

## Transition to a green economy – a challenge and a solution for the world economy in multiple crisis context

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**Abstract.** *The concept of "Green Economy" is heavily debated recently because it is considered to be essential for the future global economy. This concept aims to find practical solutions that can be applied in international affairs regarding the environment development as a result of the massive problems caused by multiple crises that are no longer solvable. However, the international community is looking for long-term alternatives to improve the quality of life and eliminate poverty population as much as possible.*

*To make sustainable economic development requires a transition with multiple implications for both the government and the private sector. In other words, you need a joint effort between public and private, in order to separate economic growth from excessive use of resources; the main objective should be considered the quality of life along with reducing the environmental and social deficit.*

*The transition to a "Green Economy" means practicing a certain type of economy based on policies and investment that should be able to create a connection between economic development, biodiversity, ecosystem, climate change, health and welfare on the medium and long term. These premises must be connected together to achieve sustainable*

*development – which is considered the resumption of economic growth at global scale.*

*Switching to "Green Economy" implies a proper concern based on adequate knowledge, research and innovation in order to create a framework for promoting sustainable development on long term. This study aims to generate an overview on the concept of "Green Economy", considered by some experts as the main solution to the problems that countries of the world are facing nowadays. It is well known that the economic system is situated in a collapse and requires a rethinking from all points of view. A solution to adapt the economy and its development to these new global challenges can be the transition to "Green Economy", especially by integrating the environment in sustainable development paradigm.*

**Keywords:** green economy; sustainable development; policies and investment; economic growth; poverty eradication.

**JEL Code:** E20.

**REL Code:** 8E.

## Introduction

The concept of environment has its source of origin about 30 years ago, when for the first time, in 1972, at the Stockholm Conference, the environmental problem, along with the effects that man's actions have on it, was taken into account. Later, in 1983 the World Commission for Environment and Development (WCED) began its activity, following a resolution of the United Nations General Assembly. Since 1985, when marking the discovery of the ozone hole over Antarctica, the officials try to take measures to reduce consumption of substances that affect the protective ozone layer. Chernobîl catastrophe generated Brundtland Report (WCED) entitled "Our Common Future", which mentioned the notion of "sustainable development" and defined it as "the one which aims to present needs without compromising the ability of future generations to satisfy their own needs."<sup>(1)</sup>

This report presents an overview of economic development situation, arguing that evolution cannot be stopped, but in the same time it proposes a rethinking of strategies in order to take into account environmental protection along with the planet's resources and it also suggests organizing an international conference as a starting point in the incursion of sustainable development. The Earth Summit in Rio de Janeiro that took place in 1992 created a general image regarding the field of sustainable development, reaching problems of climate change, biological diversity and deforest end. This year – 1992 – is an important one because it is for the first time when a support plan for sustainable development has been adopted at global level. This event was followed by the Sustainable Development Summit held in Johannesburg in 2001, in order to concentrate the attention of people on the importance accorded to sustainable development. All these actions have led to a concern for this domain, that has not installed in the minds of people and organizations at once, but gradually, being now in a position where we turn our joint efforts to integrate sustainable development across the economy to overcome crises, to find new solutions designed to attenuate the post-crisis effects.

2012 UN Conference on Sustainable Development<sup>(2)</sup> approaches two main themes: "Green Economy in the Context of Sustainable Development and Poverty Eradication" and "Institutional Framework for Sustainable Development"<sup>(3)</sup>.

It aims to highlight the importance of transition to a green economy that would build up a new form of sustainable economic development. Based on these actions, we can see an increasingly concern on current issues that may be a solution worthy of consideration to overcome the economic effects of multiple crises. Among the overall objectives, there can be included: poverty

eradication and economic development, food security, welfare and health on long term, adaptation to climate change, along with eliminating excessive consumption of natural resources.

### 1. EU – active involvement in the transition to Green Economy

European Union plays a key role in efforts to prepare the Rio Summit in 2012 and it is actively involved in order to boost sustainable development among European population and institutions at a global level. In other words, the EU is trying to create a coexistence of a partnership between public and private environment in order to support the importance of sustainable development both for society and the global economy. We note that globalization is like a paradigm, like a double-edged weapon, as it helps economies to grow, but the threat to "fall"<sup>(4)</sup> does not disappear. The phenomenon of globalization requires active support for sustainable development.

Among the proposals and conclusions arising in the Notice of Economic and Social Committee on the theme "Towards a World Summit on Sustainable Development in 2012" (own-initiative opinion), it was noted that the summit has the purpose to revive the spirit of Rio and revitalize Rio Principles and Agenda 21, as tools to involve all interested parties and the orientation of a more sustainable world<sup>(5)</sup>.

Articles 1.4 and 1.5 from Chapter Conclusions presented in the Notice of Economic and Social Committee on "Towards a World Summit on Sustainable Development in 2012" suggest that the meeting would be a landmark and should set a deadline for taking decisions regarding the next steps to be followed on climate change, biodiversity; the summit should also complete the current negotiations on mercury and launch new negotiations on the inclusion of sustainability in corporate governance. The summit should recognize and support the Earth Charter as a means to urge individuals and organizations around the world to commitment and action in this field.

In the current economic conditions, the EU feels the pulse of future events that may mark the path for the states of the world and tries to get involved as much as possible in order to find solutions that can be adopted and adapted at both central and local level. According to analysis, specialists sustain that the economy has been profoundly affected by economic crises, registering a sustainable economic downturn. Europe's population, in particular, became more cautious, avoiding to make investments and reducing their own consumption; these actions are fueled by strict banking conditions in loans and the alarming unemployment figures. EU unemployment rate remained at 9.5%

in July and in the Euro area was 10%, unchanged from June, according to data presented by the European Statistics Office (Eurostat)<sup>(6)</sup>.

Among EU member states, the lowest unemployment rate was recorded in Austria (3.7%), Netherlands (4.3%) and Luxembourg (4.6%), the opposite presenting Spain (21.2%), Latvia (16.2% in the first quarter of 2011) and Lithuania (15.6% in the second quarter of 2011). In July, the unemployment rate in Romania was 7.3%. Eurostat estimates that 22.711 million men and women in the European Union, of which 15.757 million in the Euro area, did not have a job in July 2011. Compared with June 2011, the number of unemployed increased by 18,000 in the EU and in the Euro area rose by 61,000<sup>(7)</sup>.

These figures are not encouraging for future results and they show that the economic crisis may extend to a social crisis for most EU countries. In addition, there are opinions of experts and surveys showing that because of the debt crisis of European countries, 2012 will be marked by economic decline, financial and multiple social unrest. According to analysts surveyed by Bloomberg, the Euro area will go into recession in the next 12 months, the banking sector problems will get worse and in the next five years at least one member of the Euro area will give up the single currency. The survey was conducted on 1,031 participants, among the investors, analysts and traders around the world<sup>(8)</sup>.

European Union tries to take steps to avoid these gloomy forecasts, as much to alleviate the effects of post-crisis and find solutions to avoid falling into a new phase of recession. Rio Conference in 2012 is trying to bring real solutions in debates to help world countries to overcome periods of crisis. The Green Economy as a concept is a different optic, a new vision designed to rebalance the situation that causes chaos. EU proposes for this meeting a renewal of activity in global sustainable development by:

- Defining and implementing various aspects of the Green Economy;
- Giving financial assistance and technology transfer and know-how (especially for developing countries);
- Fundamenting various aspects of governance for sustainable development;
- Involving all companies in Europe to optimize vision in Rio and providing the necessary political support.

## 2. Measures and instruments for sustainable development and poverty eradication

The new economic system based on sustainable development is likely to become the solution to overcome environmental, economic and social development, also aimed at crisis management and its effects. It is necessary to

take measures by using appropriate policies to create conditions to support economic growth and poverty reduction. In the current economic environment, most countries have been and still are affected by the crisis, hindering economic growth. However, growth should be possible to get out of this collapse by creating strong links between development, production and sustainable consumption.

The nature and its value plays an important role to support economic growth in the current context, if only the importance of balance in its protection is acknowledged. This is where the concept of Green Economics interferes, to create the framework of transition to an economy closely linked to sustainable development. The economic system has many variations, and this vision should mold perfectly from the beginning in order to adapt on long term. To implement the policies associated with green economy, we need first a joint effort of all countries, by raising awareness of the importance of this phenomenon, as well as providing timely and applicable solutions.

For example, to implement green economy in every state requires deep involvement of consumers and business environment along with the main frame of measures proposed and adopted at the national and international leading levels. One must understand the sustainable use of resources is a priority, especially if the climate change in decades is taken into account. Eradicating poverty is closely linked to the sustainable management of natural resources. Why? Because poor population is assuring their existence depending on natural resources. Natural capital is related to the current problems of humanity, such as poverty, sanitation, health, education. States should pursue objectives in the long term following the future problems:

- Food security;
- Welfare and long-term health of the population;
- Climate change and its effects;
- Economic development;
- Elimination of poverty.

Green economy involves the use of natural resources, energy and new technologies with cleaner production methods in order to promote economic growth and creating new jobs. With this concept, we need to create new sustainable consumption and production patterns that do not force the ecosystem. Sustainable development requires dynamism, requires constant change, adaptation and research; all these elements are closely related to environmental conservation and proper use of natural resources. An example in this direction may be the energy field. It is considered that in the next 40 years there will be strong changes in energy consumption and production (according to recent Report by the International Energy Agency on Technological Scenarios for 2050)<sup>(9)</sup>.

The chemical industry is a model for adopted changes in order to replace existing production methods with some lasting and effective ones to obtain a commercial advantage. The policy instruments that could be used in the Green Economy can be grouped into several categories:

- Fair pricing;
- Procurement policies;
- Ecological tax reform;
- Public investment in infrastructure development;
- Public support for research and development in clean technologies;
- Social policies for combining social objectives with economic policies.

### 3. China's Green Economy – a role model?

Green economy in China has started to develop slowly and later than in other countries, yet the results are promising. The success of this country seems to be the investment in research that propelled it to the positive results and growth even in times of economic crisis. In 2010, the installed capacity of wind turbines in China was on first place in the world. It seems that the recovery of solar energy, for example, placed it in first place in this field worldwide. Chinese authorities will allocate in the period 2011-2020, a total of 5,000 billion yuan to develop energy sectors: wind, solar, biological and hydropower, to satisfy the needs of production and daily life of the population with new type energies<sup>(10)</sup>. It seems that this country's investment by 2015 is heading for the sum of 313 billion US dollars to promote low carbon emissions, according to Xinhuanet. The investment will help reduce energy consumption per unit of gross domestic product in China by 16% at the end of 2015, compared to the year 2010, according to Xie Zhenhua's declaration, vice president of the National Development and Reform. Over the last five years, by 2010, the energy consumption per unit of GDP fell by 19.1%<sup>(11)</sup>.

Xie Zhenhua also declared that, in the next five years, China will develop circular economy projects and will establish 100 demonstration bases for the use of flight and launch pilot programs to reduce carbon emissions in five provinces and eight cities<sup>(12)</sup>. Results of this country are not random. Even after the economic crisis, one can see differences between the results in Europe and Asia. In Asia there is growth (8.7%), driven by economic growth in China (+10%), while in the Euro area there can be seen an estimated increase of 1%<sup>(13)</sup>.

China is a country that shallows energy, it is the largest producer and consumer of coal, ranks second in oil consumption and ranks fifth in oil production. Its intention is to dominate the renewable industry worldwide. To promote job growth, China has focused on investment funds directed to green

energy as a basis for global development. Among the objectives of China's energy diversification lists green market, strengthening its leadership position with market share for high-tech products. Harvard Kennedy School Belfer Center conducted a study which showed that China and emerging countries coordinate their energy and their support by government-owned enterprises.

This study covered countries like Brazil, China, India, Mexico, Russia and South Africa and found that by 2020 fabulous sums to create new jobs and increase exports will be invested in renewable energy sources. Along with these results, the investments will be related to positive effects on the environment and natural resources by reducing emissions of greenhouse gases.

Since 1999, China has achieved about 1% of solar cells placed in solar panels to generate electricity. In 2009, China has a 40% market share in this segment. Companies in China are expected to achieve more than half of solar panels in 2011 and almost 80% of the units that produce solar hot water. China prepares for massive exports of high-power wind turbines and the producers intend to sell at lower prices than Western ones.

This country is hunts a leader position in Green Energy and it can be considered a rival on export markets. The success of this country is due to reduced labor costs, along with investment in education, technology, communication and transportation systems. There are not only positive opinions regarding the green economy practiced in China. In the book "When a Billion Chinese Jump: How China Will Save Mankind – or Destroy It", the author, Jonathan Watts, correspondent of The Guardian, warns that problems were created in China and might not find solution. In his opinion, what he saw in China is not good for humanity, claiming that this Green Economy adopted by this country is only a generalization. One example, reported in the paper presents children in a province of China who choose all parts that can be reused from all the world computers. In this selection, children can become ill from toxic emissions having to wear masks all the time to avoid the toxic garbage. The persons that oppose to these activities are arrested to help the cycle continue.

The great rivers of Asia have begun to drain and it is estimated that two thirds of them will disappear by 2050 due to accelerated melting of glaciers in the Himalayas. These examples could continue, but despite all the criticism, China has shown that it manages well this issue by obtaining exceptional results in the green economy. They have propelled it into first place and brought positive records on all levels. The policies to support exporters and preferential policies in tax and labor-intensive adopted in the sectors of high technology have alleviated the crisis, helping China to record better results than other countries.



## Conclusions

The transition to a green economy involves practicing an economy based on investment policies and the connection between economic development, biodiversity, ecosystem, climate change, health and welfare of the medium and long term. These premises must be connected together to achieve sustainable development, considered the resumption of economic growth at a global level.

The transition to green economy involves a proper concern focused on knowledge, research and innovation to create a good framework designed to promote long term sustainable development.

In the current economic conditions, strongly affected by the post-crisis effects, the EU feels the pulse of future events that may mark the path for the future of the states of the world and tries to get involved as much as possible to find solutions that can be adopted and adapted both at central and local level.

European Union seeks a renewal of activity in global sustainable development by: defining and implementing various aspects of the green economy, environmental, financial assistance and technology transfer and know-how (especially for developing countries), substantiating various aspects of governance for sustainable development, involving the whole society in Europe to optimize vision in Rio and providing the necessary political support.

The new economic system based on sustainable development is likely to become the solution to overcome environmental, economic and social development problems and it also follows to manage the crisis effects. In this sense, it is necessary to take measures by using appropriate policies to create conditions to support economic growth and poverty reduction. Green economy involves the use of natural resources, energy and new technologies with cleaner production methods in order to promote economic growth and creating new jobs. With this concept, we need to create new sustainable consumption and production patterns that do not force the ecosystem. Sustainable development requires dynamism, requires constant change, adaptation and research and all these elements are closely related to environmental conservation and proper use of natural resources.

China is a country that swallows energy constantly, it is the largest producer and consumer of coal, ranks second in oil consumption and ranks fifth in oil production. To promote job growth, China has focused on investment funds directed to green energy as a basis for global development. Among the objectives of China's energy diversification lists green market and strengthening its leadership position with market share for high-tech products. China has shown that it manages well the waste issues by obtaining exceptional results in the green economy. They have propelled it into first place and brought positive records at

all levels. China can be regarded as a role model especially in terms of sustainable development, although the methods it uses for recycling have carried controversial opinions among many experts who fear long-term negative effects.

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## Notes

- (1) Report of the World Commission on Environment and Development: Our Common Future, Transmitted to the General Assembly as an Annex to document A/42/427 - Development and International Co-operation: Environment, UN Documents Cooperation Circles, the NGO Education Committee of the Conference of NGOs.
- (2) United Nations Conference on Sustainable Development will be held in Rio de Janeiro on 4-6 June 2012.
- (3) European Commission Communication on the guidelines adopted for preparing the ground for the EU position at the conference "Rio +20" UN Sustainable Development, will be held in Rio de Janeiro in June 2012.
- (4) We refer to the book of J. Stiglitz, "The Free Fall", and published by Public House, Bucharest, 2010.
- (5) See Official Journal of the European Union, 2011/C 48/12.
- (6) „Harmonised unemployment rate by gender” – total, Eurostat, August, 2011.
- (7) „Employment rate by gender, age group 15-64”, Eurostat, September, 2011.
- (8) Bloomberg is an American news agency specializing in surveys in over 126 countries.
- (9) See Official Journal of the European Union 2011/C 48/12.
- (10) See Official Journal of the European Union 2011/C 48/12.
- (11) See Official Journal of the European Union 2011/C 48/12.
- (12) We refer to Xie Zhenhua's (the Deputy Chairman of National Development and Reform Commission) declaration dated July 17, 2011.
- (13) According to OECD report published on June 15, 2011.

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