THE 8TH EDITION OF THE INTERNATIONAL CONFERENCE
EUROPEAN INTEGRATION
REALITIES AND PERSPECTIVES

Green Economy – A New Dimension of Development

Raluca Mihalcioiu[1]

Abstract: The "Green Economy" has been recognized by the international community (United Nations) as a key strategic tool for sustainable development. The transition to a green economy must be a task for all countries - for developing but also for developed countries. Economy and consumers should therefore be able to accelerate the economic transformation for their own interests. In developing this concept representatives of business, trade unions and environmental organizations are involved to ensure the practicability and application ways. After 4 years of crisis the concept of the green economy is an important principle if not to avoid but at least soften their negative effects. This paper focuses on definitions upon the concept of green economy and describes its characteristics in relation with the social market. It also tries to find the answer of the question if the green economy is the best way to choose in order to provide a sustainable economic development. Moreover, the article critically examines the concept of the green economy at the intersection between environment and economy.

Keywords: sustainable development; economy; environment; performance; social equity

1. Introduction

As a new global economic paradigm the concept of green economy wants to help the sustainable development breakthrough. But its social skills still need to be proved. In the search for sustainable economy and development models, the concept of "green economy" increasingly takes place of the term of „sustainability", and it is also based on the idea of a global "Green New Deal". But while the United Nations Environment Programme (UNEP) defines „Green Economy" as an economy which improve well-being and social equity, while significantly reducing environmental risks and ecological scarcities, many doubt that the concept of Green Economy is able to stimulate the idea of sustainable development.

2. Definitions of "Green Economy" and Sustainability

According to the definition of the World Commission on Environment and Development from 1987, the so-called "Brundtland Commission", the concept of sustainable development describes a process that meets the needs of the present generation without compromising the ability of future generations to meet their own needs. Sustainable development thus combines economic development with the protection of the environment and natural resources as well as social needs.

Can be added anything new to this concept of sustainable development? For the definition of "green economy" were formulated different approaches by both the United Nations Environment Programme

[1] Senior Lecturer, PhD, Spiru Haret University, Bucharest, Romania. Address 13, Doamnei Str., Bucharest, Romania. Tel.: +4021 455 1000. Corresponding author: raluca@spiruharet.ro.

(UNEP) and the International Chamber of Commerce (ICC). According to the Environmental Economy Report 2011 of the Federal German Environment Ministry, the concept of „green economy" is based on the knowledge that an economic system that destroys the natural resources cannot create a sustainable prosperity. The concept thus includes the transition to an economy that operates within environmental principles and it can be characterized by the following features:

- the continuous reduction of harmful emissions and pollutant entries into all environmental bodies;
- • a recycling economy, will be closed as much as possible in the biogeochemical cycles;
- • an absolute reduction of resource consumption through more efficient use of energy, raw materials and other natural resources, and by the substitution of non-renewable resources with renewable resources;
- • the protection of the environment;
- • a power supply that is based exclusively on long term renewable energy;
- • the conservation of biodiversity and restoration of natural habitats.

After a broader definition of the concept, the green economy is an economic system, which is characterized by innovation-driven, ecological and participative growth and is supported by two pillars: on the one hand, a strong environmental technology sector, on the other hand of companies with wide experience in sustainability sectors of the economy, that pursues a sustainable development strategy. These companies have integrated sustainability into all levels of their management system ("Sustainable Business"). In this case, four stakeholder groups affect the development of the Green Economy: politics, business, customers and investors.

Therefore, a green economy requires production processes, products and services that help organize the economic development within environmental guidelines so that climate, air, water, soil and biodiversity are not affected beyond its physical boundaries. From this it can be drawn the conclusion that the term "green economy" is an important subject in a sustainability strategy because it integrates both the environmental and economic pillars at the same time by putting a lower emphasis on the social pillar.

3. The Transition to a Green Economy in Germany

The progress in the transition process to a green economy is often moored in the development of energy and resource productivity, which is also the first of the 21 indicators, which are listed in the national sustainability strategy. The second indicator follows the development of the emissions of the six greenhouse gases under the Kyoto Protocol. For this, it contributes especially the use of renewable energy sources for electricity and heat generation in addition to the energy savings and increased energy efficiency. For these indicators, targets and actual values can be compared with each other.

The goal of the National Strategy for Sustainable Development is a doubling of the overall economic energy productivity by 2020 compared to 1990. In addition, the primary energy demand from 2008 to 2020 should be reduced by 20%. In fact, the energy productivity increased from 1990 to 2011 by 47.7%, measured as the price-adjusted GDP per unit primary energy consumption in Germany (as shown in figure 1.)

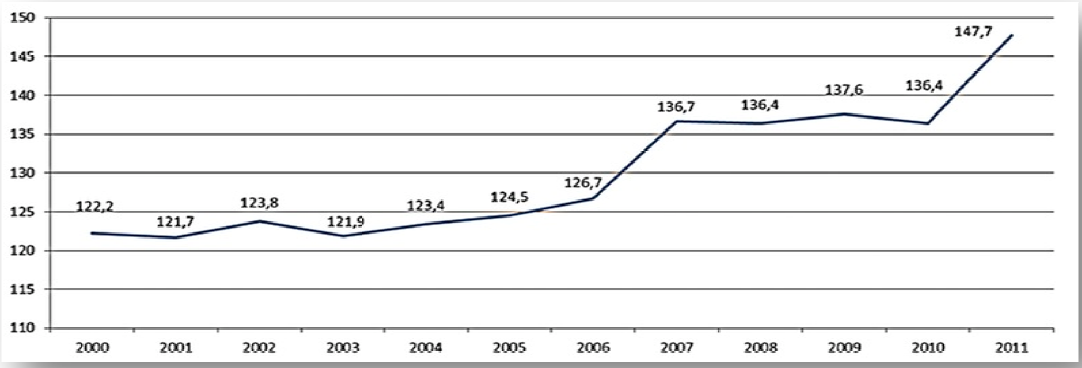

Figure 1. Development of Energy Productivity in Germany 2000-2011

Source: Federal Statistical Office

However, during that period the absolute reduction in primary energy demand was only 6.8%, so the increase in efficiency was thus largely offset by economic growth. A continuation of the previous average rate of development would be sufficient neither for productivity nor for the energy in primary energy consumption to achieve the goals set by the year 2020.

Similarly is the relation of the raw material productivity, measured as the price-adjusted GDP per ton inserted abiotic primary material. This is to be doubled according to the National Sustainability Strategy until the year 2020 compared to the level of 1994. In fact, it has increased 1994-2011 by 43.6%, although recently entered a decline of 4.5 percentage points (as we can see in Figure 2).

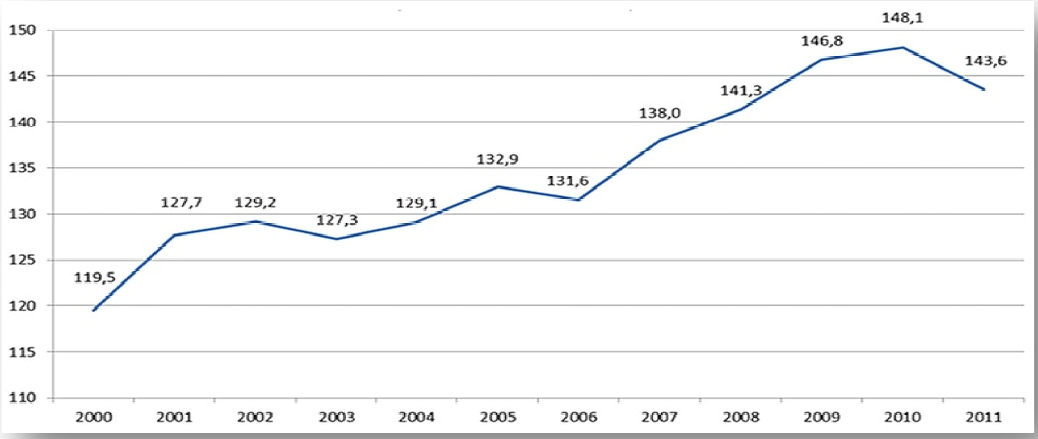

Figure 2. Development of Resource Productivity in Germany 2000-2011

Source: Federal Statistical Office

Thus, although the indicator developed in the right direction, the pace of increase in the last five years would not be sufficient to achieve the target.

Finally, according to the Renewable Energy Directive of the EU, the share of renewable energy in total gross in the EU has to increase to 20% by 2020. There is a target value of 18% for Germany. In respect of production is the goal of the federal government to reach a share of 35% renewable energy

by the year 2020. The share of renewable in final energy consumption in Germany accelerated from 1.9% in 1990 to 12.5% in 2011. This shows that the target would be achieved without problems if the development of the last five years were to continue like this.

Its share in gross electricity consumption grew in the same period from 3.1% to 20.3% at, which the interim target for 2010 (12.5%) was significantly exceeded. Thus, the process of transformation to a green economy in terms of renewable energy expansion reached a high degree of achievement, in terms of energy and resource productivity. It still exists however, the risk of missing the target.

4. Rebounding - Effects

These partial successes on the way to a green economy can be put into question entirely from a growth-critical position. As we can see from the indicators on sustainable development, the green growth strategies based on efficiency improvements have only limited success, as rebounding effects result by the increased efficiency in the use of energetic and non-energetic resources: the saved funds generate in turn an increased demand for the resource consumption associated with the services or a higher demand for other goods, which in turn increases the consumption of energy and raw materials that must be used. Thus, the initial efficiencies are neutralized or even overcompensated. In this case investment in green technologies lead to a reduction of the specific environmental pressures, but it doesn't drive to their absolute reduction.

Rebound-Effekte ließen sich dann nur vermeiden, wenn die durch Effizienzsteigerungen erreichten Einkommenszuwächse abgeschöpft würden oder man gleich auf Wirtschaftswachstum verzichtete. Eine allein auf Effizienz beruhende Strategie wäre demnach nicht ausreichend, um das Überschreiten ökologischer Leitplanken zu verhindern, sie müsste durch eine Suffizienzstrategie ergänzt werden, die, statt auf ein umweltverträgliches Wachstum des BIP zu setzen, stärker den Verzicht als gesellschaftliches Leitbild propagiert./ Rebound effects could be avoided only if the achieved efficiency gains through increases in income would be skimmed off or if one refrain the economic growth. Therefore, one based solely on efficiency strategy would not be sufficient to prevent the crossing of ecological barriers. They should be supplemented by a sufficiency strategy, which higher promote the renunciation as a role model instead of setting to a sustainable GDP growth.

5. Conclusions

Many developing countries and some emerging countries but also the civil society groups worldwide are skeptical to the concept of „Green Economy". The main threats to critics are on the one hand a lack of differentiation of the concept. Especially economically weak countries fear that they cannot be covered in a „one size model" that serves the interests of the rich countries but their own needs are however disregards. On the other hand, increasingly voices are heard, who say that the green economy approach is thought to shorten the development model of sustainable eco-economical and not to take sufficiently into account the social dimension. Moreover, it is feared, a Green New Deal could be abused by the industrialized nation's protectionism for the construction of a new, "green" and used to ecologically based conditionality financial support.

But also many people of industrialized countries face the challenge of a comprehensive structural change with conflicts run across industry, science, civil society and politics. This has not only positive aspects. This skepticism is fed by the uncertainty regarding the ability to compete in a "green" world,

but especially from the fear of loss of jobs and economic growth but also to exacerbate the social inequalities.

In emerging and developing countries must be developed strategies also by involving civil society actors, as the transition to climate-friendly low carbon economies in terms of a "green recovery" both within society and at the global level can be socially equitable. This involves a single recipe for overcoming the existing structural problems found. Rather, the common issues and challenges should be identified in order to develop models that take into account the economic structure and the political and socio-economic processes in each country. Very important to stress is also the degree and nature of specific county involvement in global processes.

6. Bibliography

Binswanger, M. (2001). Technological Progress and Sustainable Development: What about the Rebound Effect? *Ecological Economics 36*.

Paech, N. (2012). Das Wachstumsparadigma hat ausgedient – Vom grünen Feigenblatt zur Postwachstumsökonomie/ The Growth Paradigm Is Obsolete - From Green Fig Leaf for Post-Growth Economy. *Ökologisches Wirtschaften/ Ecological Management 4*.

Petersen, T. (2012). *Nachhaltiges Wirtschaften – ganzheitliche Strategien und Prinzipien, Zukunft Soziale Marktwirtschaft/ Sustainable Management - Holistic Strategies and Principles, Future Social Market Economy*. Gütersloh.

Wackelbauer, J. (2013). Green Economy: von der Theorie zur Praxis/ Green Economy: from Theory to Practice. *Zeitschrift für Energiewirtschaft, Recht, Technik und Umwelt/ Journal of Energy Economics, Law, Engineering and the Environment, April.* Essen.

*** Bundesministerium für Umwelt/ Federal Ministry for the Environment. *Naturschutz und Reaktorsicherheit und Umweltbundesamt (Hrsg.)/ Nature Conservation and Nuclear Safety and the Federal Environment Agency (ed.): Umweltwirtschaftsbericht 2011- Daten und Fakten für Deutschland/ Environmental Industry Report 2011 Facts and Figures for Germany, September*. Berlin, Dessau-Roßlau.

*** Bundesministerium für Umwelt/ Federal Ministry for the Environment. Naturschutz und Reaktorsicherheit (2012) Hrsg./ *Nature Conservation and Nuclear Safety (2012) ed.* GreenTech made in Germany 3.0 – Umwelttechnologieatlas für Deutschland/ Environmental Technology Atlas for Germany, February. Berlin.

*** Statistisches Bundesamt/ Federal Statistical Office (2012). *Nachhaltige Entwicklung in Deutschland – Indikatorenbericht 2012/ Sustainable Development in Germany - Indicator Report, February*. Wiesbaden.

*** Umweltbundesamt/ Federal Environment Agency (2012). Schwerpunkte 2012/ Focus 2012. *Jahrespublikation des Umweltbundesamtes/ Annual publication of the Federal Environment Agency*. Dessau-Roßlau.

*** United Nations (2012). Report of the United Nations Conference on Sustainable Development Rio de Janeiro. Brazil, 20-22 June, 2012, New York.

*** United Nations, General Assembly: Distr. GENERAL A/42/427 4 August 1987.Report to the World Commission on Environment and Development.

Online sources

www.fes-sustainability.org/de.