



Creating the Climate for Change towards a Better Quality of Life !

National Strategy for Sustainable Development in the Republic of Macedonia 2030

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This report has been prepared by The NSSD Team
(Comprising Project Management, Local Staff,
Domestic Specialists, and Foreign Specialists)



“...Sustainable development is the fundamental goal of the European Union. This concept is one of the main goals of European integration...”
Romano Prodi, President of the European Commission
European Parliament,
(Strasbourg, May 2001)



Sustainable development in the Republic of Macedonia, encompassing the economic, social and environmental dimensions



ОДРЖЛИВ РАЗВОЈ



SUSTAINABLE DEVELOPMENT

Support to the Preparation of a National Strategy for Sustainable Development in the Republic of Macedonia

**National Strategy for Sustainable Development
in the Republic of Macedonia Public, February 2008**



I Project Cover Sheet

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II List of Abbreviations

A21	Agenda 21
AAR	Analysis and Assessment Report
ADSL	Asymmetric Digital Subscriber Line
BAHA	Balkan Alliance of Hospitality Accountants
BERCEN	Balkan Environmental Regulatory Compliance and Enforcement Network
BSAP	Biodiversity Strategy and Action Plan
CAP	Common Agricultural Policy
CCI	Cross-Cutting Issues
CCSU	Cross-Cutting Support Unit
CDM	Clean Development Mechanism
CEFTA	Central European Free Trade Agreement
CEO	Chief Executive Officer
CHP	Combined Heat and Power
COC	Consolidated Conclusions
COF	Consolidated Findings
COR	Consolidated Recommendations
CPI	Consumer Price Index
DIRRSDC	Diversification of Income in Rural Regions and Sustainable Development Challenges
DNA	Designated National Authority
DPRS	Diagnostic-Prognostic-Reporting-Service
EAR	European Agency for Reconstruction
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EE	Energy efficiency
EEA	European Environmental Agency
EIA	Environmental Investigation Agency
EIB	European Investment Bank
EMS	Environmental management system
ERC	Energy Regulatory Commission
ESCO	Energy Service Company
ESM	Electrostopanstvo na Macedonia
EU	European Union
EU EPA	Environment Protection Agency
EU WFD	EU Water Framework Directive
EUREPGAP	Good Agricultural Practices
EURES	European Employment Services
EXS	Executive Summary
FAO	Food and Agriculture Organisation
FDI	Foreign direct investment
GAP	Good Agricultural Practice
GCI	Global Competitiveness Index
GDP	Gross domestic product
GEF	Global Environment Facility
GEF	Global Environment Fund
GHG	Greenhouse Gas
GIS	Geographic Information System
GMO	Gen Manipulated Organism
GPRS	General Packet Radio Service
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit
HASSP	Health Approved Safety Standards Protection



HRM	Human resource management
IA	Impact Assessment
IFIs	International financing institutions
IPA	Instrument for Pre-Accession Assistance (of the European Union)
ITC	Information and Communication Technologies
KfW	Kreditanstalt fuer Wiederaufbau
LFA	Logical Framework Approach
LIFE	EU's financial instrument supporting environmental and nature conservation projects throughout the EU, as well as in some candidate, acceding and neighboring countries
MAASP	Macedonian Agricultural Advisory Support Programme
MAFWE	Ministry of Agriculture, Forestry and Water Economy
MC	Management Commentary
MCs	Management Commentaries
MEAs	Multilateral environmental agreements
MEPSO	Macedonian Transmission system operator
MES	Manufacturing execution system
MIS	Market Information System
MoEPP	Ministry of Environment and Physical Planning
NASD	National Agency for Sustainable Development
NATO	North Atlantic Treaty Organization
NCSD	National Council for Sustainable Development
NDP	National Development Plan
NEA	National Extension Agency
NEAP	National Environmental Action Plan
NES	National Employment Strategy 2010
NGO	Non Government Organization
NPAA	National Programme for Approximation of the Acquis
NSDIB	The National Sustainable Development Investment Bank
NSSD	National Strategy for Sustainable Development
NUTS	Nomenclature of Territorial Units for Statistics
OSCE	Organization for Security and Cooperation in Europe
PCM	Project Cycle Management
PD	Project Director
PINCR	Project Inception Report
PINTR	Project Interim Report
PIO	Project Implementation Office
PIP	Project Implementation Plan
PM	Project Management (Team Leader and Deputy Team Leader)
PPP	Public-Private-Partnership
PSC	Project Steering Committee
PT	Project Team
R&D	Research and Development
REReP	Regional Environmental Reconstruction Programme for South East Europe
RES	Renewable energy sources
RM	Republic of Macedonia
ROACH	Results-Oriented Approach for Capacity Change
RSDI	Regional Sustainable Development Indicators
SAA	Stabilisation and Association Agreement
SCP	Sustainable consumption policies
SD	Sustainable Development
SDCU	Sustainable Development Campus University
SDF	Sustainable Development Framework
SDFR	SD Framework Report



SDI	Sustainable Development Indicators
SD-KPI	Sustainable Development Key Performance Indicator
SDS	Sustainable Development Strategy
SEA	Secretariat for European Affairs
SEFF	Sustainable Energy Financing Facility
SIDA	Swedish International Development Cooperation Agency
SM	Strategic Measure
SMEs	Small and Medium Size Enterprises
SMILEs	Small, medium and large enterprise
SWG	Sector Working Group
SWOT	<u>S</u> trengths- <u>W</u> eaknesses- <u>O</u> pportunities- <u>T</u> hreats (Analysis)
TAIEX	Technical Assistance and Information Exchange Instrument
TIRZ	Tax Increment Reinvestment Zones
TL	Team Leader
TOC	Table of Contents
ToR	Terms of Reference
TTC	Technology Transfer Centres
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UN-ECE	United Nations Economic Commission for Europe
UNEP	United Nations Environmental Programme
UNIDO	United Nations Industrial Development Programme
USAID	US Agency for International Development
VET	Vocational education and training system
WG	Working Group
WHO	World Health Organization
WSSD	World Summit for Sustainable Development
WTO	World Tourism Organisation
WWTP	Waste water treatment plant
ZELS	Association of the Units of the Local Self-Government of the Republic of Macedonia



III Foreword

Dear Citizens of the Republic of Macedonia,

It is my special honour, as President of the Project Steering Committee, to present to you to the National Strategy for Sustainable Development (NSSD) in the Republic of Macedonia. The NSSD was prepared with support of the Kingdom of Sweden and facilitated through the Swedish International Development Agency (Sida). The Project started its work in February 2006, and has been completed in February 2008.

Although the term "sustainable development" is very frequently used to reflect certain trends in contemporary world, I take the advantage of this opportunity to express our common understanding of what this term actually means in wider context of countries and nations of the world.

Let me share with you, in few words, my perception of the substance of the Project, and that is to assist the Republic of Macedonia to prepare its National Strategy for Sustainable Development in economic, social and environmental terms. The Project continued the efforts of the country towards the achievement of the goals defined before and after the World Summit for Sustainable Development held in Johannesburg, in 2002. The Strategy will at the same time mean fulfilment of the obligations of the Republic of Macedonia towards the international community and towards the EU, but its primary goal is to provide an effective framework for sustainable development, that will propose, through reviews of existing policies and sectoral strategies, practical guidelines for both the public and the private sectors and will support the efforts for attracting local and foreign investments.

We are aware of the fact that in the past years, different planning documents have been developed in the Republic of Macedonia. However, political conditions in the country change, developments take place in a rapid manner and political trends at both European and global levels change as well. The Republic of Macedonia has got the status of a candidate country for membership in the EU, we expect its membership in the NATO to take place soon and the invitation to commence the negotiations for membership in the Union. All the above require new attitude, new action directed before all towards accomplishment of the obligations deriving from the new partnerships, and then turning the focus on ourselves, on what is required by the economic and the social basis in the country and certainly the quality of living. The inter-linkage of all the above results in sustainable development or, let me use the explanation given by someone else concerning the meaning of the term sustainable development, as I deeply agree with the statement: "The sustainable development is economic development which is socially responsible and fair, environmentally acceptable and resting on the postulates of the civil society."

This is a Project of the Government of the Republic of Macedonia, as its mandate is to integrate all existing sectoral strategic documents and to produce an integrated strategic framework of the road to be passed through by the Republic of Macedonia in future. By implementing the Project "Support in the Preparation of the National Strategy for Sustainable Development of the Republic of Macedonia", we do not only demonstrate strong and full commitment towards the Strategy for Sustainable Development of the EU, but also join the global movement in sustainable development.



Observing closely the positive experiences of the Baltic States during the process of their integration in the EU, I am an optimist that the Republic of Macedonia will use well the period ahead to implement the National Strategy for Sustainable Development that promotes the vision of the national development and provides a widely supported framework to generate investment programmes and consequently improve the quality of life for all Macedonian citizens and their future generations.

I wish you, the reader of this National Strategy for Sustainable Development, to become inspired by the new way of thinking and working. Let us all together build *Sustainable Development Macedonia*.

Zoran Stavrevski,
Vice President of the Government and
President of the NSSD Project Steering Committee



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- Annex No. 2: Sustainable Development Pilot Projects Catalogue as of February 2008
- Annex No. 3: Sustainable Development Indicators

Supplements:

- NSSD Position Document I: Proposal for Institutional Set-up to Support the Implementation of Sustainable Development in the Republic of Macedonia, July 2007.
- NSSD Position Document II: Air quality in the Regions of Macedonia as Foundation for Agriculture and Rural Development based on SD Principles, October 2007.
- NSSD Position Document III: Population Change and Demographic Situation in the Republic of Macedonia, October 2007.
- NSSD Position Document IV: Agriculture, Climate Change, Soil Protection, Pesticides, Nitrates and Water in the Republic of Macedonia, January 2008.
- NSSD Position Document V: Environmental integration into the future CAP, Cross compliance, Agri-environmental Measures and Agri-environmental indicators in the Republic of Macedonia, January 2008.
- NSSD Position Document VI: Agriculture and biodiversity Plant Genetic Resources in the Republic of Macedonia, January 2008.
- NSSD Position Document VII: Agriculture and biodiversity Animal Genetic Resources in the Republic of Macedonia, January 2008.
- NSSD Position Document VIII: Agriculture and Genetically Modified Organisms in the Republic of Macedonia, January 2008.
- NSSD Position Document IX: Plants Biomass Production and Bio Fuels in the Republic of Macedonia, January 2008.
- NSSD Position Document X: Proposition of Performance Indicators for Road and Railway Transport to establish more efficient, less polluted and safer Transport System in the Republic of Macedonia, January 2008.
- NSSD Position Document XI: Water Infrastructure in the Republic of Macedonia, January 2008.
- NSSD Position Document XII: Regional Opportunities for Sustainable Development of Tourism in the Republic Macedonia, January 2008.

Creating the Climate for Change towards a Better Quality of Life!



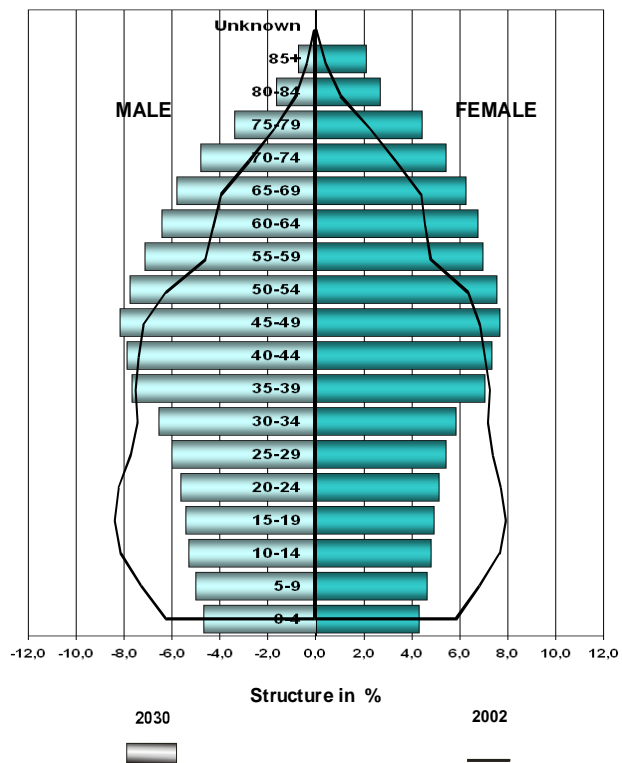
INTRODUCTION

1. Why do we need a National Strategy for Sustainable Development ?

This is the **National Strategy for Sustainable Development in the Republic of Macedonia**. The National Strategy for Sustainable Development (NSSD) comprehensively describes the **country's vision for the future 22 years until 2030**. By joining the global movement of sustainable development, the NSSD for each and every citizen of the Republic of Macedonia should first of all motivate **hope and trust in the future** and provide a clear direction and road map of the country's future development.



After independence in 1991 and 17 years of transition, many – in particular young and well educated citizens – became exhausted and left the country or are prepared to leave in order to find a better quality of life elsewhere in the world. Taking into consideration the projection of the demographic situation in 2030 (see to the right)¹ with a sharply increasing aging problem, the Republic of Macedonia – as many other European countries – can not afford any brain drain if economic prosperity should be accomplished in parallel with social cohesion and environmental accountability. We invite all citizens to **build Sustainable Development Macedonia**.



In fact, it is our daily life experience that human beings want to find material prosperity, but at the same time they enjoy a social life in harmony with the environment. The belief that social, economic and environmental goals should be complementary and interdependent throughout the development process is the heart of the concept of Sustainable Development. The vision of balanced and

¹ NSSD Position Document III, Population Change and Demographic Situation in the Republic of Macedonia, October 2007.



accountable development in economic, social and environmental fields is exactly the substance covered by the idea of sustainability of the development.

This National Strategy for Sustainable Development together with the Spatial Plan and Spatial Planning Strategy as of 2004 for the first time in modern history of the Republic of Macedonia provides an **integrative approach of planning**, which offers the overall umbrella for all other strategies and policies in various fields². For example, education is not a sector topic on its own. Education is rather a prerequisite for promoting the behavioural changes (see below) and providing citizens with the key competences such as economic understanding, human resources management as well as natural resources management skills needed to achieve sustainable development.

The NSSD in the Republic of Macedonia also has an eminent international political dimension in terms of **EU integration**. Since Sustainable Development is the fundamental goal of the European Union, the Republic of Macedonia after being awarded the candidate status for EU membership in December 2005 is obliged to prepare a National Strategy for Sustainable Development³. The concept of Sustainable Development is one of the main goals of European integration and it is the core of European model of the society⁴.



Being a European country rather small in terms of territory size and number of inhabitants, Macedonia has excellent conditions to foster Sustainable Development:

- We are used to be flexible and we can adjust more quickly than other countries to response to different challenges, rather than to implement fixed plans, ideas and solutions.
- In fact, we are well aware that each individual and the society as a whole are responsible to contribute to a better quality of life, rather than that it is the state alone which is responsible.
- Our original culture is to share, results and opportunities, to have transparent negotiations, co-operation and concerted action, rather than centralised and controlled decision-making.
- We want to see impacts of projects and legal changes, rather than to discuss projects and laws as such as a major topic.
- We are aware of the fact that the whole is more than the total of its individual pieces, and that our future is integrated planning, rather than sectoral planning.
- We have the capacity and we want to use our capacity for more domestically-driven and financed development, rather than being depended on external assistance.
- We want to move towards a process which can accommodate monitoring, learning and improvement.

Having all this in mind, it is our firm belief that this National Strategy for Sustainable Development *creates the climate for change towards a better quality of live* for all citizens,

² Republic of Macedonia: National Development Plan 2007 – 2009, unedited draft, Skopje, February 2007, page 3-4.

³ ANALYTICAL REPORT for the Opinion on the application from the Republic of Macedonia for EU membership, {COM (2005) 562 final}, Brussels, 9 November 2005, page 121.

⁴ Romano Prodi, President of the European Commission European Parliament, (Strasbourg, May 2001).



both the living and the generations to come. We need to utilize our potentials more than we did in the past (for details we refer to Chapter 3.). In order to do so we need to **change our way of thinking and working** in the society as a whole. Let us focus on Sustainable Development, rather than to blindly accept every kind of way of living that finally jeopardizes our environment and social way of life.

We clearly understand that the basic enabling factor in connection with any strategic context entailing major change is "trust", especially "trust in the future" and "trust among each other". The most dangerous thing to do and the most difficult thing to implement are to try to motivate changes. Consequently if we have to drastically change the direction of the development of our society, and the daily way of life of people, which for sure sustainable development will entail, we have to convince our neighbours that change is a positive thing and not a negative thing. And that is hard work building up trust in the change and the ones responsible for the direction of the change.



The above goes for all countries and all societies around the World, as well as for organisations and institutions, where we would like to change how things are done. However, in the country's specific context the national lack of trust in the future and the fear of the challenges of Globalisation and the EU Accession is super imposed with scepticism from the international society concerning the development potential of the Republic of Macedonia in relation to the question about short as well as long term political stability.

Consequently the change of attitude towards the future of the people at large in the Republic of Macedonia, and the International society towards the Republic of Macedonia, is addressed and has to be resolved as an inherent and integral part of the implementation of the National Strategy for Sustainable Development.

This is for sure a task outside the NSSD Project not only due to limited resources within the project but also due to the limited legitimacy of the Project in this context. However, the NSSD Project already shouldered the responsibility to explain the above to the right persons in the right places. Secondly the NSSD Project from the very first day supported this process of increasing the "trust in the future" as an integral part of the public awareness and public participation activities.

On which, in fact ethical principles of change is Sustainable Development based upon ? The Report of the World Commission on Environment and Development (better known as the Brundtland Commission) *Our Common Future* in 1987 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 further reads: *"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."*



Although the later definition might not be as well known as the first one, it gives more practical guidelines for what we understand as *behavioural changes*. Thus, the National Strategy for Sustainable Development in the Republic of Macedonia motivates behavioural changes of each and every citizens, e.g. on how to care for and recycle solid waste, to think about utilization of renewable energies and to motivate investments in this direction as well as to motivate institutions to define themselves as positive thinking civil servants for the benefit of the entire society. All this gives the complete mosaic picture of how we want to behave today for the benefit of future generations to come.

In terms of Sustainable Development Investments, this National Strategy for Sustainable Development is supposed to generate a positive climate for investors, both foreign and domestic, and what the NSSD Project can realistically achieve at the end of the two years project cycle – mid-February 2006-2008 – is to identify possibilities for investment and draft pilot projects. Although initial initiatives have been undertaken, the concrete development in form of financial investments will most likely be generated after the end of the project.

2. Our Commitment to the overarching EU policy

To build up *National trust in the future*, and the *International trust in Macedonia*, logically is a difficult and long-lasting process. Nevertheless, a journey starts with the first step, and to facilitate an **Enabling Environment first of all means to strongly commit the Republic of Macedonia to Sustainable Development, which is the fundamental goal of the European Union and the main goals of European integration. Thus, our commitment to the overarching EU policy reads as follows:**



1. Generally the following sets out a coherent framework on how the Republic of Macedonia should more effectively live up to its long-standing commitment to meet the challenges of sustainable development. It reaffirms the need for and benefits of global solidarity and recognises the importance of strengthening the work with partners within and outside the EU.

2. Following the UN Conference on Environment and Development (Rio de Janeiro, 1992) countries were encouraged to elaborate national strategy on sustainable development, in order to bring Agenda 21 into action. The commitment to the principles of sustainable development and to prepare a NSSD was reconfirmed by nations, including the Republic of Macedonia, participating in the Johannesburg 2002 World Summit on Sustainable Development.

3. The preparation of a National Strategy for economically, socially and environmentally Sustainable Development in the Republic of Macedonia takes full advantage of past planning efforts in the country before and after the World Summit for Sustainable Development (WSSD) in Johannesburg 2002. The strategy shall fulfil the obligations made by the Republic of Macedonia internationally and to EU. However, its primary purpose is to provide an effective framework for sustainable development that, via reviews of existing policies and



sector strategy, offers practical guidelines in the public and private sectors and serves to encourage incremental domestic and foreign investments.

4. The Constitution of the Republic of Macedonia contains articles referring to fundamental principles upon which the sustainable development is founded. The Law on Environment contains, among other principles, the Principle of Sustainable Development. This poses the obligation that, in undertaking or performing any activity, care should be taken to safeguard rational and sustainable use of natural resources for the purpose of satisfying the needs for a healthy environment, as well as social and economic needs of present generations, without jeopardizing the rights of future generations to satisfy their own needs.

5. Sustainable development is the overarching objective of the European Union set out in the Treaty, governing all the Union's policies and activities. It is about safeguarding the earth's capacity to support life in all its diversity and is based on the principles of democracy, gender equality, solidarity, the rule of law and respect for fundamental rights, including freedom and equal opportunities for all. It aims at the continuous improvement of the quality of life and well-being on Earth for present and future generations. To that end it promotes 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.

6. The participatory process of developing a National Strategy for Sustainable Development, meeting the requirements of EU-accession is a major milestone for the Republic of Macedonia to join the family of EU countries. Within the framework of the renewed EU SDS (June 9, 2006) there is provision made for the Republic of Macedonia to identify and develop objectives and measures to enable to achieve continuous improvement of quality of life both for current and for future generations, through the creation of sustainable communities able to manage and use resources efficiently and to tap the ecological and social innovation potential of the economy, ensuring prosperity, environmental protection and social cohesion.

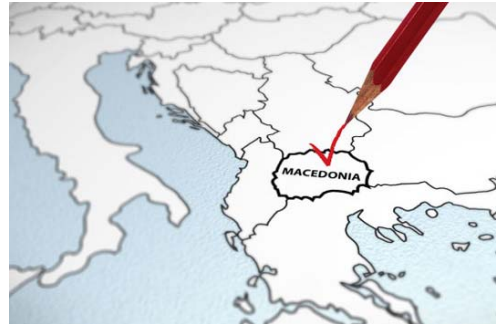
7. The strategic objective of Sustainable Development in the Republic of Macedonia, encompassing the economic, social and environmental dimensions shall be reached **by 2030**. In the below Chart is given the proposal for a comprehensive strategic framework.



Chart No. 1: Three major time horizons for a comprehensive strategic framework.

3. Macedonia's sustainable development potentials

Solidly based on the discussions among and between the NSSD Project WGs, reported in the 11 Assessment and Analysis Reports (AARs) as of 31 December 2006, and consolidated in the Sustainable Development Framework Report (SDFR) as of 31 July 2007, the following includes a **cross-cutting and comprehensive description of the sustainable development potentials of the Republic of Macedonia.**



As already mentioned earlier with other words, Sustainable Development promotes the

- ✓ **Change on focus from expensive “products” (and external assistance) towards development driven and financed by domestic sources.**

This is one of the basic elements and new ways of thinking and working. Therefore and by formulating the National Strategy for Sustainable Development in the Republic of Macedonia it is first of all necessary to identify the country's potentials to fully participate in the process of globalisation. As a point of departure the *Sustainable Development Potentials* derive from the country's aggregated strengths identified in the SWOT analysis and debated in the 7 Sector Working Groups and 4 Cross-Cutting Support Units. These *Sustainable Development Potentials* provide the ground for acceleration of investments.





1. Unique Beautiful Natural Environment and Rich Geo-/Biodiversity. The Republic of Macedonia can be proud of its undisturbed beautiful nature, which has become a rarity in many other European countries. The typical transition of Mediterranean and continental climate and outstanding geomorphologic scenery is a tourist attraction in its own. Since the country is still an undiscovered tourist destination, it provides an excellent basis for individual oriented and high quality tourism, which respects the principles of sustainable development.

The richness and the diversity of species and ecosystems are the basic features of the biodiversity in the country. It results from the country's specific geographical position and its climatic, geological, geomorphologic, hydrographical, and pedological characteristics. The presence of numerous relict species and ecosystems testifies for the significant impact of geological changes on biodiversity in the past. The richness of biodiversity is illustrated by the outstanding number of over 16,000 floral, faunal and fungal species, out of which more than 850 are endemics and through the large variety of ecosystems hosting more than 260 plant communities.

Many different relict and recent ecosystems are registered. Forests cover approximately 37% of the state territory and broadleaf forests are dominating. Lake ecosystems are of key importance. Although the flora, fauna and fungi are not sufficiently explored yet, analyses of the biodiversity richness across different European countries places the Republic of Macedonia on the very top taking into consideration its small area. The high rate of endemism represents a special feature of the Macedonian biodiversity.

2. Potential for renewable energy sources. The Republic of Macedonia has high potential for renewable energy sources. Being awarded the candidate status for EU membership in December 2005, *Sustainable Development Macedonia* supports the EU in reaching the binding and challenging targets of 20% RES and 10% BF by 2020 described in the European Strategic Energy Technology Plan decided by the European Council on 8/9 March 2007.

In Macedonia the total installed power for production of electricity from **hydro** power plants is 504 MW from six big hydro power plants, and 36 MW from 22 small hydro power plants. According to the Energy Balance 2006 the annual production of hydro power is around 1.5 billion kWh. An extensive list of more than 400 prospective sites was compiled which leads to overall potential in the order of 255 MW in capacity, and 1100 GWh in terms of annual possible energy production providing an adjacent weighted average utilization factor of 4300 hours per annum. Furthermore, the National Power Utility identified 44 potential sites with a total capacity of 174 MW and annual possible energy production of 645 GWh. For these sites, studies of some level of detail are available.

Macedonia is quite rich in **geothermal** sources suitable for different uses in addition to the production of electricity. The biggest part of geothermal occurrences in Macedonia is connected with the Vardar tectonic unit. There are 7 main geothermal fields in Macedonia with 18 localities with thermal waters, and there are more than 50 occurrences as springs and wells where thermal water appears. The biggest amount of thermal waters can be found up to the altitude of 400 m above the sea level. Only the Kozuv Mountain springs and Baniste wells have altitude of 600 m above the sea level. Temperatures of the flows vary in the range from 24-27°C to 70-78°C. Total mean temperature is 59.77°C. About 15 geothermal projects have been developed in the Republic of Macedonia during the 70's and



80's. Some of them are still in operation but others are abandoned or work below the designed capacities. Four of them are very important and have an important influence to the development and application of geothermal energy in the country. These are the Kocani geothermal project, the Smokvica and Istibanja agricultural geothermal projects, and the integrated project in Bansko.

The annual average for daily **solar** radiation varies between 3.4 kWh/m² in the Northern part of the country (Skopje) and 4.2 kWh/m² in the South Western part (Bitola). The total annual solar radiation varies from a minimum of 1250 kWh/m² in Northern part to a maximum of 1530 kWh/m² in the South Western part which leads to an average annual solar radiation of 1385 kWh/m². The climate characteristics - high intensity of solar radiation and its sunshine duration, temperature and air humidity – provide favourable conditions for the successful development of solar energy. The continental climate with hot and dry summers makes Macedonia a country with higher potential for the utilization of solar energy than the average European countries.

The **wind** energy potential is not adequately examined in the Republic of Macedonia. Although the issue is discussed since many years, very few references to wind energy can be found in studies and papers. Wind data are measured in meteorological stations throughout the country. Published data are scarce and in some occasions rather vague. Special measurements for the identification of wind energy potential in specific promising sites have not been carried out. Therefore the available data can be considered indicative only. The Vardar river basin from Kumanovo to Gevgelija is considered as the most favourable area for wind energy applications. Other areas of possible importance are the Pelagonia region, Kriva Palanka, Ohrid and other mountainous areas. Also the area around Stip is one of the most favourable in terms of wind speed.

According to the energy balance for the year 2005, **biomass** contributes by 6.2 % to the gross inland consumption. Biomass, in the form of wood and charcoal is almost exclusively used in the domestic sector. Industrial or other uses are very small and represent less than 1% of the total biomass final energy consumption. In addition, there is relatively high potential in the country for utilizing biogas from animal manure for energy generation purposes, as well as growing crops for production of bio fuel.

3. Huge Variety of Traditionally High Quality Agriculture and Forest Products and Potential for Tourist Products. Macedonia has some comparative advantages in agriculture, which comprise in fertile soils, a range of favourable micro-climate features, natural upland pastures convenient for production of some crops, horticultural produce and lamb. About 49 percent of the total area or 1.27 million ha, is agricultural land, including about 700,000 ha of pastures. A further 37 percent of the country (950,000 ha) are forests. Most of the cultivable land (82 per cent or 461,000 ha) is used for production of cereal and other crops and vegetable gardens, 26,000 ha (5 per cent of the cultivable land) are vineyards, 15,000 ha (or 3 per cent) are orchards and the remaining 58,000 ha (10 per cent) are meadows.

The agricultural biological diversity encompasses a large variety of local breeds and species found among cultivated plants and animals of autochthonous origin.

Among the production of tasty and high quality vegetables, especially the early vegetables is one of the most significant potential of the Macedonian agriculture. The early vegetables



come a month earlier in Macedonia than in neighbouring countries except Greece, where – however – the prices for agricultural products are higher.

Forests in the Republic of Macedonia are characterized with a rich biodiversity. Macedonia has significant non-timber forest resources: medical plants, mushrooms, forest fruits and game. The importance of forests is emphasized by the fact that the main part of the territory of the protected areas in the country are under forest.

The variety of traditionally high quality agriculture and forest products, and in particular certificated organic farming products, naturally form the basis of rural tourism, such as Wine Route and Gourmet Tourism as well as Spa, Wellness and Selfness Tourism, the later being considered a major trigger for prosperity in the rural regions of Macedonia. Biomass energy farming and renewable energy utilization additionally contributes to the diversification of income of the rural population and shall stimulate young Macedonians to invest their gained University know-how in their home regions.

4. Rich cultural heritage, traditional architecture and craftsmanship products.

Rural tourism with branded products is an indicator of high quality regional sustainable development. Republic of Macedonia does have potentials for development of this tourism, because of its rich cultural heritage, the characteristic traditional architecture and craftsmanship products, the unique beautiful natural environment and rich biodiversity (see above), and diversity of sites to see, visit and do and the hospitality of people. Spiritual & Cultural Tourism has a well established and visible basis in particular in Lake Ohrid and Lake Prespa Region.

Renovation of traditional rural architecture along with thermal insulation and utilization of renewable energies for individual oriented and high quality tourism is a major job creating machine utilizing the potential of labour with construction experience.

5. Intellectual Energy and Human Resources Base Potential. Beyond the potential for renewable energy sources, the Republic of Macedonia possesses Intellectual Energy. Intellectual Energy together with human resource base potential is among the most important and precious natural resources for *Sustainable Development Macedonia* in the 21st century. In this context the Republic of Macedonia shall make immediate and ultimate use of programmes related to the UN Decade of Education for Sustainable Development (2005-2014).

A country in economical transition and of the size like the Republic of Macedonia can neither afford to drain brain nor to import brain. This implies that the country first of all needs to rely on its own capacities for revival of the economy and improvement of its competitiveness in the global integration processes.

Education and life-long learning is a prerequisite for promoting the behavioural changes and providing all citizens with the key competences needed to achieve sustainable development in Macedonia. 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.



The promotion of a prosperous, innovative, knowledge-rich, competitive, eco-efficient and socially responsible economy, which provides high living standards and full and high-quality employment, is not only a challenge throughout the European Union, but also for the Republic of Macedonia.

There is the challenge of creating entrepreneurial society both in the EU member countries and in the countries in transition like Macedonia. The foundation for every entrepreneurial society is creation of entrepreneurial awareness and culture among all individuals and society at large, where the main generator should be precisely the higher education. It is the higher education that contributes to human resources development and rising awareness about sustainable development, thus shaping the international image of Macedonia. Only well educated staff can lead the sustainable development process of any country. This is why the *Sustainable Development Campus University (SDCU): A Place to Enjoy New Ways of Thinking, Inventing and Living* – to be newly established outside of Skopje – is proposed as one of the most fundamental SD Pilot Projects in Annex No. 2 (please also refer to NSSD Position Document I, Proposal for Institutional Set-up to Support the Implementation of Sustainable Development in the Republic of Macedonia, July 2007).

6. Regional SD Potential facilitated by Pan-European Corridors X and VIII and their Sub-Corridors. Fully in line with the renewed EU SDS (June 9, 2006) it is to ensure that the Republic of Macedonia's transport systems meet society's economic, social and environmental needs whilst minimising their undesirable impacts on the economy, society and the environment.

Transport and infrastructure in the Republic of Macedonia is branded with the two Pan-European transport corridors VIII and X, sub-corridor XA and the communication junction (Pan Corridor VIII). Although the current transport and infrastructure development did not consider Macedonia's internal needs for transport in agriculture and rural development, tourism and other sectors, but was focused on development of sections of roads in Macedonia that are parts of international corridors (corridor X), Pan-European corridors X and VIII and their sub-corridors indeed serve as development axes as anticipated in the Spatial Plan of the Republic of Macedonia (2004) with an outreach buffer zone of at least 50 km.

Rehabilitation and upgrading of existing main roads and building transport infrastructure is one of the conditions in order to activate the regional sustainable development potential. Combined with international standard logistics services competitiveness advantage can be provided even for those traditional Macedonian industries, e.g. textile and fashion production, which find themselves in global competition.

Railway transport is identified as the most acceptable from the aspect of sustainable development. Although development of the railways has been in stagnation in the past 50 years, the Republic of Macedonia, while reviewing the situation in 1937 when the country had a railway network denser than today (30 km on 1000 km² territory), shall re-consider its regional sustainable development potential.

Republic of Macedonia has put a lot of attention to the development of the telecommunications sector. Over the recent years, a telecommunication network with modern digital technology has been introduced. Ongoing activities for the system's further modernisation are underway with the objection to create necessary conditions for future



conversion of telecommunications, information technology and radio broadcasting. Again, it is the rural society and SMEs in rural regions of Macedonia who gains the greatest advantages of having access to modern telecommunication network and internet.

7. Stable Macro-Economic Environment, Favourable Investment Conditions and SME-based Economy. According to the Global Competitiveness Index (GCI), Macedonia is transiting from stage 1 (competitiveness based on the existence and exploitation of abundant production factors) to stage 2 (competitiveness based on efficiency). To highlight the factors influencing the positive transition of the country, special attention needs to be paid to *Higher Education and Training (see above), Market Efficiency and Technological Readiness.*

The economic performance of the Macedonian economy is expressed through stable GDP growth of around 4%, low inflation rate of 2-3% on average, fiscal discipline confirmed by the international financial institutions and a well-functioning coordination between fiscal and monetary policy.

In 2006, the Macedonian economy grew by 4%, which was both services and industry-driven. Inflation, as measured by the Consumer Price Index (CPI), was low and stable at 3.1%. Central government budget deficit in 2006 was only 0.5% of GDP, with surpluses on foreign accounts and the current account deficit around 1% of GDP. Furthermore, foreign exchange reserves increased to about 5 months of imports. These positive effects from a disciplined fiscal policy were reflected in monetary policy, causing a significant reduction in interest rates, which were 8% at the end of 2005 and 5.5% at the end of 2006.

Macedonia has recently become a tax heaven in Europe. The new Government introduced a flat tax of 10% for corporate and personal income. In 2007, the corporate rate is 12%, reducing to 10% thereafter. The previous corporate tax rate amounted to 15%, while personal income tax rates amounted to 15%, 18% and 24%. In order to stimulate additional foreign and domestic investment, corporate tax on re-invested profit is set at 0%.

The well developed SME sector – 99.7% of all enterprises are SMEs – is the backbone for sustainable development in the Republic of Macedonia as it is in Europe as a whole. Only SMEs can be the driving engine for increasing competitiveness, economic growth and enhancing job creation. The continuous identification of synergies between SMEs of various sectors, looking at both the horizontal and vertical integration and value added chains, is a challenge on a national and regional level as well.

Although the low degree of technological readiness and poor firm-level technology absorption is a major concern in various reports on SMEs competitiveness, already identified champions, e.g. in the production of selective coatings solar panels, prove the sustainable development innovation potential.

8. Process of Harmonization of Legislation in Compliance with EU Regulations. On 17 December 2005, the European Council decided to grant the Republic of Macedonia candidate status for EU membership, which implies harmonisation of its legislation and policies with the EU acquis.

Based on the Analytical Report on the Opinion of the Application of the Republic of Macedonia for EU membership, November 2005, process for harmonization of the legislation



with the EU acquis is regularly monitored, the latest document being the EU Commission Staff Working Document: The Republic of Macedonia November 2007 Progress Report. In some of the sectors and cross-cutting issues relevant for sustainable development (e.g. environment, social policy and employment, SMEs) notable – although uneven – progress is reported.

4. Macedonian Sustainable Development Vision and State Mission: Key Challenges and Key Objectives

The Macedonian Sustainable Development Vision and State Mission address **5+6 Key Challenges and corresponding Key Objectives**. The first five of those key challenges



and key objectives are rather country specific, whereas the latter six additionally make us head towards the EU. By choosing this approach to describe our vision and state mission for the future, we leave the sectoral planning behind and 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.

Good Governance and Better Policy-Making

We 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.

Diversification of Income in Rural Regions⁵ and Sustainable Development Challenges

We 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.

Economic Prosperity and Job Creation

We 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,

⁵ According to the "Law on Agriculture and Rural Development", Official Gazette of the Republic of Macedonia no. 134 from 06.11.2007, Art 2 Paragraph 15, "Rural region is defined as a geographic unit characterized by relatively small number of inhabitants and density of the population and with specific socio-economic characteristics." In terms of their socio-economic functions provided for the region, the NSSD Project Team sees medium- and micro-regional centres as to be an integral part of the Rural Regions (see Spatial Plan and Spatial Planning Strategy of the Republic of Macedonia, 2004, page 15 and 28/29).



innovation and creative entrepreneurship can flourish whilst ensuring social equity and a healthy environment.

Sustainable Human Settlements

We improve the social, economic, and environmental quality of human settlements and the living and working environments of all people.

Cross-Cutting Policies contributing to the Knowledge Society

We 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.

Climate Change and Clean Energy

We limit climate change and its costs and negative effects to society and the environment.

Sustainable Transport

We 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.

Sustainable Consumption and Production

We promote sustainable consumption and production patterns.

Conservation and Management of Natural Resources

We improve management and avoid overexploitation of natural resources, recognising the value of ecosystem services.

Public Health

We promote good public health on equal conditions and improve protection against health threats.

Social Inclusion, Demography and Migration

We 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.

5. How was the strategy developed ?

The NSSD project is building on prior experiences and fulfilling obligations made by the Republic of Macedonia internationally – especially with regard to accession to the EU (see also Chapter 19). The aim was to provide an effective framework through the NSSD offering practical guidelines for the public and private sectors in how to plan and implement sustainable development and encourage an increase in domestic and foreign investments.

The National Strategy for Sustainable Development in the Republic of Macedonia is not just another strategy document for the book shelf. With the financial support of the Government of the Kingdom of Sweden, facilitated through the Swedish International Development



Cooperation Agency (Sida) and co-ordinated by the Ministry of Environment and Physical Planning (MoEPP) it was the **project objective**

To lead a participatory process of developing a National Strategy for Sustainable Development, meeting the requirements of EU-accession for the Republic of Macedonia.

With this approach – which is very much different compared to the preparation of other strategic documents being prepared solely by foreign consultants – the national ownership of the strategy as well as the new way of thinking and working was demonstrated on the spot. It is the inherent nature of a strategy for Sustainable Development to provide an integrative approach of planning, which offers the overall umbrella for all other strategies and policies in various fields, and in fact all walks of life.

The *driving engine* of the NSSD project was the Domestic Specialists with their 7 Sector Working Groups (SWGs) and 4 Cross-cutting Units (CCSUs). Naturally the International Specialists for Research & Survey, Organisation/Economics (Business), Foreign Direct Investment, Sustainable Development, and during a later project phase the Information and Communication supported and facilitated all the eleven working groups on demand, as seen fit, and as requested by the groups (Chart No. 2 overleaf).

Group dynamics within the WGs during Project Implementation Phase II (Strategy Planning, 1 January – 30 November 2007) led to increased interactions among the SWGs and CCSUs. This included merging of pre-defined SWGs, such as SMEs (Small and Medium Enterprises) and Industry to become SMiLEs (Small, Medium and Large Enterprises). In return these intensified interactions created increased awareness for the concept of sustainable development, attracted more stakeholders and stimulated active participation in the elaboration of the National Strategy for Sustainable Development in the Republic of Macedonia.

The best practise examples for this process is the active participation of the Municipality of Ohrid and the Tikves Wine Route Foundation, which both were granted EU INTERREG III founded SD Pilot Projects as early as September 2007.



participants where held in Gevgelija, Dojran and Ohrid.

Until the end of the NSSD project 69 Workshops, among them 54 Working Group sessions with a total number of 209 core and wider group participants for the 11 Working Groups, and numerous meetings were hosted at seminar premises within the project office in Skopje. In order to ensure a high efficiency by working on Problem Trees according to EC Project Cycle Management, to facilitate group dynamics, and to strengthen the group spirit, additional 7 three-days Workshops with a total number of 174 sector working group

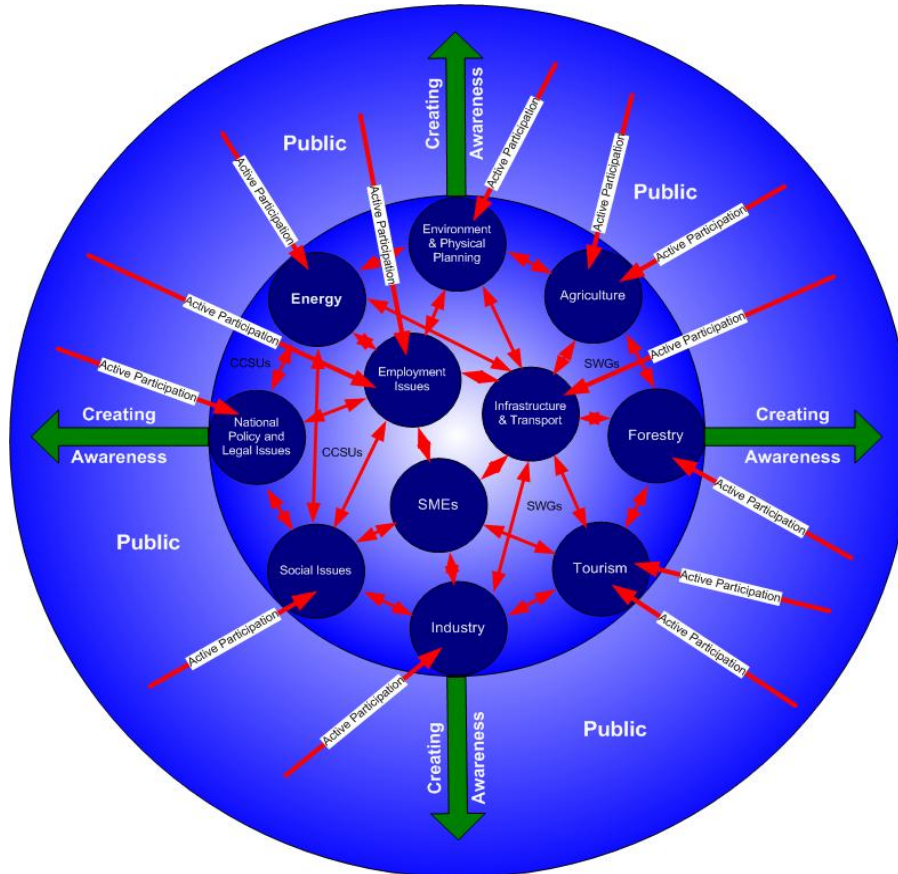
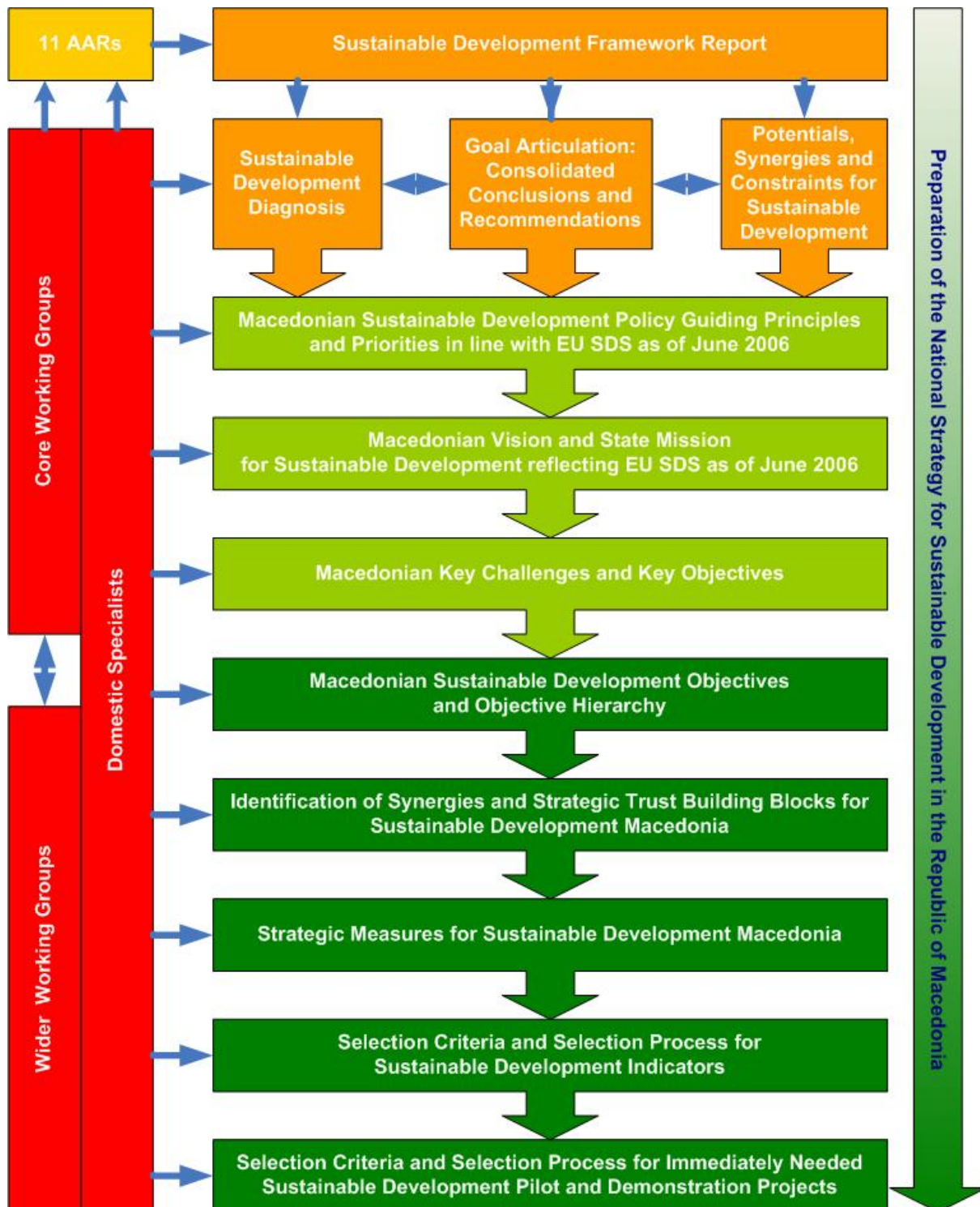


Chart No. 2: The NSSD Project Driving Engine Concept.

Being the foundation stone of the NSSD project the WGs were at the centre of the changes achieved through the project. The changes will hopefully make the many more citizens think about how to contribute to build Sustainable Development Macedonia. The society in large 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.

To achieve all this, increased awareness of sustainable development is a must not just among the natural stakeholders of the project but also among the people of Macedonia. The Domestic Specialists and their working group members have strong networks and have taken on the role of ambassadors creating awareness alongside their other activities.

The ultimate tangible outcome of the NSSD Project is the National Strategy for Sustainable Development (NSSD) presented here to the public in large. To develop the NSSD in the Republic of Macedonia was a stepwise process where all steps depended on each other. The process is visualized in Chart No. 3 overleaf.



* AARs: Assessment and Analysis Reports

Chart No. 3: Structured Strategic Process for providing a viable NSSD.



In terms of reporting the NSSD Project Team prepared 4 major deliverables, which form a pyramid style structure (Chart No. 4). The basic fundament for the whole of strategy development process is **11 Assessment and Analysis Reports (AARs)** as of 31st December 2006. They have been prepared by the National Specialists. **The Sustainable Development Framework Report (SDFR)** as of end-July 2007 marked a milestone before drafting the National Strategy for Sustainable Development. The Government of the Republic of Macedonia submitted the SDFR as part of its pre-accession Economic Programme to the European Commission in Brussels and received a positive response.

The National Strategy is finally presented as the

- ✓ **National Strategy for Sustainable Development, Technical Background Report**, mainly relevant for the public administration and consultants that will implement the strategy and will design projects, and
- ✓ **This National Strategy for Sustainable Development, Public Version**, meant for those who want to be inspired by the Sustainable Development Vision of the country, develop their innovative business and invest in Sustainable Development Macedonia.

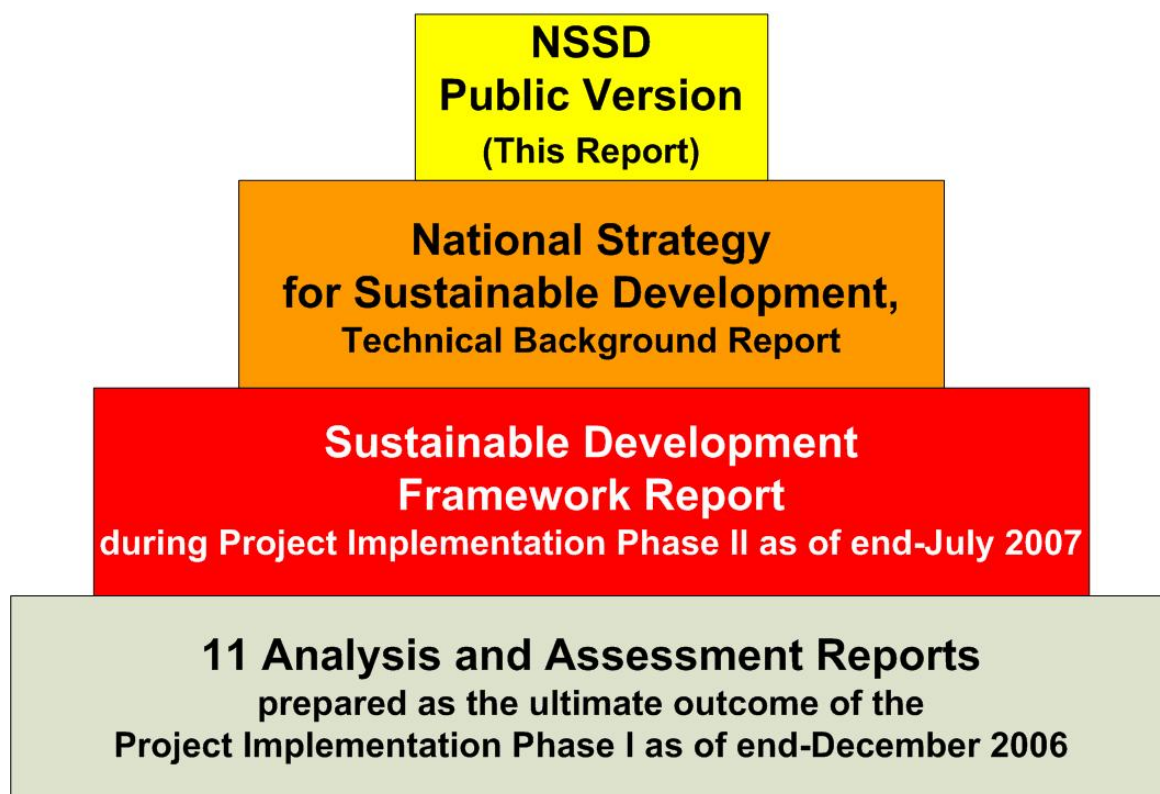


Chart No. 4: Pyramid style structure of reporting in the NSSD Project.

Although we understand scepticism from the international society concerning the development potential of the Republic of Macedonia in relation to the question about short as well as long term political stability as addressed in Chapter 1, the way this NSSD was



prepared in itself gives hope and trust in the future, and in fact provides striking evidence what committed citizens of this country are able to do if they join forces for the benefit of all.

6. What does the strategy contain?

The 1992 United Nations Conference on Environment and Development (UNCED) declared in its famous document Agenda 21 (Chapter 8, paragraph 8.7) that Governments should prepare and adopt a national strategy for sustainable development. However, a "blueprint" approach for national sustainable development strategies is neither possible nor desirable. Every country needs to determine, for itself, how best to approach the preparation and implementation of its national sustainable development strategy depending upon the prevailing political, historical cultural, economical and environmental circumstances.

Until recently, authors of strategies have enjoyed this 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, both major chapters together are regarded as two sides of the same medal which form the heart of the vision for Macedonia's future.

Given above the *Introduction for the National Strategy for Sustainable Development* in the Republic of Macedonia, the strategy in the following outlines:

- 5 COUNTRY SPECIFIC Key Challenges and Key Objectives
- 6 Key Challenges and Key Objectives HEADING US TOWARDS THE EU, in conclusion emphasising
 - Three Strategic Trust Building Blocks of Sustainable Development Macedonia (Chapter 18), and
- TOWARDS THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT IN MACEDONIA with
 - National activities as regards sustainable development and EU accession (Chapter 19)
 - Public participation, Local Agenda 21 and Institutional set-up to support implementation of the National Strategy for Sustainable Development (Chapter 20), and
 - Monitoring of progress, incremental costs and more information about sustainable development (Chapter 21).



**By the way:
It is no coincidence that this public version of the National Strategy for Sustainable Development in the Republic of Macedonia comprises 21 chapters. Guess why ... ?!**



COUNTRY SPECIFIC KEY CHALLENGES AND KEY OBJECTIVES

Key Challenges and Key Objectives described in this chapter address Macedonian country specifics, which by necessity are not emphasised as such in an overall sustainable development EU context, and therefore are not explicitly formulated in the Renewed EU SDS as of June 2006. Mind Mappings in Annex No. 1 visualize the following descriptions. For those among the readers of this strategy who are interested in more details, we refer to NSSD TBR, Chapter 5 and 6, where Results and Objectives are described in a technical manner.

7. 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 pillars' structure of sustainable development (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 governance consisting of 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; 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 sustainable development should ensure achievement of a sustainable economy, which provides prosperity and opportunities for all; accomplishment of a strong, health and just society meeting the diverse needs of 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 people's creativity, energy and diversity is also an objective of the good governance. Sustainable development 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 sustainable development 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 sustainable development is poorly integrated in its governance system. The Constitution of the Republic of Macedonia enshrines the main philosophy of sustainable development and stipulates equal economic and social opportunities for all citizens, as well as a specific protection for the natural resources, flora and fauna. However, 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 sector policies. The relevant national authorities mostly create the economic, social and environmental policies individually, rarely providing for SD cohesion among the policies. Also, 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 sustainable development in the Republic of Macedonia are following:

- To increase 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 sector's policies;
- To accelerate 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 sustainable development* imposes a need for actions towards development of public understanding and awareness. Understanding the concept of sustainable development at all levels of governance and ensuring continuous training and specialisation of relevant staff by policy areas related to SD (economic, social and environmental perspectives) is a precondition for design and implementation of a proper SD policy. Also, 'SD awareness' rising should target all sectors of society, from business entities to non-governmental organizations and citizens in most remote areas, as they all play a part in the process of SD. Individuals are the core element of the sustainable development and only aware, well-informed and trained people could contribute to the achievement of a strong balance between economic growth, social wellbeing 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 development of integral policy approach and institutional set-up that will provide enforcement of the policy. 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 cross cutting issues of sustainable development that occur across different actors, over short and long time frame impose a need of an integral policy approach and adequate institutions. The integral approach to better policy-making is based on better regulation and on the rule that sustainable development is to 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 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. 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 the sustainable development.



Macedonian key challenges for sustainable development 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 subjects 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 also inclusion of SD component in any further elaboration of strategic documents at national level. Policy coherence should be in particular 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, as well as improved social inclusion and health protection for all citizens and 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 the sectors or pillars 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 medium-term 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 or the primary legislation is scheduled with the National Programme for Approximation of the Legislation (NPAA) and follows certain dynamic, but usually 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 (covering the economic, socio-cultural and environmental perspectives) 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.

Also, strengthening of the public administration capacity and cooperation among the relevant institutions is 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 a prerequisite for ensuring implementation of the policies and legislation for SD. 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 component of the good governance for SD, aiming to pursue SD policy, to structure interactions in the field of SD, to provide ground rules and coordinate the activities of all stakeholders, including citizens. In this context, ***institutional set-up for SD*** should be based on clarified responsibilities of 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 eGovernment***. The Republic of Macedonia has started 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 with more and better jobs and greater social cohesion. eGovernment is a signal of increased openness of 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 eGovernment 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 a 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:

1. We will increase public awareness for SD at all levels of governance and society;
2. We will formulate sound SD policy, based on integral SD policy-making approach;
3. We will increase level of policy coherence among the sectors policies through integration of SD dimension into policy-making at all levels;
4. We will promote policy-making practise based on the principles of good governance;
5. We will accelerate the process of harmonisation with the EU acquis, with respect to SD;
6. We will increase public administration capacity for SD;
7. We will strengthen cooperation among relevant institutions for SD;
8. We will ensure implementation of the policies and legislation for SD;
9. We will provide efficient public services via strong eGovernment system.



8. Diversification of Income in Rural Regions and Sustainable Development Challenges

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 (ITC) today make it possible to produce and offer services in a beautiful natural environment rich in geo- and bio-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 'globalize' world. Thus, globalization provides us the best practise examples for regional and local prosperity.

Whatever the public perception of the majority of nowadays society might be, the "added values" for Sustainable Development Macedonian until 2030 will come from an unexpected direction: The Rural Regions of Macedonia. In this respect success stories from the rural regions shall become a "refreshment focus" of Macedonian media and newspapers in the mission of positively influence the Macedonian public opinion.



Considering the current situation, the main challenges to install *Diversification of Income in Rural Regions* to support sustainable development in the Republic of Macedonia as a whole follow *Good Governance and Better Policy-Making* as outlined in Chapter 7 (see above) and specify as follows:

- To implement good organization in the rural regions;
- To ensure proper agriculture and rural development policy;
- To implement strong institutional capacity;
- To improve human resources in the line with Sustainable Development;
- To encourage business environment for sustainable development;
- To ensure implementation of appropriate agriculture practices.

At the end of the day, and having on-hand a variety of income sources, **our citizen in the rural regions shall be less vulnerable to threats and fluctuations in a globalized economy while at the same time benefit from the opportunities of a globalized economy.**

Addressing the Key Challenge of *Diversification of Income in Rural Regions* - as a point of departure - **requires a high level of organisation and planning, and the later also includes spatial planning.** In fact, and first of all, we need to re-organize our brains as well as our perception of what traditionally is called 'agricultural sector'. *Diversification of Income in Rural Regions* is a well-balance mixture of various economic activities mainly performed by Small and Medium Enterprises (SMEs), which include production and processing of food, non-food, wood and non-wood, energy, tourism services and any kind of (innovative) products and services that can be supportive to added value chains in the region and beyond.

The times have changed, and so we need to change, when now preparing ourselves to join the EU. Our potential for *Diversification of Income in Rural Regions* is highly attractive (Chapter 3) as long as we consequently follow the paths of Sustainable Development, which at all points asks for economic, social/cultural and environmental benefits in parallel. In this respect, we can be glad that Macedonia during the passed decades 'missed' some 'unsustainable' trends that occurred in other European countries. It is up to us, the Government, the Municipalities, SMEs and individual citizens, to activate the potential which for sure is 'sleeping' in our rural regions. However, and facilitated by Local Agenda 21 processes, each and every region and Municipality in Macedonia needs to identify its very specific set of income diversification possibilities.

During the past 17 years production of agricultural goods in the rural regions of Macedonia was the source of various problems and subsequent never-ending discussions. Many of these discussions addressed a not existing or not-well organised internal market for primary agricultural products. Now, with the perspective of EU accession many farmers assume that all their problems will be solved and expectations are high that 'Brussels' will provide enough subsidies. Well, we shouldn't be surprised if in both cases our expectations will be wrong !

We need to understand: The 'EU Subsidy-Agriculture-Policy' very soon will come to an end, potentially having access to EU funding is a nice perspective but not automatically brings any Euro in the pocket, and a high level of organisation is not the result of EU funding but its pre-requisite. In short: **We first need to do our homework** and this includes the introduction of **EU Common Agricultural Policy (CAP)** and **Good Agricultural**



Practices (GAP), the later according to the Food and Agriculture Organization of the United Nations (UN FAO) take into account economical, social and environmental sustainability !

Good Agricultural Practices are a collection of principles to apply for on-farm production and post-production processes, resulting in safe and healthy food and non-food agricultural products. We clearly understand that today's reality in Macedonia is that already on-farm production is not or only poorly linked with post-production processing. We need to close this missing link. We expect that offering additional income sources to farmers – and one important path leads us to Energy Farming (see below and Chapter 12) – will provide enough initial income security to make some 'Sustainable Development Champions' more open and dedicated to invest in other types of businesses which are beyond purely on-farm production. This is also to open the eyes for other Sustainable Development activities in the Municipality and in the region alike, which for example refers to rural tourism and collection and processing of non-food agricultural products as well as non-wood products from the forest.

It is true: All this can be done by individually operating farmers. However, together we are stronger and experiences from around Europe provide striking evidence that a strong self-organisation of Macedonian farmers (e.g. Machinery Rings) is most likely to generate in a set of positive effects and motivates further essential actions towards *Diversification of Income in Rural Regions*. Various stakeholders will take actions to motivate self-organisation of farmers, and this is also to strengthen a self-assessment of the own capacities.

In terms of self-organization, especially the 192,367 (first census results from July 2007) so-called 'backyard farmers', which in the latest agricultural census are recorded as "Individual Agricultural Holdings", are a matter of political concern. It might be that backyard farming is a kind of relaxation from another job or hobby. Why not ! Other backyard farmers might not want to become proactive members of a Macedonian Agriculture Associations or Cooperative. There might be very personal reasons for this decision ! However, it is not too much effort to participate in Local Agenda 21 groups in order to share information and best practises and to be able to request assistance from various authorities in understanding the concept of sustainable development and the benefits of diversification of income in rural areas. *Access to information is access to sustainable development !*

On the other hand and interesting enough, this sentence also refers to any kind of professional assistance to be provided by the Government and public institutions alike for the benefit of farmers. **Therefore, the most basic and most urgent objective to be reached in the field of organization issues in rural regions is the establishment of an effective and GIS (Geographic Information System) based Farm Register System.** The Macedonian Farm Register System shall offer accurate, realistic, comprehensive, spatially allocated and real-time data describing the actual situation in our rural regions for future decision making and support. Only if this information is available, Government institutions in close liaison with local authorities can assist to facilitate a dialogue among stakeholders, provide targeted assistance to absorb supportive funding and improve policy making.

Appropriate and target-orientated agriculture and rural development policy is indeed one facet of *Good Governance and Better Policy-Making* in general (Chapter 7). The Government will ensure that its rural development policy is consistent aiming towards sustainable development and diversification of income. This requires a coordinated approach and cooperation within and between traditional sectors, and cross-cutting of competences and expertises of various Ministries and Government as well as Non-Governmental Organisations (NGOs). It was interesting to see



during the operation of the NSSD Working Groups that is it possible to organize target-orientated discussions leaving behind Ministry boundaries, which from public opinion appear to be carved in marble and that precise objectives can be formulated rather than entering in chaos discussions on publicity attractive actions.

It is to learn from best practise examples around Europe of how to implement strategies, policies and laws "on the ground". That is way Sustainable Developments promotes decentralisation and delegation of responsibilities towards the Regions and Municipalities. Naturally, citizens on the ground know their "home environment" and the local specifics much better than any central authority, and it is good enough to provide a clearly defined framework.

We urgently need and will build strong institutional capacity for integrated and sustainable rural development. We need the most committed and most professional experts on-hand ! Various institutions within a newly developed institutional setup (see Chapter 20 for details) will generate the desperately needed additional intellectual energy and backup to support all efforts in the process of motivating and facilitating *Diversification of Income in Rural Regions*. Institutional capacity needs to be equally strong on the central and local level, where the "real life" of rural regional development is indeed happening.

Clear definition of competences and allocation of responsibilities among various Ministries will strongly support the process of integrated and sustainable rural development. Competences and responsibilities will be coordinated with the local level. Citizens in the rural regions need to have very simple and free access to information provided by *Rural Development Information Centres*, which are best allocated in the Municipalities. Actions will be supported, monitored and evaluated in a coordinated manner by the various stakeholders.

Performance-based and appropriate payment of the administrative staff in charge of integrated and sustainable rural development will ensure better services and prevent abuse of the administrative system. We are well aware of the possible threat that the envisaged process can be easily jeopardized if financial resources are not properly used or managed. Moreover, we can not afford any more that an 'informal communication network' counts more than the actual capacity and performance. We expect that highly motivated administrative staff naturally works on their own capacity-building, and we will support these efforts, because it will strengthen the institutional capacity in large.

To *immediately* build strong institutional capacity has tremendous practical implications for the future of our country. As an EU candidate country the Republic of Macedonia starting from 2008 potentially has access to **Instrument for Pre-Accession Assistance (IPA)** funding. In particular the following *three components* are reserved for candidate countries only,

- the *'regional development' component*, aimed at supporting the countries' preparations for the implementation of the Community's cohesion policy, and in particular for the European Regional Development Fund and the Cohesion Fund,
- the *'human resources development' component*, which concerns preparation for cohesion policy and the European Social Fund, and
- the *'rural development' component*, which concerns preparation for the common agricultural policy and related policies and for the European Agricultural Fund for Rural Development (EAFRD),

and are therefore of vital importance to support our objectives as outlined in this NSSD (see also Chapter 21). **We can not afford not to absorb available EU funding !**



We will improve our human resources in line with the concept of sustainable development. As highlighted in many parts of this NSSD, Sustainable Development is a *new way of thinking and working*. In the 22 years ahead it is most essential to spread the idea of an integrated and sustainable rural development supportive to a diversification of income. We need new and creative ideas which by necessity can only be provided by committed and well trained citizens.

The sustainable development challenges will bring new perspectives in the rural regions only if sufficient motivation for change is in place. Motivation for change and improvements of the situation in the rural regions is fundamental for any step towards Sustainable Development. However, motivation for changes towards a better quality of life in the rural regions will not fall from the sky, but needs to be generated by **target-orientated public awareness programmes and specific programmes for education and training**.

First of all we need to deal with the fact that Macedonian rural regions are historically neglected and the public image is – whether we like it or not – that the rural citizens are ‘the poor ones’. It goes without saying that this image can be changed only step by step. However, what we can start to do is to send the first signals to the public in large that Sustainable Development in the future indeed WILL change the rural regions. We need a positive promotion of the universal values of our rural regions, and this addresses the QUALITY OF LIFE !

In order to manage this complex changes for the benefit of the rural regions, we will pay special attention to kids and young generations. Experiences from creating awareness and public participation activities during the NSSD project already provide striking evidence that the young generations obviously can understand the new benefits and advantages deriving from a *Diversification of Income in Rural Regions* much easier than those who fully experienced the disappointments of the past transitional period. This is why schools shall be the promoters and nucleuses of Sustainable Development ideas; in particular those schools that already today show creative and innovative capacity. Therefore, we will enforce larger autonomy and decision-making power of schools.

To facilitate the needed “mental jump” we will increase investments in education. This is to strengthen Municipalities’ administrative capacity and ability of funding schools’ maintenance and technical infrastructure, as well as to support education projects committed to SD principles. Strong start-up support shall be provided by IPA funds for projects in primary and secondary education.

Transfer of advanced knowledge related to *Diversification of Income in Rural Regions and Sustainable Development Challenges* will in particular target students from the rural regions of Macedonia. Backed-up with practical experience in rural life it is anticipated that it will be students from the rural regions that can most likely be ‘infected by SD ideas’, and – provided that practical aspects of sustainable development are fully integrated in new curricula and implemented along with new (non-frontal) teaching methods during the education process – are natural multipliers and change agents at the same time. By following this chain of education and training, SD shall become understandable, visible and touchable for ordinary people from the rural regions. To safeguard this process and based on the information aggregated in Farm Register System (see above), we will offer and provide target-orientated vocational training.

All individual objectives supportive to improve human resources in the line with Sustainable Development aim towards the ultimate tangible goal to stabilize the age and gender structure in



the rural areas of Macedonia, and to keep our well-educated young generations and to utilize their intellectual energy where it is needed.

The vision to unfold the intellectual energy of Macedonia in an innovative and highly creative manner motivated the NSSD Project Team to propose the pilot project of founding a **'Sustainable Development Campus University (SDCU)' in a rural region of Macedonia** (Annex 2, Pilot Project IV 3). The SDCU is an integral part of the *Institutional Set-up to Support the Implementation of Sustainable Development in the Republic of Macedonia* and shall be a place newly constructed from scratch, where the vision of sustainable development and new ways of thinking, inventing and living is realised in practical daily life. New methods of holistic teaching and studying are implemented following Mahatma Gandhi's motto of 'Teaching by example'. Innovations are not only motivated in theory, but testing, implementation and maintenance is daily experience. The SDCU will create entrepreneurial awareness, spirit and culture, and will considerably sharpen the profile of Macedonia's tertiary education as well as its image in Europe. SDCU students and teachers are true SUSTAINS[®] and Sustainable Development Managers alike, with high potential for the national and international labour market of the 21st century.

We will encourage and enforce a favourable business environment for sustainable development in the rural regions of the Republic of Macedonia. Mind mappings in Annex 1 visualize the various aspects of *Diversification of Income in Rural Regions and Sustainable Development Challenges*, and it shall become evident that there are no boundaries between traditionally defined sectors any more.

Farmers in Sustainable Development Macedonia are not civil servants on the payroll of the Government, but entrepreneurs, who first of all are responsible for their own business. On the other hand, we are well-aware of the fact that farmers following Good Agriculture Practise (GAP, see below) considerably contribute to natural resources management for the benefit of the society in large. It is no secret that the agriculture products that we as consumers enjoy to buy on our green markets are too cheap and can hardly meet the production costs.

Legislation shall avoid any obstacles to combine synergisms of on-farm production and post-production processes, and shall rather encourage SMiLEs to invest in added-values. Efficient institutional capacity as well as improved human resources in future shall facilitate SME-based off-farm activities as a first step of diversification of income in rural regions. Well developed business structure and information flow will significantly enforce diversified and sustainable operating SMEs.

Financial support is crucial for the development of any on-farm and off-farm business in the rural areas. We will provide sufficient working capital for SMEs by introducing proper financial mechanisms, attractive bank credit programs and guarantee funds in favour of Sustainable Development. Strong influx of direct domestic and foreign investments will be organised by means of coordinated and well managed project and programs.

High technology utilization within the off-farm business activities will contribute to the creation of an efficient and environmental friendly SME sector in rural areas. Recycling of solid waste from the agricultural production will contribute to the foundation of a new type of SMiLEs that will utilize raw materials and natural resources in a sustainable manner. Environmental friendly off-farm SMiLEs in the rural regions can significantly contribute to proper waste management, production of energy from Renewable Energy Sources (RES) (see below) and production of equipment and technologies/processes that will control the pollution of the environment. In addition, medium to



large sized and rather specialised agricultural-based companies can become 'Sustainable Development Champions' on a regional and national level and shall be able to push such a process into a very positive cycle of cross-sector cooperation among different SMEs from various rural regions across the Republic of Macedonia. Today, milk and wine production have started their way in this direction.

To create additional income sources, especially during non-agro seasons, is nothing new for traditional rural communities. However, what is new is to recognize the value of products such as handicraft, hand stitch work, handmade carpets and traditional pottery. Grandmother's knowledge of utilizing various roots, herbs and fruits is a precious pool of natural pharmacy products. Promotion and advertisement of such products and services will increase the awareness of potential customers and investors alike. Again, we need to focus on finding the synergism of good traditional knowledge and new technologies and it is the solidarity between generations that can facilitate this approach.

We usually understand that the only role of forests is to provide timber and fuel wood? Well, we are deeply wrong ! We need to establish a new partnership between silviculture and rural communities supportive to sustainable rural development.

Forests offer a variety of products that are in favour to considerably contribute to a *Diversification of Income in Rural Macedonia*, such as: game tourism, mountain tourism, fishing, gathering and processing of non-wood products (medicinal plants, mushrooms, forest fruits etc.). Many people from various rural regions can find their additional source of income by participating in those activities provided by an organized forestry. Even SMEs can find their place as partners of forestry. There are already very good examples for such a partnership organization in "Malesevo"-Berovo: This forestry unit has built up capacities for storing of forests seeds, medical plants and lichens. They operate a small hotel and a factory for extraction of ethereal oils. There is also possibility for production of souvenirs or toys made from wood. A number of citizens from this region, mostly from the rural areas, have found there existence working in those facilities permanently or temporary.

With the introduction of 21st century technologies and methodology, we are able to create favourable conditions for efficient and profitable businesses in partnership with the forestry sector. These technologies and methodology shall ensure an accurate determination of the quantities of non-wood forestry products and its sustainable utilization in order to avoid overexploitation with negative effects to the environment. We will invest in these technologies and methodology not only for management purposes alone, but also in order to properly utilize our available labour force and to increase employment. Citizens in the rural regions shall have the immediate economic benefit from their surrounding environment.

We are well aware of the fact that during the next couple of years we need to invest more in basic infrastructure of our rural regions in order to transform them in attractive zones for various investments. We will facilitate the access to and the transport of products to markets from our rural regions by improving local roads. Where it is feasible transport of rural products shall use an extended railway system (Chapter 13). Until today there are tremendous problems with water supply in our villages. For example Stenje, situated on the shores of wild-beautiful Lake Prespa could become '*SuStenje*' with highly attractive rural tourism, as soon as there is a reliable water supply secured. This does not necessarily imply expensive technical solutions for water supply that are not economical feasible. The same goes for waste water treatment, where eco-remediation solutions are most appropriate (Chapter 15).



Availability of water is also a concern because of its utilization for agriculture production. Since water already today is the most precious resource on this planet Earth and while facing even more shortages due to climatic change, local communities need to decide of how to manage their water resources. It is not a contribution to a better quality of life if citizens and foreign tourists alike need decide *when* to have a shower during the day ! Irrigation schemes need to be planned, maintained and managed with major focus to avoid spoiling of water and minimizing losses during transport, thus decreasing the costs of the production of agricultural products.

Each and every citizen needs to feel responsible for the quality of the water in our rivers and other (open) water bodies. High quality irrigation water is a precondition for high quality agricultural products ! Fish can only be a market product meeting high EU-standards if good water quality in our rivers and lakes is secured by professional environmental monitoring (Chapter 10).

An additional and highly important component to encourage business environment for sustainable development is our objective to motivate Energy Farming (see Mind Mapping in Annex 1). Referring to the country's sustainable development potentials (Chapter 3), 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** (Chapter 12). In fact, Energy Farming offers various possible income sources, mainly derived from solar energy, biomass (wood, biogas, biofuels, agricultural and forest residues) and wind energy. Energy Farming during the past couple of years became a major topic in all EU countries and many farmers already gain benefits in this new type of business environment. In Macedonia Energy Farming can considerably contribute to the *Diversification of Income in Rural Macedonia*. Provided that the legal framework strongly supports individual farmers and SMEs to utilize renewable energy sources (RES) (see Chapter 12), that high level EU standard are met, and that financial instruments are in place it shall be possible to spread Energy Farming in an adequate time period around the country. This shall be facilitated by an awareness program, including information on best practises, advisory packages and pilot projects, as well as offering study tours to European countries for best practise exchange.

There is an urgent need to introduce Good Agriculture Practices (GAP) as a strong foundation of sustainable development all over Macedonia. Declarations are not enough but effective implementation of GAP procedures is requested. We are well aware of the fact that this is a long process, but we need to start NOW ! **By heading towards the EU we need to shift our focus from quantity to quality.**

The idea of Sustainable Development naturally leads towards GAP procedures and the promotion of healthy food production. The conversion of traditional farming to Organic Farming always needs a transitional period, which will be even longer if in the past we did not use fertilizers and pesticides in an appropriate and scientifically based manner. Our soils have a long memory !

In this respect sustainable utilization of natural recourses and Good Agriculture Practise is strongly connected with the health situation in Rural Macedonia. The National Health System will strongly support all efforts in providing a healthy environment in our rural regions, and this includes offering adequate health care. At the end of the day we need to join all our forces and being without any doubt in promoting high quality Macedonian food products for all consumers in our country and beyond. On a world-wide scale there is an increasing demand of organic farming for baby food production. However, world-leading baby food producers also have the world's highest quality standards. Therefore, and if we want to participate in this type of highly specialized production, we



indeed need to fulfil these high standards and any case of abuse would jeopardize our market participation for a long time. In this direction and taking into consideration the consequences, Government needs to decide on whether or not to allow the introduction of Gen Manipulated Organism (GMO) on our farms.

Our objective is to establish an optimum number of brands for products from Macedonian rural regions in order to be able to profitably place them on domestic and foreign markets. However, we need to keep in mind that 'branding' is a kind of sharp sword with two sides. Branding requires ensuring GAP management and quality control all along the line of the life-cycle of the product. This is why branded products achieve a higher market price than non-branded products. On the other hand, any abuse of quality requirements will destroy the brand from one day to the other, and in the case of Macedonia being a country small in size of territory, this will for sure have co-lateral damage to any other brand. Thus, we need to be sure that brands are carefully introduced and backed up by an ethical understanding of those who with their name guarantee for the quality of the product.

Branded rural products from Macedonia can be offered 'on the spot' to our international guests and it is most likely that through their very personal appreciation and by using rather informal communication channels they can conquer niches in international markets. In Europe there is already a strong competition of international recognized brands. Our 'competitive advantage' is that until today Macedonian brands are totally unknown, and that highly demanding European consumers always seek for something new. Through tourism we able to introduce a variety of Macedonian (regional) brands in a kind of 'orchestra approach' to European markets. This is way we understand Macedonian tourism as a future multiplier for *Diversification of Income in Rural Macedonia* and brand of its own.

We promote Macedonia as a country of Individual-Orientated and High Quality Rural Tourism (Annex 1). This refers to the preciousness of "originality of life and fairly undisturbed nature", but at the same time addresses our future service and quality understanding. Macedonian Sustainable Development Potentials (Chapter 3) do not qualify our country for mass tourism ! Unsustainable trends in Lake Ohrid tourism with high impacts and consequent overexploitation of natural resources during a rather short time of the year need to be reversed in favour of a diversification of tourism products responding to the different season aspects of the year. We very much appreciate Local Agenda 21 initiatives in the Municipality of Ohrid which substantially contribute to sustainable regional development.

Many of our rural areas have good potentials to improve their future development and "to become alive again". Beyond agriculture being the primary sector for contributing to such achievement, tourism is identified as a very important part of the mosaic of sustainable rural development. As a 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 attractive for varies innovations contributing to a *Diversification of Income*, which *Individual-Oriented and High Quality Rural Tourism* for sure can provide.

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 the developing of wine route/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.

Macedonia is quite rich in geothermal water resources suitable for various kinds of utilization (Chapter 3). However, present spas in Macedonia (Katlanovo, Debar, Gevgelija, Strumica, Kumanovo, Kocani and Stip) only in terms of their actual location can be the basis for the development of spa tourism beyond the original concept which has seen them as centres for medical treatment and rehabilitation. In the future we need to further on develop our spas as attractive small worlds of well-being with specific images, which for example 'The Rural Bath' is able to communicate to customers ! Well-being starts with



attractive architecture and design, and ends with individual-orientated and high quality services. Relaxation and wellness might be the starting point to utilize our geothermal water resources and create new jobs, both in terms of production and services. Already today we also need to be prepared to include selfness programmes for highly demanding foreign tourists. In fact, our rich natural and cultural heritage is a perfect fundament for this worldwide mega trend in tourism. In some places wellness and selfness tourism can be easily complemented with congress facilities. On the other hand, regions which are already strong in congress tourism shall urgently investigate and – if feasible – shall utilize their geothermal potential. In other European regions wellness and selfness tourism has already proved to be the driving engine of integrated and sustainable rural development with a variety of services and added-value cycles. What are we waiting for to utilize our potential ? (see also Annex 1).

Having in mind the existing tradition, folklore and hospitality of Macedonian people, the Republic of Macedonia is a country that can be proud of 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 as well as to economic and socio-cultural aspects, 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 and rural sustainable development.

Having said all this and thus having outlined the major objectives related to a *Diversification of Income in Rural Regions and Sustainable Development Challenges*, Sustainable Development Macedonia by 2030 will see encouraged, progressive and innovative rural regions, which indeed utilize their human and natural resources potential. In parallel employment will increase and today's un-explored or un-used



human resources will contribute to sustainable development of the entire country. There is indeed a strong – although not exclusive – focus on the present day and future young generation. The strategic goal is to keep well-educated young citizens in the rural regions or to make them return after their studies. It is not only due to the new prosperity that rural regions will become attractive in the near future. It is also the experience of mental pressure in the densely populated and stressful urban settlements that will make urban citizens move to the rural regions, which naturally facilitate to find balance in all aspects from our modern style of living.

Strategic Measures

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

1. We will intensify our focus on alternative energy resources, ecotourism development and healthy food production, and utilize the environmental strengths and opportunities in RM to promote the regional cooperation and integrated regional management.
2. We will create conditions for efficient and profitable environment for the forestry sector under the sustainable development principles.
3. We will 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...
4. We will apply appropriate methodologies for determination of capacities for non-woods forestry products under the secure preconditions for their planned use without negative effects of the environments.
5. We will 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".
6. We will 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.
7. We will improve the level of organisation and planning of the production in the Macedonian agro-food and rural development sector. Self strong organisation of Macedonian farmers will bring multiple positive outcomes and further essential actions from DIRRSDC (Diversification of Income in Rural Regions and Sustainable Development Challenges) point of view. The diversification of the income in the rural regions will be more promising idea if our farmers are well organised and with clear understanding of the self capacities.
8. We will perform the proper agriculture and rural development policy which will lead to better environment in the overall regions where the diversification of the income in rural areas is possible.
9. We will extend the execution of the legal issues of the national agricultural policy urgently on the local level, first like a pilot project then like long-term policy adapted to regional characteristics and the micro specifics.
10. We will establish an effective farm register system and determine various target groups of farmers necessary for proper and efficient execution of CAP of Macedonia.
11. 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. The clear competences among various Ministries will strongly support the process of DIRRSDC. Institutional capacity will be equally strong on the micro level where the real life related with rural regional development is happening.
12. We will improve our human resources in the line with sustainable development. This is essential for extending of the new creative ideas related with the process of DIRRSDC.
13. We will support and promote the schools with more creative and innovative capacity in the rural areas. They will be the promoters of SD ideas and nucleus for expanding the idea for DIRRSDC.



For the proper DIRRSDC we will increase the funding and administrative capacity of municipalities, allocate resources for schools maintenance and we will support capital education projects adopted on SD principles. We will increase investments in education for the proper execution of DIRRSDC in the future generations.

14. We will target 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.
15. We will upgrade our agro-food sector like 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.
16. We will take care about the age and gender structure in rural areas and they will become more proper with special programs of DIRRSDC we will organise on the micro level.
17. We will support the optimal number of back yard production and part time farmers identified via FR system in the rural regions. The special multi-sector activities, the special pilot projects with strong elements of synergies between sectors will be adapted to this target group.
18. We will work on the attraction of the agricultural sector. The possibilities for employment will increased within the period of time especially in the rural regions. The comparative advantages of rural regions via different multi-sector program for DIRRSDC need to insure the prosperity of future generations and new values according tree pillars of sustainable development.
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23. We will work on building the proper access to agricultural aria 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.
24. We will work on the attraction of the agricultural sector. The possibilities for employment will increased within the period of time especially in the rural regions. The comparative advantages of rural regions via different multi-sector program for DIRRSDC need to insure the prosperity of future generations and new values according tree pillars of sustainable development.
25. We will work on building the proper access to agricultural aria 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.
26. We will 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.
27. We will 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 arias.
28. We will 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.
29. We will improve reputation of the agro-food sector and stop the historical neglect of the rural and agricultural activates and areas. We will starts with very positive promotion of the universal



values of our agro-food sector in "every layer" of our society. The reputation of our sector will grow as soon as new benefits and advantages of DIRRSDC process become understandable and visible for ordinary people from the rural regions.

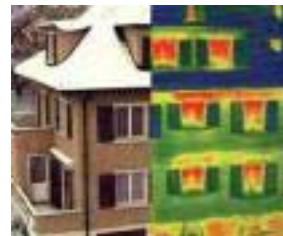
30. We will support and promote the large and medium specialised agricultural companies who will become "the champions of sustainable development in the field of agriculture" on the national and regional level. They will push such process into a very positive cycle of cross-sector cooperation among different SMEs from different rural regions across the Republic of Macedonia.
31. We will create and promote optimal number of adequate brands with much considerable added value for sales on the domestic and foreign markets, on the classical way or via other sectors offers (with tourism we will export domestic products "on the spot" to our international guests). 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.
32. We will enforce favourable 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.
33. We will develop well 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.
34. We will financially 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. 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.
35. We will urgently implement Good agriculture practices (GAP) around the country via active role of various SD champions from the A&RD sector. This ultimate process is important because of this long-term goal for the whole country and need to be the foundation of strong idea of the DIRRSDC. All other perspectives of A&RD could collapse if we do not start with the implementation of appropriate agricultural practices (GAP).
36. We will support 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. The "Energy Farming" like new stile of living and production in the rural area will directly lead into more significant DIRRSDC.
37. We will increase the national level of awareness about the idea of "Energy Farming" and spread around the country. Information's 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 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.
38. We will generate the process of diversification of the income in the rural areas on the principles of sustainable development and strongly push our economy, social and environmental quality of life for all citizens of the Republic of Macedonia.

We highly encourage rural/urban entrepreneurs and domestic as well as international rural/urban investors to join forces in order to meet the Sustainable Development Challenges in our Rural Regions. The time is ripe !



9. 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"⁶.



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 endeavours: 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

⁶ The conclusions of Norwegian Policy Makers in "Competence Report" - 2003, pg.24.



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 Chief Executive Officers (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, 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 is 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 are 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.

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:

1. We will promote efficient allocation of resources and direct public expenditure towards growth-enhancing categories, adapt tax structures to strengthen growth potential;
2. We will secure economic stability to raise employment and growth potential through adequate monetary and fiscal policies;
3. We will 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;
4. We will 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:

5. We will 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;
6. We will create more attractive business environment through a systematic and rigorous assessment of the economic, social and environmental impacts;
7. We will 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;
8. We will develop adequate transport, energy and ICT infrastructures. In addition 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;
9. We will 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 transnational and intersectoral mobility of researchers;



10. We will 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;
11. We will 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;
12. We 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.

10. Sustainable Human Settlements

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 labour 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.

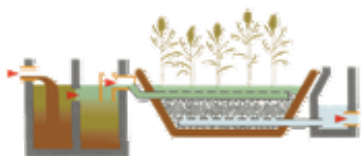
Human settlements management must be strengthened, so as to be able to steer physical development in a way which reduces the demand for transport and prevent damage to



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 centres 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 behaviour.

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. In fact, solid waste management is a very sensitive prerequisite for the



promotion of environmentally sound and culturally sensitive tourism programmes as a strategy for sustainable development of urban and rural settlements and it is a way of decentralizing urban development and reducing discrepancies among regions. Government and local authorities will improve water and waste management in tourist destinations. Increased awareness and appropriate consideration of potential tourist products by competent authorities in the future will contribute to sustainable development of 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:

1. We will adopt and applying urban management guidelines in the areas of land management, urban environmental management, infrastructure management and municipal finance and administration.
2. We will 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.
3. We will strengthen human settlements management.
4. We will develop affordable, reliable and efficient urban public transport.
5. We will promote and implement projects for increasing the use of bio transport (bicycles, role-skates).
6. We will establish integrated water management system.
7. We will promote policies aimed at recovering the actual cost of infrastructure services.
8. We will reduce water losses throw water supply distribution systems.
9. We will build new sewage systems in rural areas.
10. We will upgrade and expand existing sewage collection system.
11. We will construct new waste water treatment plants for all agglomerations with more then 2000 e.c.
12. We will close landfills those are not in compliance with EU requirements.
13. We will establish modern regional municipal waste management system.
14. We will promote the formulation of environmentally sound and culturally sensitive tourism programmes as a strategy for sustainable development of urban and rural settlements.



11. 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 transformation towards sustainable development society. 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 situation of the economic hardship 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 ethnics, moral and social behaviour, 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;
- To establish a system for professional development of teachers, trainers, researchers and all workers in the education and training sector;
- To enable access to advanced information technology and telecommunications infrastructure at an affordable price for all citizens and education, training and research institutions and
- To 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 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 into a coherent framework for the knowledge society is challenging, but inevitable process, as the enabling role of education and training is critical to both - the public and private sectors. 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 instructors 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 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 people engaged in this sector 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.*** This includes development and management of a new philosophy of education and training, based above all on the recognition of substantial (output-acquired) knowledge, rather than on inputs and/or factual memory, as well as sterile acknowledgment of degrees and certificates. In this respect, professional development of teachers, trainers, researchers and other workers 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 the policy-makers in the Republic of Macedonia to create education and training sector capable 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 information technology and telecommunications infrastructure in the country, available to all citizens under favourable terms. Better access to the current information technology and telecommunication infrastructure in the Republic of Macedonia has been partially enabled within the eGovernment project and provision of privileged internet access points for socially disadvantaged groups. 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 eLearning as key mode of education, which brings some additional benefits, but requires more sophisticated systems and professional personnel. Use of eLearning 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 information technology and telecommunications infrastructure at an affordable price for all citizens and education, training and research institutions.***

The policy on education and training should enhance cooperation between industry and education, as the emergence of the knowledge society implies an increasing demand for a well-educated and skilled workforce across the whole economy. 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 as key factors in global competitiveness. 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 curricula 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 would increase, and hence the persistence of the job match will increase, to the extent the job match is of high quality. On the other hand, firms should plan and announce their demand for certain skills and knowledge and be involved actively in formulation of the education policy, which will give a clearer signal to students on skills that are (will be by the time of graduation) in demand.

Another core policy area contributing to the knowledge society is research and development. The importance of research and development has been recognized as an EU priority, enshrined in the heart of the Lisbon Strategy to boost employment and growth in Europe. Research, education and innovation form the "knowledge triangle", which it is hoped will allow EU to maintain its economic dynamism and social model. 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 research and development 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 knowledge society requires stronger relationship between research, policy and practice, and its social context. Research and education are parts of a larger system in which researchers, businesses, civil society and policymakers exchange knowledge to bring about social and economic improvements. Therefore, 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.



Research and development determine competitiveness in the knowledge society at great extent, as information economy is based on knowledge-based industries. Modernization and restructuring of the industrial branches is related to strengthening of the technological base of the sectors, which is currently on a very low level in the Republic of Macedonia. 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 sustainable development 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". In the knowledge society terminology, only nations acquiring and effectively using knowledge could be winners in the modern society.

Strategic Measures

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

1. We will build coherent policy framework that will encompass all policy aspects relevant for the knowledge society;
2. We will create policy on education and training aiming towards creating values and knowledge that correspond to the demands of the changing global society in all sectors;
3. We will create adequate regulatory framework on education and training for information economy and knowledge society;
4. We will 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;
5. We will 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;
6. We will ensure education and training sector 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;
7. We will establish educational clusters of excellence in the selected areas for development;
8. We will improve the link between education system and labour market to improve job matching both in terms of the speed of the matching, its quality and persistence;



9. We will 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;
10. We will formulate and implement coherent industrial policy and regulation focused on technological advancement, higher growth and prosperity for the country.



Key Challenges and Key Objectives HEADING US TOWARDS THE EU

Key Challenges and Key Objectives described in this chapter are important for Macedonia as well as in an overall EU sustainable development context, and are therefore explicitly formulated in the Renewed EU SDS as of June 2006. Mind Mappings in Annex No. 1 visualize the following descriptions. For those among the readers of this strategy who are interested in more details, we again refer to NSSD TBR, Chapter 5 and 6.

12. 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 sustainable development.

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 - **A**ffordability), to ensure reliable energy supply for all our citizens (social - **A**ccessibility) and to reduce energy-related environmental pollution, both global and local (environmental - **A**ceptability). To achieve these objectives, the Macedonian government must foster the adoption and realization of a **comprehensive long-term Energy strategy**. 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**, see Chapter 7).

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** 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** (Chapter 14). On the energy supply side we will **progressively change the energy mix** 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**, 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** 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** (Chapter 13). 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.

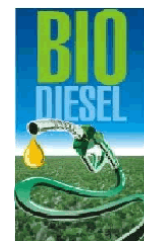
In order to make these energy demand side measures more effective, the long term trend of treating the energy price as a social category should be abandoned, and instead a **market price of energy** to be introduced which will improve the operational condition of the energy producers and also will provide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



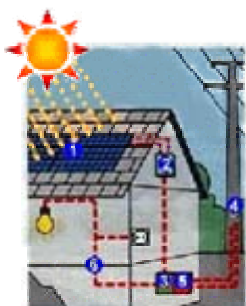
Moreover, the market prices of energy will increase the competitiveness of **renewable energy sources**. Although the RES potential in the country is high, its realization is almost negligible. With so many sunny days and even having the sun in our national flag, we afford not to use solar energy for 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 (Chapter 9). 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* (Chapter 8). 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**, first of all - the adoption of **feed-in (preferential) tariffs** for electricity generated from small hydro, wind, solar energy and biomass power plants. This was accomplished 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.

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.

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* (Chapter 15).

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 (Chapter 16) and inform the public.

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, Chapter 7).

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, and it 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:

1. We will develop and adopt a comprehensive long term Energy Strategy which will also incorporate Climate Change Mitigation.
2. We will adopt a secondary legislation to support the implementation of RES and EE projects.
3. We will progressively change the energy mix (utilization of the natural gas and renewable energy sources for energy production).
4. We will stimulate structural changes in the industry, favouring less energy intensive industries and SMEs.
5. We will improve the EE at demand side through targeted programs, education, training and awareness rising.
6. We will 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.
7. We will enhance the existing and introduce more incentives for EE and RES projects.
8. We will promote sustainable energy financing facility and encourage RES and EE projects to make use of it.
9. We will host as many as possible CDM projects and identify and promote as many as possible Programmatic CDM projects.
10. We will monitor and assess the climate change vulnerability (particularly health impacts) and undertake appropriate adaptation measures.



13. Sustainable Transport

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. Also the government's policy of deregulation, commercialization, privatization, and related measures to increase competition in the transport sector is essential to stimulate further competition and efficiency of managing and maintaining of transport sector. 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 will 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 will 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 (VIII and X). 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 government, 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 behavioural 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 of 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 will work with the Ministry of Finance 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 will 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.

Government recognizes public participation as a vital element in establishing Sustainable Transport System. 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 will implement transport safety standards covering each mode of transportation. The government will pay particular attention to ensuring that border crossings meet the demands of safety and security while facilitating the flow of people and goods. 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.

Tourism is increasing and has demonstrated growth in the Republic of Macedonia. In order to cater to the demand for improved access to tourist destinations, recreational attraction, the government will promote and support projects for the construction, modernization, and maintenance of transport infrastructure which will improve and facility the access to the tourist destinations.

Local authorities will work closely with the government and private sector in develop and implement the projects for the construction, modernization and maintenance of transport infrastructure which will improve the access to the agricultural areas in Macedonia.

Strategic Measures

Key Challenge Sustainable Transport:

1. We 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.
2. We will 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.
3. We will improve urban traffic flow operations and circulation and providing facilities and urban transport infrastructure, which will reduce emmiton of green house gasses.
4. We will 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.
5. We 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 behavioural change combined with a better connection of the different transport modes.
6. We 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.
7. We 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.
8. We will implement transport safety standards covering each mode of transportation.



14. 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

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



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, 4.24 and Chapters 12 and 15). 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 (Chapter 12). Citizens of Sustainable Development Macedonia have dramatically increased utilization of renewable energy sources (RES) and very much appreciate environmentally friendly vehicles for public transport !

Sustainable production in the public perception is closely connected to reduced pollution. Having in mind the *Precautionary Principle and Make Polluters Pay Principle* (Chapter 7), 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.

We will 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.

It is our objective to develop an 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 arriving 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 (see also Chapter 8). 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:

1. We will 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;
2. According to the previous goal, we will undertake a green tax reform, one that gradually shifts away taxes from labour 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;
3. We will 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.
4. We will 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.
5. We will have environment-related employment approach. Employment effects of market-based instruments. Integration of environment and employment at national and local level as well.
6. We will 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;
7. We will improve the resource management: water supply, recycling, renewable energy plants, forestry, fisheries, eco-tourism;
8. We will 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.



15. 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 (Chapter 12), 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 ?

We will increase the awareness of the public in large for forestry issues 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.

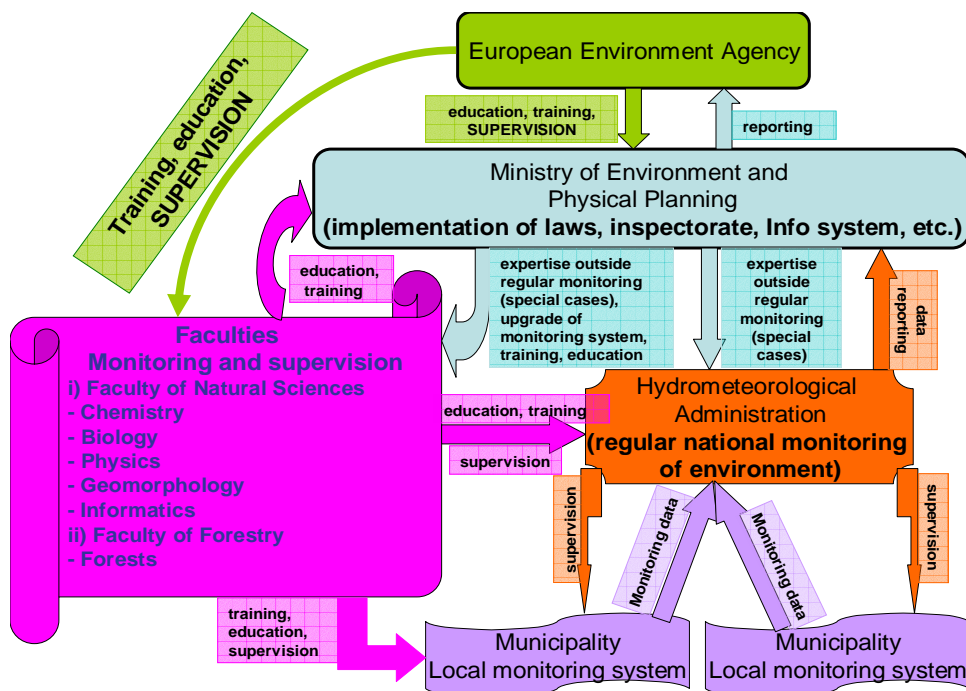
Develop environmental market. More and more environmental services are provided on the market by companies, NGOs, and scientific institutions. Ministries and agencies contract out legal drafting, policy development, public relations and management of dialogue with the public, studies regarding specific 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 projects 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:

- **We will 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.
- **We will 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.

- **We will 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.
- **We will 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.
- **We will 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 management 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.
- **We will 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 agrobiodiversity (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.

- **We will 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 Conservation and Management of Natural Resources:

1. We will 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;
2. We will ensure the nature protection in Macedonia based on "Natura 2000" network principles and via forced implementation of the Biodiversity Strategy and Action Plan;
3. We will promote the new Environmental Monitoring Network;
4. We will ensure the air quality control and reduce the threats to human health and ecosystems' functioning;
5. We will implement the Water Resource Management to mitigate the water losses and pollution impacts as basis for developing of comprehensive River Basement Management Plans;
6. We will strongly support, promote and implement alternative systems, like eco-remediation, for preventing and improvement of environmental deterioration;
7. We will implement Waste Management that includes reduction of waste amounts, recycling and pollution control;
8. We will support Sustainable Forestry, Agriculture and Rural Development as basic economy activities synergistic with the Conservation and Management of Natural Resources;
9. We will support eco-tourism development and healthy food production as prominent attributes of Macedonia in the process of globalization;
10. We will 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.

16. Public Health

To promote good public health on equal conditions and to improve protection against health threats is the key challenge that is of vital interest for all citizens.

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 the Republic of Macedonia and this concept is yet to be fully introduced in policy making, we share the EU's vision of sustainable development and we 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.

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 and key challenges. 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 Public Health:

1. We will complete the legal framework necessary for an integrated and coordinated public and consumer health systems;
2. We will establish all necessary institutions and reforms and increase the capacity of existing institutions;
3. We will streamline and promote preventive health care;
4. We will improve the quality and quantity of services provided in the primary health care;
5. We will reform the provision of services in the secondary and tertiary health care;
6. We will implement and HR policy that results in motivated and well-paid health specialists;
7. We will invest in better health facilities and more modern equipment;
8. We will ensure that resources are not wasted and financing is linked to services provided.



17. Social Inclusion, Demography and Migration

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 unfavourable 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 (see NSSD Position Document III for details), 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 labour 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 favourable business climate for creation of new jobs. In addition, the state could enhance the employment growth by setting up labour-intensive public work schemes and supporting non-conventional types of employment. Furthermore, an effective strategy towards formalization of the informal labour 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 unfavourable characteristics of the labour 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 labour 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 labour 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 capacities 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 labour 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 labour 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

Key Challenge Social Inclusion, Demography and Migration:

1. Improve the business climate for creation of new jobs.
2. Set up labour-intensive public work schemes and support non-conventional types of employment.
3. Develop and adopt effective strategy for formalization of the informal labour market.
4. Improve the employability of the labour force.
5. Introduce instruments which will decrease poverty i.e. that will provide make up of insufficient income of the population.
6. Build up educational inclusion policy which will provide equal access to education and equal possibilities for education with certain quality standards.
7. Develop a model of health based on the principles of solidarity, equity and proper efficiency, along with the expected trends of the population aging.
8. 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.
9. Formulate and apply sound long-term population policy which will incorporate set of indirect measures for the particular components of the total population movement.
10. Adopt consistent long-term migratory policy which will incorporate set of measures for internal and international migration.

**Everything that we described in all the 5+6 chapters before
is focussed on one spot, in the
*Sustainable Development Campus University (SDCU) –
A Place to Enjoy New Ways of Thinking, Inventing and Living*
Pilot and Demonstration Project (Annex 2, IV 3).**



18. Three Strategic Trust Building Blocks of Sustainable Development Macedonia

With all this, following the intensive debates in and the conclusions made by the NSSD Working Groups as presented, the NSSD Project Team identified **three Strategic Trust Building Blocks of Sustainable Development Macedonia** that contribute to all SD Key Challenges and corresponding Key Objectives as outlined above (see for details NSSD TBR, Chapter 5.2 Sustainable Development Synergies between Sectors and Cross-Cutting Issues). In order to describe these Strategic Trust Building Blocks, we use the following picture of practical life experience:

- ✓ **Small and Medium Enterprises , which today make up 99.7% of all enterprises in the country – in the future some of these might develop in Large Enterprises –**,
are the driving engines for Sustainable Development Macedonia. Without driving engines or cars there is no individual mobility in the 21st century. However, we need to maintain our cars and – if necessary – repair. This in particular refers to those cars which pollute our environment or are not safe. We might start driving a small or medium size car. However, after a couple of years we might be able to afford a large car, which – in our context – would be a Large Enterprise (Small, Medium and Large Enterprises = SMiLEs ☺).
- ✓ **Policy and Legal Issues**,
is the gear box of the car. It might be possible to drive the car with one gear only. However, the car will drive more smoothly and efficiently if we have four or five gears, not to mention 4x4 when the terrain becomes rough.
- ✓ **Education, understood as a life-long learning process, which uses modern day Information and Communication Technologies**,
is the fuel that we need to have available during all our journeys whether they are short or long. Again, like it is with the car itself, we need to take care that the fuel is produced according to the latest international standards technology. We in particular like fuel produced by renewable sources and from time to time we need to reconsider the type of fuel and engine which is regarded to be the most appropriate.

Hence, the **Strategic Trust Building Blocks** shall receive major attention and be multipliers in order to meet the Key Challenges and Key Objectives. Strategic Measures that are designed within the three Strategic Trust Building Blocks (see for details NSSD TBR, Chapter 6 Macedonian Sustainable Development Objectives and Measure for their Implementation) are expected to have the greatest impact to stimulate Sustainable Development Macedonia. This refers in particular to SMiLEs, which are considered to be the backbone for e.g. the *Diversification of Income in Rural Regions*. In the rural regions of Macedonia, Sustainable Development offers a great palette of new opportunities for business 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. Central Government institutions as well as Municipalities shall use eGovernment 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 eLearning products, which in return shall be designed by innovative SMiLEs.



TOWARDS THE IMPLEMENTATION OF SUSTAINABLE DEVELOPMENT IN MACEDONIA

The preparation of this National Strategy for Sustainable Development was well founded and the Republic of Macedonia was soundly prepared to start a participatory process of elaborating such an important document, which will have major impacts on the future developments of the country and its full integration in the EU. The NSSD Project Team appreciated all the efforts in the past and incorporated the relevant documents for the benefit of a National Strategy for Sustainable Development.

19. National activities as regards sustainable development and EU accession

At Lisbon 2000, the European Council set a new strategic goal for the Union "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 Stockholm European Council then decided that the EU sustainable development strategy should complete and build on this political commitment by including an environmental dimension. This recognises that in the long term, economic growth, social cohesion and environmental protection must go hand in hand. Sustainable development offers the European Union a positive long-term vision of a society that is more prosperous and more just, and which promises a cleaner, safer, healthier environment a society which delivers a better quality of life for us, for our children, and for our grandchildren. Achieving this in practice requires that economic growth supports social progress and respects the environment, that social policy underpins economic performance, and that environmental policy is cost-effective.

The Republic of Macedonia has identified several key priorities for its future development, where achieving EU membership can be considered as the overriding strategic policy objective. The Republic of Macedonia was granted applicant status in May 2004 and candidate status in December 2005. The European Partnership concluded in June 2004 provides main priority areas for further integration into the European Union and the development of a National Strategy for Sustainable Development (NSSD) has been identified as a short-term priority. The NSSD should be in line with the acquis and a plan for the implementation of the recommendations set out in the conclusions of the UN World Summit on Sustainable Development in Johannesburg 2002.

The ANALYTICAL REPORT for the Opinion on the application from the Republic of Macedonia for EU membership (COM 2005)⁸ again highlighted the need of a National Strategy for Sustainable Development.

⁸ ANALYTICAL REPORT for the Opinion on the application from the Republic of Macedonia for EU membership (COM 2005), p. 121.



The Ministry of Environment and Physical Planning has undertaken many activities for promoting sustainable development in general and for the furthering of the National Strategy for Sustainable Development. MoEPP has:

- (a) organised workshops for governmental, municipality, academia and NGO representatives;
- (b) financed the development of the "Conceptual Approach towards Creation and Implementation of the National Strategy for Sustainable Development of RM" (2000);
- (c) co-ordinated the preparation of the "National Assessment Report for Sustainable Development" (2001-2002), which was adopted by Government in July 2002 (with this document, the Republic of Macedonia participated in the World Summit on Sustainable Development in Johannesburg in 2002);
- (d) commenced the implementation of the activities aimed at developing the "Research Concept supportive to the creation and implementation of the NATIONAL STRATEGY FOR SUSTAINABLE DEVELOPMENT OF THE REPUBLIC OF MACEDONIA", 2003;
- (e) co-ordinated the national reports to the NCSD sessions;
- (f) translated and published relevant international documents on sustainable development; and
- (g) financed the development of the "Guide towards Local Agenda 21" (a guide towards the development of strategies and action plans for sustainable development at local level).

For undertaking these activities, MoEPP was given a mandate from Government in the form of governmental conclusions and decisions of which the following are particularly relevant:

1. The Ministry of Environment and Physical Planning, as national focal point, shall proceed with the co-ordination of the activities related to the implementation of the goals and recommendations of Agenda 21 and development of "National Assessment Report of Sustainable Development" (2001);
2. The Government has obliged the Ministry of Environment and Physical Planning to initiate, after the completion of the "Research Concept for Provision of Analytical and Prognostic Substance to Serve the Purposes of the Development of the National Strategy for Sustainable Development of the Republic of Macedonia", preparatory activities for development of the National Strategy for Sustainable Development of the Republic of Macedonia " (2002); and
3. The Government has appointed the Ministry of Environment and Physical Planning to be co-ordinator of activities for development of the National Strategy for Sustainable Development of the Republic of Macedonia" (2004).

20. Public participation, Local Agenda 21 and Institutional set-up to support implementation of the National Strategy for Sustainable Development

The preparation of a NSSD was a challenging and time-consuming process, which by necessity included many sectors, many stakeholders, and a great variety of other donors' projects. The process as such as well as the institutional framework to be developed was complex with conflict potentials among stakeholders, between public and private interests, within sectors, and between sectors and cross-cutting issues.



Finally and based on the spatial approach of the Agenda 21 (A21), the NSSD needs to be implemented 'on the ground', on a Municipality level or regional/cross-border co-operation level. Therefore, we very much appreciate MoEPP's "Guide towards Local Agenda 21".

Municipalities are members of the Association of Local Self-Government's (ZELS). As early as of 7 March 2006, President of the Association of Local Self-Government of the Republic of Macedonia was invited to participate at the 1st NSSD Stakeholder Workshop. On 28 March 2007 a Memorandum of Understanding and Cooperation was signed with ZELS.

The NSSD Project encourages Local Agenda 21 activities and invites Municipalities to actively participate in the Local Agenda 21 process. Thus, we facilitate a programme for implementation of the decentralisation process in the Republic of Macedonia as adopted in February 2003.

Implementation of this National Strategy for Sustainable Development calls for active participation and dialogue between a wide range of players. It is not the State and its Government Institutions alone which are responsible for sustainable development, but it is the responsibility of the society as a whole. Starting from local level each and every citizen can and shall contribute and take action. **We invite all citizens to build Sustainable Development Macedonia.**

However, it is the State's responsibility to provide the necessary institutional capacity and set-up in order to ensure professional implementation of the Strategy and to safeguard the movement from sectoral towards integrated planning and with social, economic and environmental objectives being complementary and interdependent throughout the development process, which is the heart of the concept of Sustainable Development.

As soon as the NSSD document is approved and enacted by the Government of the Republic of Macedonia, the **National Council for Sustainable Development (NCSD) shall be politically responsible for the NSSD implementation.**

According to the NSSD project's ToR, the Government of the Republic of Macedonia, on the initiative of MoEPP established the **NCSD**. A proposal for the role and mandate of the NCSD was already drafted during the Inception Period of the NSSD project.

The NCSD is chaired by the Deputy Prime Minister, include Ministers of key government ministries as well as a balanced spectre of competent and prominent representatives from the public and private sectors and from the civil society. The NCSD shall serve as an open forum for all Macedonian stakeholders to present their views. The NCSD shall debate the central policy issues related to the NSSD process and serve as a driving force for awareness raising as well as for ensuring transparency and commitment building.

Having in mind the complexity and multi-sectoral nature of Sustainable Development projects in general and the need for applying a new cross-cutting and more strategic oriented way of thinking also towards investments (Chapter 7.1.3 and 7.2.3), the **NSSD Project Team proposes a new Institutional Set-up to support the Implementation of Sustainable Development in the Republic of Macedonia to be financed as one of the most fundamental and urgent SD Pilot Project** (see Annex No. 2, and NSSD

Position Document I, Proposal for Institutional Set-up to Support the Implementation of Sustainable Development in the Republic of Macedonia, July 2007).

Based on experiences of NSSD implementation around Europe, the implementation of the NSSD in the Republic of Macedonia shall be safeguarded by an institutional set-up as visualized in Chart No. 5 and outlined below:

1. The National Agency for Sustainable Development (NASD),
2. The National Sustainable Development Investment Bank (NSDIB), and
3. The Sustainable Development Campus University (SDCU).

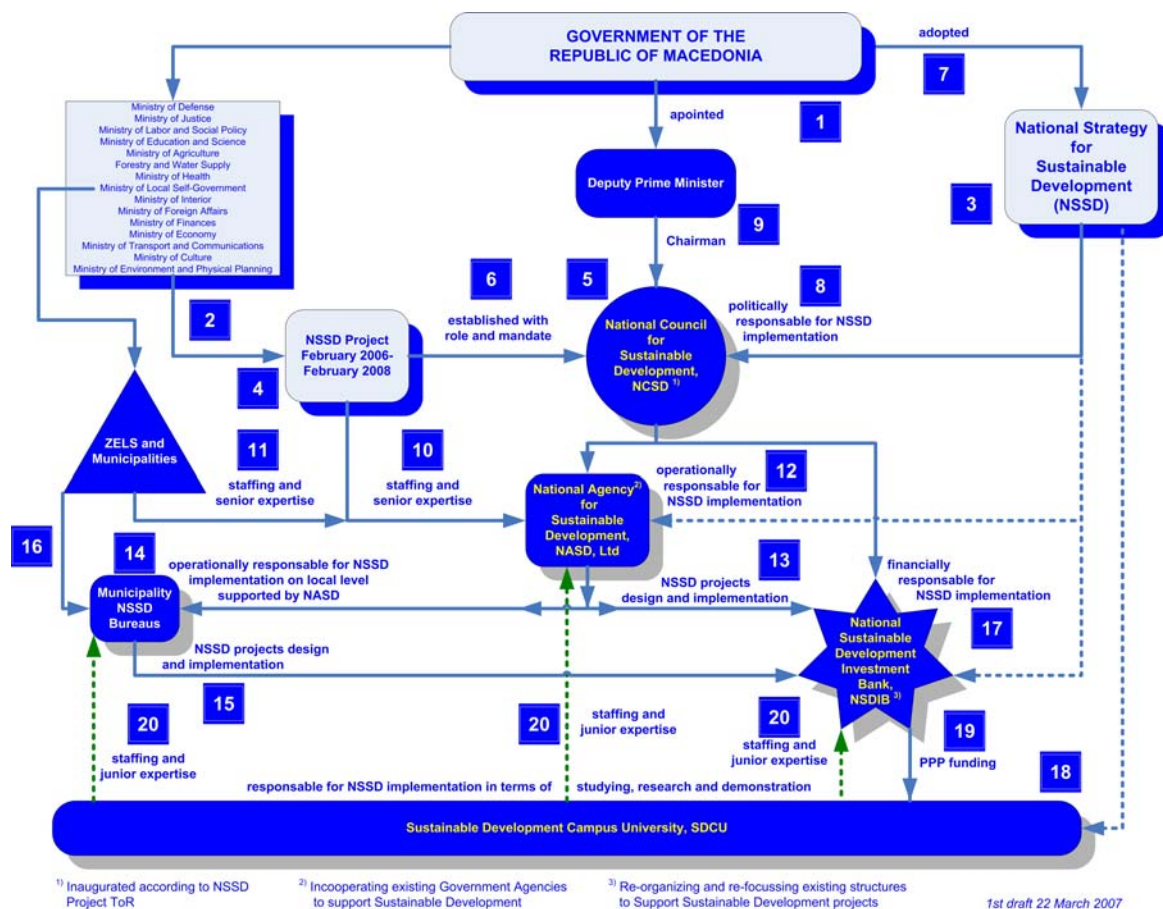


Chart No. 5: Proposed new Institutional Set-up to support the Implementation of Sustainable Development in the Republic of Macedonia.

The first two mentioned institutions, the **National Agency for Sustainable Development (NASD)** and the **National Sustainable Development Investment Bank (NSDIB)**, shall be established by pooling the best available knowledge, experience and committed human resources from already existing Government Agencies to support sustainable development in the country in an efficient, rationalized and streamlined manner. To a limited extent staffing and senior expertise of NASD could be recruited from experienced members of the NSSD



project team as well as from ZELS and pro-active Municipality institutions (e.g. Sectors for Local Economic Development).

The NASD, operating on national level, closely cooperates with NSSD Bureaus on a Municipality level. Likewise the NASD on a national level, it shall be the NSSD Bureaus major task to design and implement sustainable development projects on a local level. NSSD Bureaus are backed up by the communication network and support provided by the Association of the Units of the Local Self-Government of the Republic of Macedonia (ZELS).

The major task of NASD shall be the design and implementation of sustainable development projects according to the objectives of the NSSD and strictly following the overarching objectives of the EU Strategy for Sustainable Development and its regular revision. The NASD shall insure that available funding from international institutions (e.g. IPA funds) is utilized to a maximum benefit of the Republic of Macedonia.

Both, NASD and NSSD Bureaus, are connected to the **National Sustainable Development Investment Bank (NSDIB)**, through which all operations relevant for sustainable development project and investments shall be canalized. The National Sustainable Development Investment Bank (NSDIB) shall be financially responsible for the SD implementation based on the National Strategy for Sustainable Development document as adopted by the Government of the Republic of Macedonia. In particular NSDIB shall be responsible for all funding transactions in relation to international institutions and donors (e.g. IPA funds).

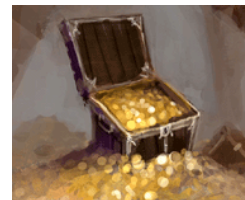
The Sustainable Development Campus University (SDCU) shall be founded and constructed as a new Campus University outside of Skopje, thus acting as a driving engine for regional development and innovations as well as a 'Place to Enjoy New Ways of Thinking, Inventing and Living'. It is envisaged that the SDCU is founded, constructed and operated by Public-Private-Partnership (PPP) funding. Having in mind the attractiveness of investing in higher education worldwide, the Sustainable Development Campus University in the Republic of Macedonia shall benefit from the commitment to sustainable development by private investors.

21. Monitoring of progress, incremental costs and more information about sustainable development

This is the National Strategy for Sustainable Development in the Republic of Macedonia. **A system of indicators shall monitor progress in achieving the objectives as outlined in this Strategy and accommodate a process of learning and improvement** (Annex No. 3). Major investments are needed to redirect the society towards sustainable development. This is also to motivate a new way of thinking and working as well as technological breakthroughs and innovation, which in particular addresses the entrepreneurial spirit of the young generation. SD Pilot Projects (Annex No. 2) serve as lighthouses for what is envisaged in the future, which in particular refers to the Sustainable Development Campus University. Sustainable Development Macedonia is finally knowledge-based.



The adoption of this National Strategy for Sustainable Development in the Republic of Macedonia in itself will not result in an increase in financial demands on the State Budget. The Strategy's goal is to establish a broad consensual framework and road map for the drafting of other conceptual documents (sectoral policies, programmes and plans of action) and should serve as the basis for strategic decision-making in individual sectors and for co-operation between sectors and with interest groupings.



Since 1995, a data base of investment projects in the public infrastructure of the Republic of Macedonia was set up in the Ministry of Finance and the concerned Ministries and that is continuously updated. The Public Investment Programme (PIP) of the Republic of Macedonia 2007-2009 was prepared in accordance with the Operational Programme of the Government of the Republic of Macedonia. When preparing the PIP, sectoral development policies and priority infrastructure projects have been taken into account, which are included in the 2006-2010 Government Operational Programme. Additionally supported by the Pre-accession Economic Programme 2007–2009 of the Republic of Macedonia the financial frame is set out in which the implementation of the short-term objectives of this National Strategy for Sustainable Development and their fiscal implications realistically shall be seen.

The Government's determination to encourage foreign investments primarily through concessions, donations, direct and joint ventures is an imperative. Based on this and as outlined in full detail in Chapter 7.1.3 NSSD TBR, the NSSD Project Team strongly recommends taking immediate actions to elaborate a SD-KPIs methodology adapted to the specific transitional country situation of the Republic of Macedonia (see Annex No. 2, Pilot Project III.3) in order to regularly monitor specific company's and their investments.

Besides this, further targeted increase of foreign grants is necessary for support in water supply, irrigation, environment, education and health. EU pre-accession funds are expected to be available for the country in the next years. Thus it should be noted that the impacts referred to in this NSSD will not be triggered until the individual sectoral strategies, policies or other programming instruments are in the process of implementation.

Nevertheless, the Government shall, subject to available resources by gradually increase public investments to the level of 5% of GDP, prioritize those parts of sectoral policies which immediately address objectives formulated in this NSSD, and therefore contribute most likely towards balanced relations between the three pillars of sustainability, and exemplify economical, environmental and social benefits in parallel. By considering the public sector as a potential development generator, it shall be expected from experiences in other European countries that Macedonia can generate private foreign and domestic investments in the relation of at least 1:2, if not 1:4.

This also addresses the international donors' community willingness to support the country on its way towards Sustainable Development Macedonia. As far as financial support is necessary, foreign grants shall focus on the short-term objectives described in detail in this NSSD in Chapter 6 as well as on the SD Pilot Projects (Annex No. 2), which are essential for demonstration purposes in order to stimulate further private investments.

Beyond the classical financing instruments mentioned above – Public Investment Programme (PIP), foreign and domestic investments and foreign grants – new models like e.g. Public-



Private Partnership (PPP) shall be carefully tested. PPP describes a government service or private business venture which is funded and operated through a partnership of Government and one or more private sector companies. PPP provides opportunities for both, foreign and domestic investments supportive to Sustainable Development.

With the adoption and implementation of the European strategy outlined in the VI Environment Action Programme of the European Community 2002-2012, the Government of the Republic of Macedonia through the formulation of strategic instruments and actions, both voluntary and mandatory, shall aim at the "re-orientation" of public and private investments towards eco-compatible technologies.

The banking system in the Republic of Macedonia plays a crucial role in mobilizing domestic investments. Banks in other European countries have acknowledged that companies' commitment to sustainable development and practical day-by-day implementation of distinct measures affect, in the long run, the reliability of investments. Therefore, the Government of the Republic of Macedonia in liaison with the international donor community shall initiate a dialogue with the country's banking system in order to promote so-called 'green investments' and to design procedures for the concession of favourable credits focussing on environmental and innovative sustainable development technologies. In the future the Sustainable Development Investment Bank (SDIB), as part of the proposed new institutional set-up to support the implementation of the NSSD, shall be the driving engine for all financing issues related to Sustainable Development.

Last but not least the Republic of Macedonia can learn from other European countries' experience on gradually introducing appropriate fiscal incentives and taxation instruments for promoting market transparency and prices that reflect the real economic, social and environmental costs of products and services and at the same time create awareness in the choices which can be made by consumers. In medium and long-term, a new tax system mainly based on consumed resources (*natural-resource-user-pays* concept), as envisaged in the Agenda 21, Chapter 8 of the UN Conference on Environment and Development in Rio de Janeiro in 1992, and technically supported by a Geographic Information System (GIS) shall be introduced to support Sustainable Development in the Republic of Macedonia.

**The Republic of Macedonia shall become not only the
New Business Heaven in Europe, but as well shall become the
*Paradise for Sustainable Development Investments in Europe.***

Individuals and organisations are encouraged to contact the NSSD Project Office either by mail or phone or by consultation to get access to the material and not least to discuss the National Strategy for Sustainable Development with the NSSD Team.

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**With all this,
a viable, realistic, appropriate and operational
National Strategy for Sustainable Development
for the Republic of Macedonia and its citizens,
both living today and in future,
has been developed.**

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