

GREEN ECONOMY PERFORMANCE, RESULTS AND COMPARISON BETWEEN WESTERN BALKAN COUNTRIES AND CHINA

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Abstract: Greening the economy plays a significant role in achieving sustainable development, as a paradigm with no alternatives for the survival of the planet Earth. It is the only way to create a positive impact both on the society and the environment. Hence, it is an inclusive concept, embedded in the overall development of a country, which emphasizes a responsible way of planning and acting. The green economy trend is increasingly present worldwide; an increasing number of countries are developing and implementing policies and practices that support the green economy concept.

The main objective of this research is to emphasize the commitment of the Western Balkan countries and of People's Republic of China in regard to greening their economies. The methodological framework rests on the several scientific methods - analysis, synthesis, induction, deduction, selection, generalization and comparison.

The research focuses on policies and practices that contribute to green economy in non-EU Western Balkan countries: the Republic of North Macedonia, Republic of Montenegro, Republic of Serbia, Republic of Bosnia and Herzegovina, and Republic of Albania. At the same time, this Paper emphasizes the policies and successful practices implemented in the People's Republic of China, as one of the world's leading economies that is rapidly moving on the path of greening its economy.

In order to quantify the countries' efforts towards the Green Economy, the Green Growth Index is presented and used.

The results of the research point to the conclusion that in the selected Western Balkan countries and the People's Republic of China, efforts are being made for implementation of the concept of green economy, but there is much that can be done to improve it.

Keywords: green economy, sustainable development, Green Growth Index

1. METHODOLOGICAL FRAMEWORK

For the purposes of this research, six countries were selected for gathering data and analyses, - five Western Balkan countries and China. The countries of the Western Balkans were chosen because of several important common characteristics - they are developing countries, are not member countries of the European Union, have aspirations for EU membership and belong to the same geographical region. China, on the other hand, was chosen because it is one of the leading economies of the world. The research was based on relevant and recent (from 2000 onwards) documents and data.

From a methodological point of view, the research follows both the qualitative and quantitative approach. The concept of green economy is very broad and difficult to investigate. Therefore, we adjusted by selecting particular areas for our research aim. We assessed the following 5 broader areas: climate change, circular economy, environment (air, water, soil), biodiversity and social inclusion. These areas were identified by the methods of deduction and selection.

Within the qualitative approach, several techniques and instruments were implemented: analysis of national strategies, programs, laws and by-laws; analysis of official information and data obtained from relevant institutions; and collection of secondary information and their analysis.

Research was mostly focused on data analyzes and content analyzes. The methods of synthesis and induction were used to formulate views for better description of the situation. These two methods were used in particular for research of Serbia, Montenegro, Albania, and Bosnia and Herzegovina. Conclusions were drawn using the generalization method.

Precisely because the concept of green economy is broad one, in order to detect the directions countries are following towards establishing green economies, the Green Growth Index is presented. Using this index, the quantitative approach was applied when determining the extent to which the selected countries implement green economy policies. The quantitative approach was also applied when comparing their results.

2. INTRODUCTION

The concept of “green economy” is relatively new, emerging as a more focused aspect of sustainable development, which has been established worldwide quite earlier. Green economy is perceived as a pathway to sustainability, as an “umbrella” concept encompassing various aspects and implications with regard to economic growth and well-being, or efficiency and sustainable natural resources utilization. It can be defined as “one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities”¹. More strictly, it can be said that the fundamentals it lies upon are:

- De-carbonization - transition from fossil fuels to renewable energy and to a climate neutral economy;
- De-pollution of air, water and soil, including reduction of: greenhouse gas emissions, heavy metal dispersal and erosion;
- Circular economy aimed at steering Governments and private companies for active transition of all sectors of the economy towards sustainability;
- Biodiversity protection in order to restore the natural resources;
- Social inclusion that will enable creating conditions for enhanced prosperity and growing social equity, as a vision of “society for all”.

Each country aiming to bear the epithet of a responsible one, should incorporate policies that lead to greening their economies, because the consumer economy, in essence anthropocentric, has been pinpointed in the last several decades as a fundamentally negative factor disturbing numerous environmental parameters, from micro- to the global level. As a counterpoint to the consumer economy, the term green economy is steadily gaining popularity, as one, if not the only mean for overcoming environmental problems we are facing as a civilization. Although considered as narrower than the sustainable development, the depth and width of green economy can be recognized by the areas it contains.

Green economy should be the basic tissue integrated in all social and economic aspects of development of a country, steering it to accountable ways of planning and acting. Thus, countries and societies which want to be considered as responsible need to commit to policies which promote and assist green economy.

When comparing the green economy performance of Western Balkans countries, and on the other hand, China, it has been a challenge, since their difference in various aspects: size, economic power, geographic position, aspirations... The countries of the Western Balkans – North Macedonia, Bosnia and Herzegovina, Montenegro, Serbia, Albania – all relatively small by area, situated in Europe, with a strategic goal of becoming members of the European Union, economies considered as developing... The People’s Republic of China, a financial and economy powerhouse, large by area, situated in Asia... To our knowledge, this is the first Paper discussing and comparing green economy efforts and achievements in such dissimilar countries as Western Balkan countries and China.

We investigated the framework of policies (laws, strategies) in all of the five green economy areas mentioned ahead. This paper aims to analyze the prospects in five Western Balkans countries and People’s Republic of China in the context of the green economy. It strives to provide an answer to the questions: whether the selected Western Balkan countries create and implement policies supportive to green economy? Is China doing that? To answer those questions, the Paper is composed of four sections.

The first part gives an illustration of the policies supportive to the concept of green economy implemented in selected Western Balkans countries. The second part is focused on the People’s Republic of China, its policies and practices toward greening its economy. The third section examines the current state in all of the selected countries concerning the Green Growth Index. The last part draws conclusions for both Western Balkan countries and China regarding their efforts towards green economy.

3. POLICIES FOR GREEN ECONOMY IN SELECTED WESTERN BALKAN COUNTRIES

By analyzing the available relevant data, several features have been detected that are common for Montenegro, North Macedonia, Bosnia and Herzegovina, Serbia and Albania. To begin with, do not forget that all Western Balkan countries, with exception of Albania, were constitutional parts of Socialist Federal Republic of Yugoslavia and that its Constitution from 1974 was the first Constitution in the world that recognized the man’s right to a healthy environment. (Matlievska, Pushova Stamenkova, Matlievska, 2021). Article 192 (Chapter III: Freedoms, rights and duties of man and citizen of the Constitution) reads: “Man has the right to a healthy environment”.

By our thorough research, several facts captured our interest: that there is not an individual strategy or law, which would exclusively encompass the concept of green economy. There have been created national strategic documents

¹ 2011b Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication. A Synthesis for Policy Makers <http://www.unep.org/greeneconomy/GreenEconomyReport/tabid/29846/Default.aspx>.

in all areas, which can be considered as supportive to green economy, although their compliance is not at high level; we have detected lack of clear goal, clear vision which would reflect the determination towards green economy. As to the laws in the areas of research, the majority of them are harmonized with European legislation (which is obligatory for countries aspiring to become EU members), by which it can be assumed that they are supportive of green economy. In various areas, various practices are being applied which are supportive of this concept, on central or at the local level; their number, although increasing in recent years, cannot be considered as sufficient and satisfactory at the moment.

Through the research and analyses, it is noticeable that the Western Balkan countries in general, practice policies (laws and strategies) for protection of the environment, and this can be considered as an important step towards achieving green economies. There is evidence of initiatives, projects and programs, planned, ongoing or executed, related to the promotion of, or implementation of various aspects of green economy in all Western Balkan countries. However, on the state level, none of these countries has adopted, nor projected, to our knowledge, singular laws or strategies exclusively related to green economy. Instead, various aspects of green economy, in a stricter or in a broader sense, directly and indirectly, are treated within legislation and strategies of related fields, such as environment protection, pollution prevention, energy efficiency, climate change mitigation, biodiversity and ecosystem protection, sustainable transport, sustainable agriculture, sustainable forestry, sustainable water management, etc.

There are also various studies and reports (funded by, executed or lead by UNECE, UNDP, UNEP, World Bank, EU, EBRD, and others) for Western Balkan countries, either on an individual level, a bilateral or a multilateral, with analyses of the state of the areas related to various aspects of green economy. However, data and analyses are difficult to be compared or related, because of the different approaches and methodologies used, and because of variable duration and scope of the studies. Therefore, it is practically impossible to assess the level and the depth of implementation of green economy related policies in countries of Western Balkan.

However, there is an evident lack of financial support and funding for relevant large-scale projects, which would contribute to a faster adjustment of these countries towards greening their economies. Apart from the small possibility to self-invest into greening their economies, Western Balkan countries have a noticeable insufficiency of good practices in some crucial areas such as road and railroad infrastructure, transformation from coal/lignite-heavy towards CO₂-neutral economies (wind, solar, geothermal energy), recycling, energy efficiency, pollution (air, water, soil), biodiversity, etc... Although there are examples for good practices in all countries of the Western Balkan and in most areas, they are only a few and in deficient number or level.

Some green economy aspects have been supported by various political and financial entities, especially from the EU, as part of the support towards the transition and accession processes of all Western Balkan countries to the EU. Still, no matter how big and important these recent financial, political and administrative contributions have been, there is still an evident need for long-term and substantial financial investment in various green economy related projects and infrastructure.

In all Western Balkan countries, UNDP-supported projects are implemented, tailored with each of the areas of green economy. For instance, in North Macedonia - self-employment; Bosnia and Herzegovina - energy / resource efficiency and less air pollution; Montenegro - reduction of carbon dioxide; Albania - protection of biological diversity; Serbia - circular economy. Further on, EBRD projects that support improving the energy efficiency and investments in implementation of the renewable energy projects (wind farm and solar power plant) were also performed.

4. POLICIES FOR GREEN ECONOMY IN THE PEOPLE'S REPUBLIC OF CHINA

People's Republic of China has been experiencing a very rapid growth; China is a country which economy is among several biggest world's economies and became a synonym for "the world's factory". But, China's negative environmental impacts cannot stay unnoticed as it is the biggest contributor to GHG emissions. However, since China recognized the importance of environmental protection, a significant progress has been made. At the beginning, the early development policies have been dedicated only to a basic environmental protection. As years were passing, those policies started to cover a larger concept of sustainability and China's strategies started to refer to 'green development' and 'ecological civilization'.

The most important policy document of China is the Five-Year Plan. The 13th Five-Year Plan is of essential relevance in directing the overall China's green economy evolution at the macro level until 2020. It is the one that is the most environmentally focused, and is strongly supporting the government at its economic commitment to a more sustainable growth. This plan addresses China's "unbalanced, uncoordinated, and unsustainable growth" and creates a "moderately prosperous society in all respects".

Not only that, but the China's commitment stated in it, also focuses on improving the citizens' quality of life, through making the environment, health, education and social welfare, China's priorities. The 13th Five-Year Plan is based on 5 fundamental themes, among which

- Green growth: The 13th FYP supports and strengthens China's commitment to confront the severe environmental degradation and to build its clean energy and green manufacturing sectors efficiently. Moreover, out of its 25 total targets, 10 of them are environmentally related and they are all binding that must be accomplished by 2020. Those targets represent the China's ambitious goals for city air quality, carbon dioxide intensity, and reduction of soil and water contamination.
- Inclusive growth: The Chinese government is working on an inclusive growth for its citizens by setting targets that will lessen poverty, raise the standard of living, improve accessibility and affordability of healthcare and other social services, and promote education

These targets and policies on a macro level show the serious China's responsibility towards 'ecological civilization' which will lead not only to positive changes in China, but also on a global scale. It is of particular importance that China's businesses understand the necessity of applying environmental standards and greening their operations. There are some successful stories of companies' practices: GEM Co. Ltd - which is China's market leader in material recycling; Guangzhou Huadu Worldwide Transmission as an example in the remanufacturing industry; the city of Suzhou as a model of an effective collection of waste and a program for its processing; FINCH Designs' Kaye – a company which produces fancy clothing for swimming from recycled plastic bottles, remarkably reducing the GHG emission, reducing water use; Mobike, a company which operates in the area of bike-sharing – it developed a process for recycling that contributes to decreasing the air pollution and efficiency in resource use.

5. MEASURING THE GREEN ECONOMY

In pursuance of illustrating the countries' efforts towards a green economy in a quantitative way, the Green Growth Index (GGI) which measures Green Growth, was used. To do so, the definition of green growth has to be compatible with the definition of green economy.

We used the definition as the one used by Global Green Growth Institute: "Green Growth is a development approach that seeks to deliver economic growth that is both environmentally sustainable and socially inclusive. It seeks opportunities for economic growth that are low-carbon and climate resilient, prevent or remediate pollution, maintain healthy and productive ecosystems, and create green jobs, reduce poverty and enhance social inclusion". Consequently, Green Growth Index (GGI) can be considered as one that measures country's performance in achieving green economy. And again, according to the Global Green Growth Institute (2015): "Green growth is a development approach that seeks to deliver economic growth that is both environmentally sustainable and socially inclusive. It seeks opportunities for economic growth that are low-carbon and climate resilient, prevent or remediate pollution, maintain healthy and productive ecosystems, and create green jobs, reduce poverty and enhance social inclusion." (GGGI, p.120).

The aim of the Green Growth Index (GGI) is to measure the countries performance in achieving the targets of sustainability. Targets for four green growth dimensions are: Efficient and sustainable use of resources; Protection of the natural capital; Green economic opportunities and Social inclusion.

For each of these dimensions, indicators that give a score are determined and the GGI's calculation is based on them. The Green Growth Index scores and its dimensions are in the range from 1 to 100; 1 presents the lowest or very low performance and 100 presents highest or very high performance. The scores can be perceived interpreted as:

- For 80 to 100 – present very high scores meaning that the country have reached or almost reached the target.
- For 60 to 80 – present high scores, meaning that the country have taken the strategic position to completely reach the target.
- For 40 to 60 present moderate scores, meaning that the country is moving forward to reach the target.
- For 20 to 40 present low scores, meaning that the country is in the process of identifying the appropriate policies to calibrate its development toward achieving the target.
- For 1 to 20 present very low scores, meaning that the country need actions to improve its position regarding the target.

Out of 43 countries in Europe, Western Balkan countries have the following scores and rank as follows:

On 30-th place is Serbia with the score 52. In Efficient and sustainable resource use its score is 40.26. In Natural capital protection its score is 74.02. In Social inclusion its score is 74.83 and in Green economic opportunities its score is 33.89.

Albania is on 31-th place with score of 52. In Efficient and sustainable resource use its score is 40.26. In Natural capital protection its score is 74.02. In Social inclusion its score is 74.83 and in Green economic opportunities its score is 33.89.

Montenegro takes the 35-th position with score of 40. In Efficient and sustainable resource use its score is 57.54. In Natural capital protection its score is 68.12. In Green economic opportunities its score is 9.40 and in Social inclusion its score is 72.36.

On 37-th place is Bosnia & Herzegovina with the score of 35. In Efficient and sustainable resource use the score is 40.15. In Natural capital protection its score is 62.24. In Green economic opportunities its score is 9.27. In Social inclusion its score is 64.66.

Regarding North Macedonia, the situation is different because there are not enough information to calculate the score and its overall rank – no data for Green economic opportunities.

In other pillars, North Macedonia has the following scores: 45.09 in Efficient and sustainable resource use; 78.15 in Natural capital protection and 73.97 in Social inclusion.

Out of 49 countries in Asia, China is ranked as 5-th, having 55.41 as overall GG Index. Its scores in the distinct pillars are as follows: 34.49 in Efficient and Sustainable Resource; 70.15 in Natural Capital Protection; 55.41 in Green Economic Opportunities and 70.32 in Social Inclusion.

6. CONCLUSIONS

The Western Balkans countries (with the exception of North Macedonia, for which there is no data on the dimension Green economic opportunities) are ranked between 30th and 40th out of 43 surveyed countries in Europe. This shows that the investigated countries from the Western Balkans should increase their efforts in the pillars of Efficient and sustainable use of resources, Natural capital protection and Social inclusion. The lowest scores are noticed in the pillar of Green economic opportunities, implicating those Western Balkan countries should put greatest emphasis on Green economic opportunities, since moderate grades are noticed in that dimension.

China is ranked on the 5-th place, out of 49 countries surveyed in Asia, indicating that it is one of the leading Asian countries in the area of green growth. Yet, China can improve, especially in the dimension of Efficient and sustainable resource use, where it has lowest score.

Broadly translated our findings indicate that all investigated countries are on the path towards greening their economy. In all investigated countries, policies and laws are created, practices and projects are implemented supporting green economy. Yet, there is so much to be done. Because, the time has come!

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