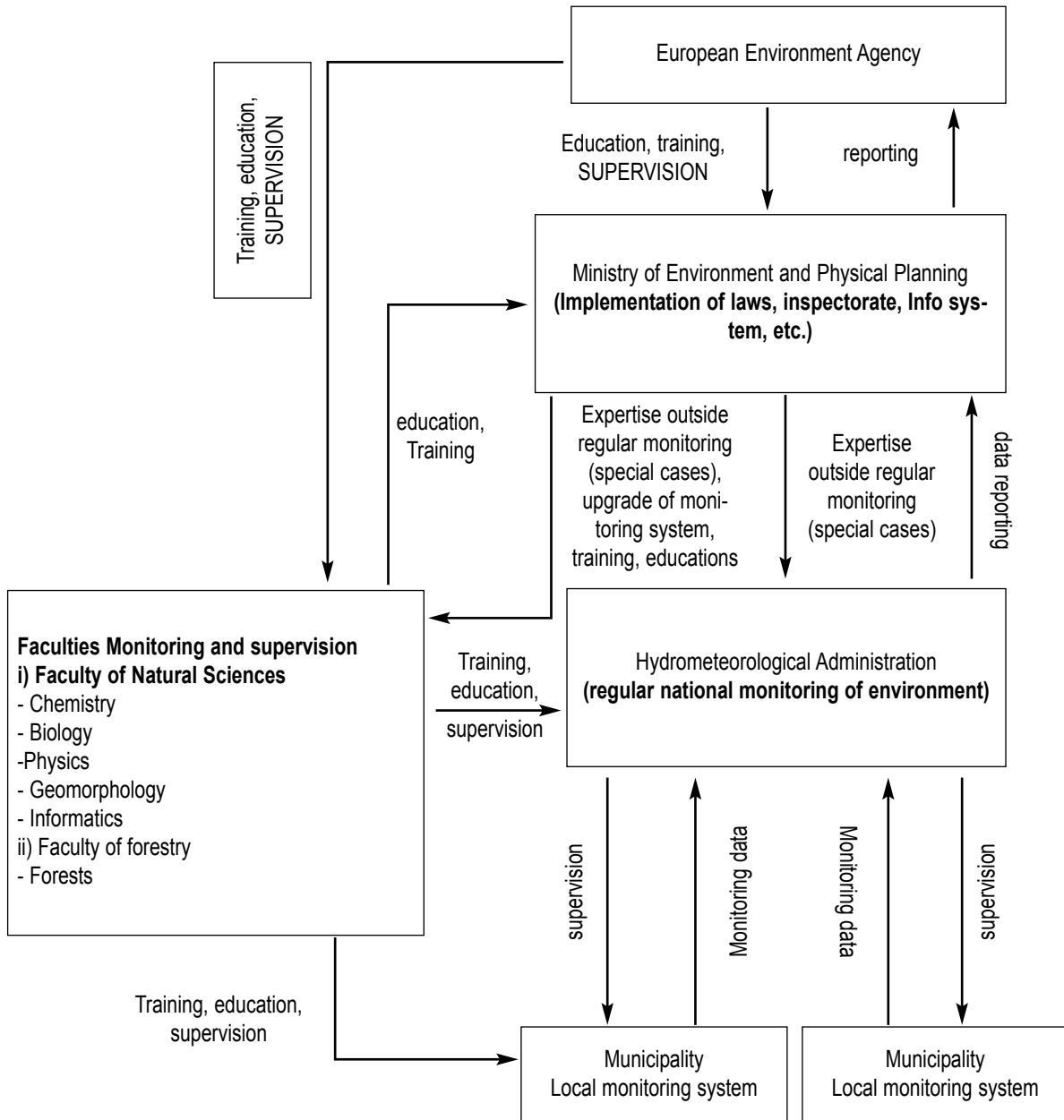
Mobilize of financial resources to environment. In the next decade, substantial investments are necessary in order to meet the EU standards. These investments will generate even higher benefits in terms of improved health, preserved natural resources and improved competitiveness of the country. Therefore, the Macedonian Government needs to increase the public funds dedicated for financing of environmental protection. In the strife to protect the environment, everybody has a responsibility: the polluters - to reduce the pollution; the government - to mobilize the financial resources required for environmental investments. Investments in public infrastructure need to be financed first and is later repaid through service charges.

Increase the environmental awareness and education. Raising the public awareness about the environment, as well as the education in this area, are important steps towards achieving sustainable development. Environmental situation can only be improved if citizens recognize their power, their responsibilities and their capability to contribute towards improvement of the environment. Each of us should be involved in the process of planning and making decisions about which activities need to be undertaken in order to provide for protection and improvement of the environment. Healthier environment can not be achieved by adopting new legislation, it can be only be achieved if the citizens understand and support this legislation and at the same time accept the individual responsibilities for protection and preservation of the environment.

Reorganize the monitoring system and fully develop the environmental and spatial plan information systems. The proper monitoring system of the environment is a prerequisite for any step in the decision making process for preserving and improvement of the environment. Environmental information is the starting point of any environmental activity. This can be information about the level of pollution, about its impact on human health or nature, about who is responsible for pollution, about funding sources for environmental purposes, or activities of environmental organizations. Proper standardization and digitalization of spatial information in Macedonia is very



important for users such as municipalities, urban planners, natural resource managers, developers of environmental impact assessments, NGOs, scientists and others to easily obtain and use information from databases related to physical space.



Finalize the organizational set up within the Ministry of Environment and Physical Planning, which includes to introduce a human resource management system in the MoEPP and to prevent the partization of the cadre. The objectives of securing a healthy environment and meeting EU requirements can only be achieved with professional and motivated staff. In this sense, it is necessary to increase the capacities of the Ministry for human resources management, thereby providing for direct and personal accountability of every civil servant for the work he/she does, and at the same time they will be given opportunity to express their creativity and capability. Career at the MEPP will be supported with a modern human resource management system that will provide for transparency of individual and group responsibilities and performance. The system will be underpinned with numerous domestic and international capacity building opportunities in form of specific trainings and participation in international proj-



ects and processes. With its capacity building function, the Ministry will not just secure staff for its own functions, but serves as a career experience for people who may later work on environmental issues in the private sector, local government, NGOs and elsewhere in the country and abroad. This is another way how the Ministry strengthens the environmental sector in the country as a whole.

If the environment is indeed a priority of our politics, than - step by step - we need to reach the following objectives which are of crucial importance and support each other in order to secure a healthy environment, including rational and sustainable use of physical space, clean air and waters, adequate waste management, preserved ecosystems and living species as well as sustainable use of other natural resources:

- **Achieve high level of implementation of laws on environment.** Via creation and revision of sound sector's policies with SD dimension, environmental policy and strategic documents should be formulated with focus on natural resources. Harmonization of sectoral legislation with EU acquis with respect to SD shall be done via amended environmental legislation with focus on natural resources and strengthening of the institutional capacities for harmonization of the environmental legislation. **The public participation in decision making process** on environmental protection should be strongly supported, while **citizens' responsibility and penalties for damages** to environment should be significantly increased with establishing of the functional eco-police force. Adequate split of competences among the governmental sectors regarding environment should also be highly forced.
- **Ensure nature protection.** It is widely recognized that Macedonia is of outstanding natural beauty. Our natural heritage must be protected, while our protected areas also contribute to the European ecological networks by protecting the species which are under threat of extinction. The new law on nature protection reflects the EU standards and incorporates international agreements into our national legislation. It will protect species and their habitats through mechanisms such as strict natural reserves, national parks, natural monuments, nature parks, Biosphere reserves and protection of landscape. **It emphasizes the need to protect biological diversity.** The law makes provisions for establishing of the environmental network, compatible with the "Natura 2000" (European environmental coherent network), which gives new opportunities for increasing and enhancing of the Macedonian biodiversity. Many important ecosystems such as the Ohrid, Prespa and Dojran lakes as well as several mountain chains are located on borders with our neighbours. The new law provides for the international cooperation in protection of natural heritage and especially cross border cooperation and we will continue to cooperate with neighbours, the EU and other international organizations. By implementing the **BSAP (Biodiversity Strategy and Action Plan)** we will strongly increase the biodiversity protection in Macedonia.
- **Ensure air quality control.** Clean air is needed for survival of every individual. **Poor air quality is probably the main environmental threat to human health in Macedonia.** Air pollution from industries such as in Veles and the growing air pollution from traffic in all the cities require urgent attention. The new comprehensive air quality law addresses all sources of air pollution, pollution from new and old installations and from cars. In the past decades, the EU countries have demonstrated that it is possible to significantly improve air quality. The phasing out of lead from petrol already demonstrates that some improvement can be achieved with very little cost. In relation to industrial pollution, it is clear that industry and the business sectors are responsible for their pollution and its reduction.
- **Implement water resource management.** Macedonia is rich in water resources. These resources call for careful management and protection against pollution. We should achieve both: reasonable use of water and protection of its quality. The EU Water Framework Directive (EU WFD, 2000), harmonized in the new Law on water, provides for modern policies as well as legal and institutional mechanisms. Through improved water supply infrastructure we will increase the number of water supply systems in rural areas, increase coverage of agricultural land irrigation systems and minimize water losses. All these activities will establish an integrated water management with the full implementation of the relevant legislation as a basis for developing of comprehensive river basement management plans. The implementation and effective support of eco-remediation systems will prevent and improve the deterioration of the environment.
- **Implement waste management.** Following the guidance of the EU waste management legislation we are developing a comprehensive legal framework dealing with all types of wastes and all aspects of the waste manage-



ment cycle. The most important objectives we want to achieve are waste prevention, recycling, as well as reducing the amounts of wastes generated. By doing so, we reduce environmental risks and we save resources. The new law reflects these priorities and together with its secondary legislation will improve the current situation in the waste management sector by introducing European standards in waste management.

- Support sustainable forestry, agriculture and rural development. Appropriate agricultural policy must include all aspects of Conservation and Management of Natural Resources! This means that our policy should encompass the priorities of agro-biodiversity (genetic resources of rare domestic plants and animals) as part of the total biodiversity. Conservation and Management of Natural Resources regarding agricultural practices will be directly threatened if GAP (Good Agricultural Practice) is not implemented, from generating of pollution in environment media to physical destruction of the natural resources. Good management in relation to gene resources protection, regarding the exclusion of GMO plants and animals, will protect the endemic species and environment in whole. If the proper diversity of income in rural areas is generated many benefits may be created via the synergism with Conservation and Management of Natural Resources. Creation of new businesses in rural areas that force the combination of rare and endemic domestic plants and animals, traditional agricultural products and services, which have the focus on Conservation and Management of Natural Resources, will enable an SD milieu on local level and will reduce the Governmental influence on the rural development. Forcing the healthy food production will highly increase environmental protection and preserve the natural resources in the same time.
- Support eco-tourism development. The new concept of eco-tourism, embracing different aspects of natural and cultural promotion of the Macedonian potentials, will be achieved through proper definition of the carrying capacities, improved infrastructure in the tourist destinations and respect of environmental protection and cultural heritage in local urban plans. We will overcome the conflicts of interests in the physical plans and increase the awareness of sustainable tourism among the stakeholders, principally orientated towards protection of the natural and cultural heritage in Macedonia. We see Macedonia as prosperous eco-tourist, healthy food production destination, prominent with its qualities within the process of globalization.

Strategic Measures

Key Challenge for Conservation and Management of Natural Resources

- Significantly increase the implementation of passed environmental laws, support the central and local (municipalities) capacity for implementation of the laws and increase the administration efficiency;
- Ensure the nature protection in Macedonia based on "Natura 2000" network principles and via forced implementation of the Biodiversity Strategy and Action Plan;
- Promote the new Environmental Monitoring Network;
- Ensure the air quality control and reduce the threats to human health and ecosystems' functioning;
- Implement the Water Resource Management to mitigate the water losses and pollution impacts as basis for developing of comprehensive River Basement Management Plans;
- Strongly support, promote and implement alternative systems, like eco-remediation, for preventing and improvement of environmental deterioration;
- Implement Waste Management that includes reduction of waste amounts, recycling and pollution control;
- Support Sustainable Forestry, Agriculture and Rural Development as basic economy activities synergistic with the Conservation and Management of Natural Resources;
- Support eco-tourism development and healthy food production as prominent attributes of Macedonia in the process of globalization;
- Rapidly and intensively support the increasing of public awareness on SD in general, the role of environment in future economic and social benefits of the society in RM and the responsibilities of every citizen towards damages forced on environment in RM.



3.2.10 Public Health

The concept of sustainable development is inevitably related to public health. Sustainable development calls for a development pattern that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. As such, we understand that health is both an input and an outcome of sustainable development. Healthy population means larger, more productive and better skilled labour force that will increase economic growth. At the same time, the health of the population critically depends on the strength of the economy and its ability to meet the needs of the population.

We understand the importance of health issues and sustainable development. While this is the first Sustainable Development Strategy of the Government of Macedonia and this concept is yet to be fully introduced in policy making, we share the EU's vision of sustainable development and are committed to promoting "a dynamic economy with full employment and a high level of education, health protection, social and territorial cohesion and environmental protection in a peaceful and secure world, respecting cultural diversity".

We also made a commitment towards sustainable development by signing the Millennium Declaration in 2000 and adopting the Millennium Development Goals (MDGs) and have included health as a strategic priority of our Government.

Our vision for the health system is articulated in our Health Strategy. The strategy builds on Article 39 of the Constitution, which guarantees the right to health protection to every citizen of the country and gives citizens the right and duty to maintain and upgrade their own health and the health of others. The basic principles of the strategy are:

- Equity, meaning that all citizens are entitled to basic health services.
- All citizens, the Government, all health care institutions providing health services, public and private enterprises, as well as non-governmental organizations, are responsible for the health.
- Health insurance provided on the basis of solidarity.

The strategy aims to improve the health of the population by improving the health protection. It calls for greater preventive measures, improvements in the effectiveness and efficiency of the health system mostly by strengthening the primary health care, building up the human capital in the health sector and ensuring quality provision of services and sound and sustainable financing of the health sector based on the solidarity (health insurance) principle. Implementation of the strategy should also ensure that eventually the national health system will become compatible to the EU system. Specific health aspects are being dealt in through individual strategic documents (HIV protection, Dental Disease prevention among children, Promoting health living and work environment, Development of Integrated Health Information System etc.)

A key challenge in achieving sustainable development will be the creation of an **integrated and coordinate public health system**. It will require the setting up of a system with clear division of duties and responsibilities between various, adequately staffed and equipped, institutions. Such a system will ensure that all citizens have access to appropriate medical care at affordable costs and that threats to public health are easily identified and tackled.

Such a system can function properly only if the **institutional framework that governs public and consumer health system is appropriate**. While we have made substantial progress in improving our legislation and aligning it to the standards of the EU, there are still a number of gaps, especially in the area of consumer protection. We will work intensively in the upcoming period to **complete the legal framework** in all areas of public and consumer health. However, the legal framework will not yield the expected results if not implemented properly. Unfortunately, the current institutional setup is not completely adequate - capacity to design, implement and monitor policies is relatively modest and a number of institutions have not yet been established. As a result, we will invest significant



efforts in order to **establish the necessary institutions and reform and increase the capacity of existing institutions** to enable these to effectively promote public health and provide services to the populations.

The contribution of the health sector to sustainable development will critically depend on the services it provides. We need to **reform the provision of health services** in order to be able to better answer to the key objectives of this strategy. More attention needs to be given to **streamlining and increased preventive health care** and promotion of health life styles in order to raise the awareness of people about the importance of public health, improve health outcomes and reduce costs to the society. We need to work on **improving the quality and quantity of services provided in the primary health care**, so that the population will be able to satisfy most of the health needs of the Macedonian citizens. Finally, we will need to considerably reform the provision of services in the secondary and tertiary health care in order to ensure that all citizens have access to the necessary medical treatment.

Public resources are scarce and need to be safeguarded against wasteful spending and invested equitably and in high-priority areas. Due to this, we will work on "rightsizing" the health sector and ensuring that the **demand for services is adequately matched by the supply of services**. Currently, health sector inputs (human resources, spending, health facilities etc) do not entirely reflect the demand for health services, resulting in poor service delivery and both unsatisfied patients as well as health specialists. We will revise our health and education policies to ensure that the system gets the human resources that it needs and in the amounts that it needs it. Equally important, we will work toward **implementing an HR policy** in the health sector that will ensure that health specialists are motivated and well-paid. Our health system has been deprived from larger investments for a long period which has resulted in depletion of the capital stock, poor health facilities and depreciated and outdated equipment. In order to overcome this situation, we intend to increase spending on capital expenditures and equipment in the health sector. We are confident that **better health facilities and more modern equipment** will considerably improve the public health of the Macedonian population.

54

The financial sustainability of the health sector is essential for the ability of the health sector to fulfil its functions adequately. Such concerns gain in importance given the aging structure of the Macedonian population, the extended life expectancy and the rising costs of health care services. We are committed to implementing the reforms needed to safeguard the sustainability of the system which will result in **increased productivity and efficiency** in the health sector. Old equipment means frequent failures, large running costs and low volume of services provided to Macedonian citizens. The **increased capital investments** we plan will bring in new equipment and better facilities which will increase productivity and efficiency in the sector. We have also made significant progress in reforming the financing of health services, by introducing capitation for primary health care, introducing budgets in the secondary and tertiary health care as well as reforms in the supply of pharmaceuticals on the market. Still a lot remains to be done to ensure that **financing is linked to services provided**. In order to fully implement this principle we will **strengthen the accountability mechanisms** in the health sector. Finally, we plan to **use monitoring and performance indicators** to assess our progress in this area as well as in our success in fulfilling our objective of promoting public and consumer health.

As mentioned above, the health sector can not be viewed in isolation from the other sectors in the Macedonian society. Achieving the objectives in the health sector will depend on the success in promoting the objectives in other sectors. The linkages with the education, environment, economic growth and employment, infrastructure and agriculture, forestry and rural development sector are critical. The **quality and quantity of human capital** will be increased only if health outcomes improve. On the other hand, progress in **better infrastructure and cleaner environment** will promote public health. **Stronger agriculture and rural development** will improve health outcomes of the rural population but also ensure more appropriate public and consumer health protection.



Strategic Measures

Key Challenge Promote Health:

- Complete the legal framework necessary for an integrated and coordinated public and consumer health systems;
 - Establish all necessary institutions and reforms and increase the capacity of existing institutions;
 - Streamline and promote preventive health care;
 - Improve the quality and quantity of services provided in the primary health care;
 - Reform the provision of services in the secondary and tertiary health care;
 - Implement and HR policy that results in motivated and well-paid health specialists;
 - Invest in better health facilities and more modern equipment;
 - Ensure that resources are not wasted and financing is linked to services provided
-

3.2.11 Social Inclusion, Demography and Migration

The Key Challenge Social Inclusion, Demography and Migration and its corresponding Key Objective is addressed and supported with the Objectives and Results formulated in various sectors and cross-cutting issues:

Firmly based on their historical experiences and formulated as one of the policy priorities (NSSD TBR Chapter 4.2), European Union countries promote a democratic, socially inclusive, cohesive, healthy, safe and just society with respect to the fundamental rights and cultural diversity that creates equal opportunities and combats discrimination in all its forms. So far European social policy has been mainly subject to soft regulations. The assessments of the current model of a "social Europe" turn out to be highly diverse. Although there are demands to strengthen social components alongside the development of market freedoms by means of social policy provisions, the heterogeneity of welfare states and production regimes is viewed as the major obstacle to a stronger EU social policy.

Social inclusion policy in the Republic of Macedonia does not have a long tradition, although there are many social problems, such as great poverty, emphasized inequality and low living standard of the population. Current program for tackling the problems of the socially excluded persons focuses only on several target groups and should be widened to include other vulnerable categories. However, in a country with high unemployment rate, low salaries and their non-regular payment, it is very difficult to assess the proportion of the socially excluded population.

Under the given unfavorable circumstances in the economic and social development, as well as the demographic situation, the government should focus its efforts on a few policy fields that are most important in terms of social inclusion and population development. Promotion of a greater social inclusion in an aging society and identification of the essential priorities in respected domains should serve as guidelines for building of a more inclusive welfare state in the Republic of Macedonia. Therefore, one of the key challenges is to create a socially inclusive society by taking into account solidarity between and within generations and to secure and increase the quality of life of citizens as a precondition for lasting individual well-being, especially of those who can not help themselves.

Considering the current social and demographic situation, the main challenges for the sustainable development of the Republic of Macedonia in respect to the social inclusion and the population aging process are following:

- To increase the employment in the formal sector and employability;
 - To decrease poverty of the population;
 - To ensure equal access to education and equal possibilities for education with certain quality standards;
 - To ensure health system based on the principles of solidarity, equity and proper efficiency;
 - To improve the current functioning and supply of social service and benefits;
-



- To formulate and apply a sound long-term population policy;
- To formulate and apply consistent long-term migration policy.

First and most important area of social inclusion in the Republic of Macedonia is related to maximization of the labor market capacity to provide new jobs i.e. **to increase the employment in the formal sector**, as it addresses the origin of social exclusion. In a country with a high unemployment rate over the long period of time, the state has crucial role in provision of a favorable business climate for creation of new jobs. In addition, the state could enhance the employment growth by setting up labor-intensive public work schemes and supporting non-conventional types of employment. Furthermore, an effective strategy towards formalization of the informal labor market can contribute to the decrease of the unemployment rate. The supply of formal jobs could be increased by enhancing employment flexibility, reducing taxes on work, introducing different social security schemes, etc.

Given the very unfavorable characteristics of the labor force (age, educational and professional structure) in the Republic of Macedonia, the **employability** is extremely important issue. Public policy can facilitate formal and decently paid employment by ensuring good education, adjusting the school curriculum to the labor market demands, setting up of appropriate schemes for professional education, as well as life-long learning, etc.

Along with the high unemployment rate, there is extremely high poverty in the Republic of Macedonia (about 30% of the population is below the poverty threshold) that is spread between unemployed, as well as employed persons. There are several instruments that state could use **to decrease poverty i.e. make up of insufficient income of the population**: legal stipulation of a minimum wage; guaranteed minimum income for the unemployed persons and other disadvantaged categories of the population; subsidized housing and food for the needy persons and cash assistance for deprived population living in extremely difficult conditions.

Population and labor force in the Republic of Macedonia is characterized by low level of **education** that serves as a main threat for the sustainable development and national prosperity of the country. Therefore, the policy makers should enable all children, young people and adults, regardless of their social and economic status, place of residence and ability, sex, ethnic and religious affiliation to have equal access to education and **equal possibilities for education with certain quality standards**. With respect to the current situation, the educational inclusion policy should be built upon the following priorities: improvement of the physical access to schools providing education up to high school degree; ensuring high quality of teaching and educational services; ensuring compulsory education attainment; increasing children enrolment in pre-school education; university access for all qualified persons regardless of their financial status; ensuring high standards in both universities - public and private ones.

The current **health system** in the Republic of Macedonia is designed as publicly financed system that formally provides access to all health services, but the practice reflects many deficiencies in the availability, quality, timing and efficiency of services' delivery. In this respect, along with the expected trends of the population aging process, the vulnerable groups in terms of the access and benefits from the health care system should be identified (long term care patients; elderly persons; population from rural areas, Roma population; non-insured and redundant workers). Concerning the problem of social exclusion in the Republic of Macedonia, the **health system should be based on the principles of solidarity, equity and proper efficiency**. This model should include: securing adequate health care for all; policy controlled private delivery in the Primary Health Care with exception of some preventive and emergency services; rationalized and well managed public hospitals accessible to all citizens; reforms in the health insurance policy, etc.

The improvement of the supply of the social services and benefits is particularly important determinant of the sustainable development of the Republic of Macedonia with respect to the social inclusion. So far, the social services and benefits were available to the narrow categories of disadvantaged persons and did not provide for inclusion of all vulnerable groups. In this respect, along with the current ineffective coordination among agencies and organizations working in the social welfare field, the improvement of the supply of social services and benefits in the country should be based on: increased emphasis on needs-based assessment; improvement of the capaci-



ties for delivering of social services; decentralization of the social services; ex-ante systematic assessment before introduction of more rigid criteria regarding access to social services.

Population and labor force aging in the Republic of Macedonia becomes a serious obstacle to the process of sustainable development. The implications of the demographic aging are manifested in the changes of the demographic development, the labor force supply and human capital formation, economic development, the system of transfers (particularly the pension and health system) etc. The current and the expected changes in the population development and the process of demographic aging in the Republic of Macedonia undoubtedly stress out the need of **a sound long-term population policy**. It should be **implicit population policy** with set of indirect measures in other related policies (employment policy, fiscal policy, credit policy, policy of housing, policy of prices for goods and services for children, etc.). The measures should route the particular components of the total population movement (natality/fertility and migrations) in socially sustainable direction.

The lack of migratory policy in the Republic of Macedonia has resulted in negative effects of the internal and international migration. Considering the biodynamic and aging of the population, further abrupt migrations can have enormous negative implications on the population processes. Therefore, it is necessary **to adopt consistent long-term migratory policy**, as a part of the total population policy of the country. Its measures should be directed toward decrease of the emigration from smaller municipalities and rural areas, and especially immigration in Skopje. In this respect, formulation of an appropriate development policy directed towards more balanced regional development is needed, especially with regards to the development of the rural areas and smaller municipalities. Furthermore, the migration policy should aim at decrease of the large permanent emigrations abroad, especially the intellectual emigration. The measures should be primarily directed toward stimulating the temporary employment abroad, i.e. promotion of mobility of highly educated persons in purpose of their professional upgrading that would be beneficial for the SD of the Republic of Macedonia.

Strategic Measures (SM) - Social Inclusion, Demography and Migration:

- Improve the business climate for creation of new jobs.
- Set up labor-intensive public work schemes and support non-conventional types of employment.
- Develop and adopt effective strategy for formalization of the informal labor market.
- Improve the employability of the labor force.
- Introduce instruments which will decrease poverty i.e. that will provide make up of insufficient income of the population.
- Build up educational inclusion policy which will provide equal access to education and equal possibilities for education with certain quality standards.
- Develop a model of health based on the principles of solidarity, equity and proper efficiency, along with the expected trends of the population aging.
- Improve the supply of the social services and benefits particularly in respect of the needs-based assessment, capacities for their delivering and decentralization of the social services.
- Formulate and apply sound long-term population policy which will incorporate set of indirect measures for the particular components of the total population movement.
- Adopt consistent long-term migratory policy which will incorporate set of measures for internal and international migration.



4. COMPREHENSIVE SUSTAINABILITY DIAGNOSIS FOR THE REPUBLIC OF MACEDONIA

Based on the Sustainable Development Framework Report and the NSSD Technical Background Report, of which the consolidated findings, conclusions, and recommendations is summarised in the above, a comprehensive sustainability diagnosis for the Republic of Macedonia is given in the following.

A basic precondition for changing a country and a society in the direction of sustainable development is without a doubt that the politicians, public and private decision makers, and the wider public is aware of, understands and accepts the concepts and principles of sustainable development. Looking at the Republic of Macedonia, there seems to be limited awareness, understanding and accept of the concepts and principles of sustainable development in the wider public and amongst local and regional politicians and decision makers - with a few significant exceptions. As for national politicians and national public and private decision makers, a growing awareness can be traced and this interest has to some extent been stimulated by the NSSD Project. However, the overall will to take the necessary steps towards a sustainable society is not yet significantly present amongst national politicians and national public and private decision makers.

As stressed previously, EU accession is regarded as the overarching precondition for making the Republic of Macedonia sustainable. As for the importance of the EU accession, there is strong awareness and commitment amongst national politicians and national public and private policy makers, and to some extent amongst local and regional politicians and public and private decisions makers. It is also very important that the wider public understands and is strongly committed to EU accession.

In terms of sustainable development, the Republic of Macedonia basically benefits from being a developing economy as resources have not yet been overexploited. Further, there is only severe pollution stemming from point sources related to intensify industrial and agricultural production. Consequently the rich natural and cultural resources of the Republic of Macedonia are fairly unspoiled at present. In the context of sustainable development this means that only point wise and not severe remediation and clean-up activities are needed, and the strategies consequently should concentrate on change and prevention.

In summary the comprehensive sustainable development diagnosis for the Republic of Macedonia can be outlined as follows:

- Limited awareness, understanding and commitment to sustainable development.
- Fairly widespread commitment to EU accession on the state level.
- Favourable point of departure with rich and fairly unspoiled natural and cultural resources.
- High and widespread unemployment.
- Health sector in need for significant improvement and strategic direction.
- Educational sector in need for significant improvement and strategic direction.
- Agricultural and forestry sector in need of strategic redirection.
- Tourism sector, with a high potential, but in need of structured strategic work and planning.
- Water, wastewater and solid waste systems in need of significant improvement.
- Significant upgrading of rail road network is needed.
- Road planning and construction in need of strategic focus.
- Industrial development including especially the important SMEs in need of strategic redirection and focus.



- Comprehensive and in-depth organisational development and institutional strengthening needed for all walks for public life including policy making, preparation of legal and regulatory framework, strategic planning, administration, monitoring and enforcement.

5. GOAL, DIRECTION AND GUIDING PRINCIPLES FOR MAKING THE REPUBLIC OF MACEDONIA SUSTAINABLE

In the following the goal, direction and guiding principles for making the Republic of Macedonia has been identified and formulated based on the previous sustainability diagnosis and identification of key challenges in the NSSD Part II.

Sustainable development is a precondition for the development of the Republic of Macedonia. However, as stressed several times, the overarching goal and direction for making the Republic of Macedonia sustainable is EU accession as soon as possible.

Furthermore, **the goal and direction should take point of departure in the rich and fairly unspoiled natural and cultural resources of the Republic of Macedonia.**

Following this, the goal should address mutually supportive and sustainable integration of the tourism, agricultural and industrial sectors with a sustainable supportive function from the energy sector and the infrastructure and transport sector. The environmental sector will be cross-cutting supportive of the said integration. It is important to remember that sustainable development is a continuous process, which requires permanent adjustments, monitoring and improvements.

With the aim of making the NSSD as viable as possible, it builds on the following three mutual supporting guiding principles, which are illustrated in the chart overleaf. :

- **Guiding Principle No. 1:** The Government should function in an **innovative supporting and guiding role** in relation to the Municipalities and the private sector, which has the operational role in relation to making the Republic of Macedonia Sustainable.
- **Guiding Principle No. 2: E-government** should be introduced covering national as well as regional and local government. This in order to ensure transparency and efficiency, and as a strong tool in relation to faster and more effective processing of sustainable development projects from the public as well as from the private sector.
- **Guiding Principle No. 3:** Focus in the short term should be on projects and activities, which are **targeting the well educated part of the work force**. This in order to avoid further brain drain, possibly to attract Macedonians abroad who are highly skilled, well educated and resource strong. Further, these projects and activities, with a high level of knowledge and innovation, should be the locomotive pulling the more traditional development venues described in detail in the NSSD Technical Background Report. Development of e-government could be one of the first boosters of these guiding principles, with a domestic as well as regional commercial potential.



The National Strategy for Sustainable Development for the Republic of Macedonia

<p>GUIDING PRINCIPLE No. 1 The Government sets the direction and support the process, with the Municipalities and the private sector as the operational part</p>		<p>GUIDING PRINCIPLE No. 2 E-government is introduced at national, regional and local level in order to ensure transparency and efficiency</p>		<p>GUIDING PRINCIPLE No. 3 First focus group is the well educated Macedonians at home as well as abroad</p>
---	--	---	--	--

The Viability Assessment of Making the Republic of Macedonia Sustainable

The Three Guiding Principles for the National Strategy for Sustainable Development for the Republic of Macedonia



6. ORGANISATIONAL AND IMPLEMENTATION FRAMEWORK FOR MAKING THE REPUBLIC OF MACEDONIA SUSTAINABLE

As has been stressed several times proper sustainable development, addressing the three pillars of economic, social and environment, is based on a cross-cutting, integrated, participatory and holistic strategic approach. **Consequently it is not conducive for making SD operational to allocate programming and management responsibility in a line Ministry or in a line organisation.**

Consequently the first step in making the Republic of Macedonia sustainable is to set up the already planned **National Council for Sustainable Development (NCSD)** with a resource and competence strong and efficient Secretariat, which in time could develop into a proper Agency for Sustainable Development. The NCSD with its secretariat should be provided with governmental executive power, and in line with this it is proposed that it should be chaired by the Prime Minister and includes all relevant line ministries. In accordance with Guiding Principle No. 1 it should also include executive representatives from the municipalities as well as from the private sector. Further it is recommended that other key SD stakeholders as NGOs should have representatives in the NCSD.

The **Agency for Sustainable Development** could be established as a merger and further development of existing agencies as the Agency for Spatial Planning, the Agency for Promotion of Entrepreneurship, the Agency for Energy Efficiency, the Agency for Sport and Youth and other agencies addressing and dealing with sustainable development.

In the short run the secretariat function of the NCSD could be placed in the planned Secretariat for Informatics Society, which then should be renamed the **Secretariat for Informatics and Sustainable Development Society**.

As ICT is a key tool in making the Republic of Macedonia sustainable it is proposed that the **National ICT Council**, proposed in the National Strategy and Action Plan for Information Society Development, **should be merged with the NCSD.**

The first task of the NCSD, which should be set up as early as possible in 2008, in order for it to be able to interact with and benefit from the knowledge and resources of the NSSD Project, should be to carefully review this draft final NSSD and based on this make directions for its revision, detailing, finalisation and implementation. In this connection it is important to underline the dynamic concept behind this NSSD, which entails that it should be continuously assessed and respond to changes, through the preparation of **yearly national strategic working plans** by the NCSD with point of departure in this NSSD.

In order to monitor the implementation of the NSSD, and in this connection the progress in ensuring sustainable development for the Republic of Macedonia, a set of indicators are needed. In Annex No. 1 is given a set of SD Indicators addressing the EU Indicators as well as country specific indicators.



REFERENCES

List of international, national and sector's documents (related to SD)

1. RENEWED EU SUSTAINABLE DEVELOPMENT STRATEGY June 9, 2006
2. ANALYTICAL REPORT For the Opinion on the Application from the Republic of Macedonia for EU membership (November, 2005)
3. COMMISSION STAFF WORKING DOCUMENT The former Yugoslav Republic of Macedonia 2006 Progress Report EN {COM (2006) 649 final
4. Sustainable Development Indicators to monitor the implementation of the EU Sustainable Development Strategy (9.2.2005)
5. UN Agenda 21
6. Presidency Conclusions of the Brussels European Council (15/16 June 2006)
7. Targeting the Environmental Investment Challenge in South Eastern Europe (November, 2005)
8. A European Union Strategy for Sustainable Development 2002
9. EU Funding in brief (June, 2006)
10. The EU Strategy for Sustainable Development: Process and Prospects (January, 2004)
11. Plan of Implementation of the World Summit on Sustainable Development (2002)
12. Stabilization and Association Agreement between the Republic of Macedonia, on one part, and the European Communities and their member states, of the other part, 2005
13. Strategy for economy adjustment and global opinions on the economic development, prepared by MASA (Macedonian Academy of Sciences and Arts), 1992 on demand of the Government of the Republic of Macedonia
14. Law on Transformation of Enterprises with Social Capital ("Official Gazette of the Republic of Macedonia" No. 38/93, 48/93, 21/98, 25/99, 39/99, 49/00, 6/02, 31/03, 38/04)
15. Law on Privatization of State Capital ("Official Gazette of the Republic of Macedonia " No.37/96, 25/99, 81/99, 49/00, 06/02, 77/05)
16. Law on Institutions ("Official Gazette of the Republic of Macedonia " No. 32/05, 120/05)
17. Law on Transformation of Public Enterprise "Macedonian Railways" ("Official Gazette of the Republic of Macedonia " No. 29/05)
18. Law on Health Protection ("Official Gazette of the Republic of Macedonia " No. 85/05)
19. The Broadcasting Law ("Official Gazette of the Republic of Macedonia " No. 100/05)
20. Law on Restructuring of Loss Making Enterprises ("Official Gazette of the Republic of Macedonia " No.2/95)
21. Law on Bankruptcy ("Official Gazette of the Republic of Macedonia " No.55/97, 53/00, 37/02, 17/04) and
22. New Law on Bankruptcy ("Official Gazette of the Republic of Macedonia " No.34/06) Implementation 2006-2007
23. Agreement with IMF and the World Bank, II loan for adjustment of the financial sector and enterprise sector FESAL three trenches, December 2002-December 2003
24. Stabilization Program of the Government of the Republic of Macedonia ("Official Gazette of the Republic of Macedonia " No.br.4/94), prepared by IMF and the World Bank
25. National strategy for economic development of the Republic of Macedonia made in 1997 by MASA; it represents a long term vision till 2020
26. Strategy of export of the Republic of Macedonia, prepared by MASA in 1999
27. Frame program of economic development and reforms "Macedonia 2003" ("Official Gazette of the Republic of Macedonia " No.49/00)
28. National strategy for the integration of the Republic of Macedonia in the European Union, 2004
29. National program for adopting the law of EU, 2006
30. National Strategy for development of small and medium size enterprises, 2003, financed by USAID
31. European act on small enterprises - Thessalonica 2003, R.M member with equal rights
32. Macedonian programme on competitiveness and innovation of MSP, 2007-2010 (Ministry of Economy)
33. Industrial policy in the Macedonian economy, preparation is from 2006 to 2008, financed by the World Bank-BERIS. Implementation 2008-2010



34. National Strategy for reconstruction and modification of the steel industry in RM as an obligation from Protocol 2, of the Stabilization and Association Agreement with EU, prepared and financed by the European Committee; 2005 -Implementation 2006-2008
35. Strategy for the development of textile industry in RM, underway, Institute of Economy. Implementation 2007-2009
36. Law on State Aid ("Official Gazette of the Republic of Macedonia " No.24/2003).
37. Study on discovering administrative barriers and procedures for investing and attracting foreign investments in RM in cooperation with the World Bank - FIAS, 2003
38. Programme for stimulating investments in RM with help of the World Bank, MIGA, UNDP, USAID.2003-2006, Foreign Investment Agency established
39. New Programme for the Improvement of the investment climate in RM 2007-2010, EAR and TDI Group from Ireland
40. Law on stimulating and helping the technological development ("Official Gazette of the Republic of Macedonia " No. 98/2000)
41. Law on stimulating and helping the technological culture ("Official Gazette of the Republic of Macedonia " No. 53/2000)
42. Conceptual approach in the creation and revitalization of the National Strategy sustainable development of RM 2000
43. National estimation for sustainable development of RM - 2002
44. Research concept for ensuring analytical and predictable asset in function of preparing the National Strategy for sustainable development of RM - 2003
45. New Law on Trade Enterprises ("Official Gazette of the Republic of Macedonia" No. 24/04).
46. Law on industrial ownership ("Official Gazette of the Republic of Macedonia " No. 09/2004
47. Law on concession ("Official Gazette of the Republic of Macedonia " No. 25/2002 i 24/2003)
48. Law on the window reference system and Trade Registry ("Official Gazette of the Republic of Macedonia " No. 84/2005)
49. Law on Free Economy Zones ("Official Gazette of the Republic of Macedonia " No. 2/2002), New Law on TIRZ -underway. Law on Competitors Protection ("Official Gazette of the Republic of Macedonia " No.4/2005)
50. Law on Consumer Protection ("Official Gazette of the Republic of Macedonia" No.38/2004)
51. Strengthening the Capacity of the Ministry of Environment and Physical Planning (June, 2004)
52. National reporting guidelines for CSD-14/15 Thematic Areas C. Industrial Development
53. Functional Analysis and Institutional Development Plan (16 July 2004)
54. GTZ: Project: Strategy for development of food industry with special review towards production of fruit and vegetables ,2002
55. Study-Master plan for revitalization of the food industry in RM, Japanese agency for international cooperation,1996
56. Land o"Lakes Project: "Proudly from Macedonia" and -Sign of quality for meat and dairy products, 1999
57. Sector studies on wine, leather and textile, production of fruit and vegetables 2001-2003 by the Macedonian Business Centre
58. Annual programmes for adjusting the judiciary system of RM to the one of EU, starting from 2001
59. SME Charter - 2004, 2005
60. Study on the development of the competition indicators of the Macedonian industry, 2006
61. Programme for stimulation of investments, 2003
62. National Action Plan on Employment 2004-2005
63. Public Investments Programme 2004-2006.
64. National programme for education development.2005-2015
65. Strategy on Energetic efficacy and National Ecology Action Plan
66. Macedonian Program for Competitiveness and Innovations of SME (2007-2010)



CALL FOR PAPERS

Journal for Sustainable Development is a quartile journal published by the Integrated Business Faculty - Skopje. Authors are encouraged to send their research papers, articles, essays, reviews etc. on the issues of sustainable development.

SD area includes three pillars of economic, social and environmental development issues. All these aspects will be considered relevant for publishing in the SD Journal.

The authors should submit their papers according to the following rules:

1. Papers (articles, reviews and other research papers and reports) can be sent to the Editorial Board only if have not been published before, nor will be published elsewhere before the printed Journal of Sustainable Development is issued. Research papers & articles should consist up to 15 pages (approximately 38.000 characters with spaces), while reviews up to 3 pages (approximately 17.000 characters with spaces). Margins: Top - 2,54, Bottom - 2,54, Left -3, Right - 2,5, Gutter 0 cm, Header - 1,25, Footer - 1,25. The text should be typed with 1,5 spacing in Tahoma for texts in English, or Mac C Times for texts submitted in Macedonian and the font size should be "12". The Title of the paper should be written as a header of the text on each page. The footnotes should be written with font size "10".

2. On the first page should be written:

- the name and academic title of the author with notes in the part of Notes (at the bottom of the page), explaining the author's academic degree, title, occupation/vocation and the title of the institution where the author is employed,

- the title of the paper and

- executive summary in 6-8 lines (approximately 500-600 characters with spaces), in

a) Macedonian Language and

b) English Language

at the end of each should be provided 5-7 key words that describe the topics of the paper.

3. Quotations and notes should be placed on the bottom of the page and are marked successively with Arabic numbers.

4. Tables, graphs, charts and other illustrations should be titled and marked successively with Arabic numbers. On the bottom line below the illustrations should be provided data source, while additional comments-explanations should be written in a new line under the data source.

5. Quotations of the bibliography should be provided at the end of the paper in the following order:

6. Each author should enclose payment proof for the participation quote of:

a) research paper, article - 150 euros in denars

b) review - 85 euros - in denars

7. Papers sent for publishing are not returnable to the authors (in both cases, whatever approved for publishing or not).


8. If the critique review of the paper by two reviewers is positive, the paper will be published in the first next edition of the SD Journal.



Papers can be submitted electronically to: biljana.avramovska@fbe.edu.mk
or in a hard copy with enclosed electronic version to the:
Integrated Business Faculty,

Str. Kosta Novakovic no.6
1000 Skopje
Republic of Macedonia

Phone: +389 (02) 24 02 160
Fax: +389 (02) 24 66 043





Publisher Integrated Business Faculty - Skopje

For the publisher Jens Humbold

Title Journal of Sustainable Development

Editorial board Prof. Strahinja Trpevski, Ph.D.
Prof. Vesna Stojanova, Ph.D.
Prof. Natalija Nikolovska, Ph.D.
Biljana Avramovska, Secretary

Cover, pre-press & print GLOBAL Communications, Skopje

Number of copies 500 copies

Skopje, June 2008



Sustainability through change

Факултет за бизнис економија



Република Македонија
Министерство за Образование и Наука