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SUSTAINABLE DEVELOPMENT AND THE ECONOMIC CRISIS

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Abstract
One of the constituents of the sustainable development is economic sustainability, along with the social, environmental and institutional dimensions.
In business, there are only companies which manage their economic sustainability as no amount of excellent social and environmental performance will prolong the life of a company that is economically unsustainable.
It is only obvious that economies and communities are to a high degree affected by business failure and economic instability having a disastrous effect on people. However, businesses that only measure success against financial indicators, such as turnover and profit, increasingly risk failure. A broader perspective on sustainability is now emerging, based around reputation, full cost accounting, ability to add value and the management of knowledge.
Summarizing specific challenges, it is critically important that the European Union has resident (citizen) capacity to carry out strategic planning on a continuing basis. While this capacity will in the short-term necessarily have to depend on externally supplied expertise, more institutional strengthening will be required to ensure the development and institutionalization of planning and policymaking capacity at both national and state levels.

1. GENERAL CONCEPTS REGARDING SUSTAINABLE DEVELOPMENT

The term of „sustainable development" appeared in earlier decades due to a high number of environmental movements. It was first defined by World Commission on Environment and Development (WCED) as the development that "meets the needs of the present without compromising the ability of future generations to meet their own needs." [1] This definition is clear enough, not requiring any further explanations. But there are two more questions worth thinking about: Why should we think about the future generations and how can we implement a sustainable development?

Referring to the first problem, taking into consideration the sustainable development not only helps our children, grand-children, grand-grand-children and so on, but also helps us. It helps us live a better life in a better world reducing pollution, uncontrolled waste dumping, controlling the resources which, in the end, reflects in the increase of our life expectancy. Moreover, from the economical point of view, we will be able to better fulfill our needs, as individuals, as long as we take into consideration a good management of our personal resources and we keep our consumption levels under control.

However, how do we get to the sustainable development? Starting with 1992, at the Earth Summit, held in Rio de Janeiro, the EU identified the need for sustainable development in Europe. There has been developed a strategy (which was renewed in June, 2006) that focuses on climate change and biodiversity. The challenges identified which European Union has to face are:

- Climate change and clean energy
- Sustainable transport
- Sustainable consumption and production
- Conservation and management of natural resources
- Public health
- Social inclusion, demography and migration
- Global poverty

Unfortunately, although the first summit concerning sustainable development took place 17 years ago, the progress in this direction is still not very significant and visible. This is also due to the different ways of understanding and implementing the concept of sustainable development in EU's state members mostly characterized by the reticence towards this concept met in poorer countries. Many state members tend to believe that the implementation of a good sustainable development strategy is expensive, thus unaffordable or they even consider it "a brake to development". In this situation, it is no wonder that the strategy did not achieve its goals. Still, new goals have been set,

among which the limitation of the climate change and the reduction of the greenhouse gases by 20 percent by 2020. How and if this targets will be met, remains to be seen.

2. EU SUSTAINABLE DEVELOPMENT POLICY

The main focus of the European Union Sustainable Development Strategy (EU SDS) is to progressively achieve the change in the current unsustainable consumption and production patterns and the non-integrated approach to policy making. Of course this can be obtained only by succeeding in raising awareness among communities in order to improve the quality of life for both the nowadays generations and the future ones. Being able to efficiently manage and use resources to trigger the ecological and social innovation potential of the economy, building up a prosperous and protected environment, as well as social cohesion. The cross cutting policies are:

1. Education and training.
2. Research and development.
3. Financial and economic instruments.
4. Communication, mobilizing actors and multiplying success.

Obviously three main actions are most significant in achieving the goal and these are – implementation, monitoring and follow up. Starting September 2007 a new rule has been set – the Commission has to submit every two years a progress report on the success of the implementation of the above mentioned directions in the European Union and the Member States, as well as on future actions and targets.

The two issues that keep coming up in the debate are the quantification of the progress made by EU and the Member States in implementing EU SDS and the setting of future targets.

In this respect, a very high importance is given to the climate change and clean energy. All the Member States , as well as EU, agree that this is a very important theme, therefore the number of initiatives that have been taken. One example would be the focus on renewable energy and biofuels which has caught the public's eye. Unfortunately, not so much attention is being paid to post-2012 emission reduction and adaptation to climate change, which is becoming a more and more urgent matter. In what concerns the climate change and clean energy there is a lack of coherence between objectives and actions. Thus the adaptation to climate change has no corresponding actions attached to it and therefore we need strategies to reach the already mentioned objectives. There are policies such as agriculture, trade policy, research and technology development which although are not directly connected to the climate change issues can influence the sustainable development and mainstreaming energy.

In the field of sustainable tourism the energy use and the greenhouse gas emissions are in focus. The problems concerning the sustainable tourism refer to separating the economic growth and energy consumption from the increase in demand for transport. This can be helped by providing a real market price for the different means of transport. Improving the technology in the field is another way to help the sustainable tourism in what concerns the obvious energy consumption and emissions. The transport by air demand is highly increasing in Europe, being estimated to double by 2020.

With regard to the progress, there are limited reasons for showing optimism in the area of sustainable transport. The growth of freight transport volumes has outpaced economic growth since 1995 and growth of passenger freight transport has exceeded economic growth between 1990 and 2002. Growth in transport related energy use has exceeded growth in energy use in all sectors: transport's share of total energy consumption is rising and oil provides 98% of the energy used by the transport sector . Greenhouse gas emissions from transport are increasing and it is questionable whether targets in this area can be met. Although harmful, polluting emissions are decreasing, air quality problems in European cities still persist. A shift to environmentally friendly means of transport is unfortunately not a reality at the moment: road freight transport is still dominant and continues to grow; passenger air transport has increased significantly; passenger car transport shares have remained constant. The pollution through noise is as well on debate, although there is not, at the date, a valid data in support of the negative effect it has on the quality of life.

Obviously, *the challenge faced by all the Member States to apply the measures for a sustainable development is great.* It requires good inter-ministerial cooperation and horizontal methods of working, along with the ability to synthesize all outputs varies considerably between the Member States.

3. ECONOMIC RECESSION – AN OPPORTUNITY FOR TRANSFORMATION

The issue of origin and nature of economic cycle is one of the most important and the oldest unsettled problem of economy theory, still a very actual problem. A lot of the most famous scientists-economists studied phenomena of economic cycles, economic dynamics and development. Among

them one can name: Karl Marx, Wicksell, Mitchell, Tugan-Baranovsky, Gassel, Schumpeter, Kondratyev, Harrod, Hansen, Aftalion, Clark, Spiethof, Kuznets, Pigou et al. and, according to Hansen, this problem had not been solved till the time of his work (40s of the 20th century) (*Hansen, 1997*). By analyzing, comparing and contrasting the works of economists of the second half of the 20th century, it is possible to say that his statement remains true until now. Methodology that exists today in economics and its sections – theory of economic dynamics and theory of economic development – has come from classical mechanics [*Kondratyev, 1998; Schumpeter, 1982*). Today is a time of complexities. It looks that the organization of universal system is complex, intricate and functions according to non-linear laws. The idea of complexity itself became the focus of scientific thought. Non-linear physics and physics of open systems have occupied their place in educational and research processes of physics (*Zaslavsky and Sagdeev, 1988; Klymantovich, 1999; Bar Yam,1997*). The concept of self-organization of physical objects is confirmed as open dissipation systems. Fundamental categories of physics are newly interpreted from the position of new knowledge of complexity. The same phenomenon can be observed in economics as well. Wide diffusion of knowledge, including methods, occurs among different branches of science. Interdisciplinarity of research is one of the fastest spreading scientific methods. Our work is inter-disciplinary. It is an attempt to consider economic problem from position of non-linear physics, or, more exactly, - from position of physics of non-linear wave processes. So we are aware that "pure" physicists interested in economics can reveal triviality and even dilettantism in stated context and they will be right.

Economists, acquainted with physics, can reject the very method of approach and they will be right as well. It is due to the fact that economics studies human objects, the ones possessing reason and right to choose and making decisions, i.e. biological objects, while physics studies physical objects.

In such times, when companies struggle to remain on the market, a good question arises: can we still afford to focus on sustainable development?

Some claim that now is the best time to do that and that right now it should be clear to everyone that we can not go on as we have been.

Always in the face of challenge, a lot of new opportunities appear. We just need to seize the moment and make the most of them. Our future (as individuals and as a society, as a whole) depends on it.

The "big questions" here are: how do we build a more sustainable society with lower energy and resource use? How do we create the "green jobs" that will be needed to deliver these solutions? And how do we create a societal infrastructure that will be more resilient to the challenges of climate change and its impacts on our food and water supplies?

The amount of investment needed for energy, urban infrastructure, water, transport and food supply, to mention a few, will be tremendous, but we can not allow these investments to lock us into an unsustainable future. The infrastructure we invest in today will be with us a long time (50 years or even more). It is vital that governments remember this when designing the future infrastructure. They need to look forward to the low-carbon economy of the future and focus on investments in new energy systems, transport solutions, energy-efficient buildings and water and urban infrastructure. Making the right decisions now will spur new industries, create "green jobs", change our lives and secure our future.

We need to be thinking across the board, and outside of the usual constraints. With vision, foresight and planning, the world can be re-shaped. Imagine, for instance, a life in the future, where our homes and industries are powered by low-carbon energy, where transport runs on clean fuels, where even the poorest people have easy access to clean water, where our buildings and household appliances consume less energy, and where workers equipped with new, "green" skills are employed in the abundant jobs these new industries create.

All these represent opportunities for new businesses and growth. But the achievement is not possible by thinking in silos and within narrow national borders. A global view is required. We must take advantage of these opportunities. Future generations will not thank us if we fail.

4. ECONOMIC SUSTAINABILITY

One of the constituents of the sustainable development is economic sustainability, along with the social, environmental and institutional dimensions.

The term of economic sustainability does not only refer to achieving economic growth every year, but also at understanding that economic growth is only sustainable if it simultaneously improves our quality of life and the environment.

Along with ways of a business to operate and its financial stability, economic sustainability involves the generation of community capital, such as local sourcing, employment, partnerships and investment.

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In time, there have been set certain models of the sustainable development, therefore it is well-known that in order to obtain the sustainability each of the four subsystems (economic, social, environmental and institutional) has to maintain its capability to survive and evolve, while the connections of the subsystems must enable a permanent co-evolution. It has always been a challenge to identify the perfect level of complexity for descriptions and models in order to develop adequate analysis and to avoid wrong prognoses and this is sometimes beyond the analytical capacities of current economic theories. In this way, a system analysis perspective is presented as a framework for debating the co-evolution of economy, society, and nature. In this context, the economic, social, environmental and institutional sustainability of the economy can be defined and economic theories can be assessed regarding their usefulness for the description of a complex evolving system, like the economy.

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However, the present tax system acts in the direction of discouraging small business as it encourages waste, discourages conservation, and rewards consumption. The tax system needs a major overhaul to favor the legitimate and critical needs of the small business community. Retention of capital through retained earnings, efficiencies, and savings is central to small business competitiveness. Current tax policies often act to unfairly penalize small business.

To sum up, sustainable development is and always will have to be taken into account as it decides not only the economical welfare and growth, but also the quality of life.

Summarizing specific challenges, it is critically important that the European Union has resident (citizen) capacity to carry out strategic planning on a continuing basis. While this capacity will in the short-term necessarily have to depend on externally supplied expertise, more institutional strengthening will be required to ensure the development and institutionalization of planning and policymaking capacity at both national and state levels.

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