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Idea zielonej ekonomii – ograniczenia, perspektywy, implikacje

Green Economy Idea – Limits, Perspectives, Implications

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Streszczenie

Artykuł ten podejmuje ideę "zielonej gospodarki", jako jedną z możliwych odpowiedzi na problemy o wymiarze globalnym, związane z działalnością gospodarczą człowieka i jej konsekwencjami – często szkodliwymi – dla perspektyw rozwoju na naszej planecie. Wymaga to np. dostrzeżenia napięć jakie powstają, gdy „tradycyjny", generujący duże zanieczyszczenie środowiska, przemysł staje wobec wyzwań innowacyjnej gospodarki. Warto zwrócić uwagę na próby rozwiązania tych problemów, wymagających odpowiedniego kształtowania systemów gospodarczych, tak aby przyjęły one formy bardziej zrównoważone. Kilka podstawowych odpowiedzi zostało już zaproponowanych (np. *material cycle thinking*, czy podejście 3R – *reduce, reuse and re-cycle*). Rozwijane są też bardziej skomplikowane rozwiązania w skali globalnej, regionalnej czy globalnej.

W tekście zaprezentowane zostaną niektóre strategiczne odpowiedzi na globalne problemy środowiskowe, powodowane między innymi przez „tradycyjną" działalność przemysłową i politykę gospodarczą. Odpowiedzi te kryją się za pojęciami, takimi jak „zielony rozwój", „zielony wzrost", czy „zielona gospodarka".

„Zazielenianie gospodarki" jest w coraz większym stopniu postrzegane jako konieczność. Jednocześnie, hasło to wnosi nowe nadzieje i inspiracje do debat politycznych na różnych forach (takich jak UNEP, UE, OECD) i w różnych procesach politycznych (np. proces ministerialny „Środowisko dla Europy", proces przygotowawczy do światowej Konferencji ONZ ws. Zrównoważonego Rozwoju – „Rio+20" i in.). Artykuł jest próbą ukazania, jak wyzwania dla środowiska i zrównoważonego rozwoju są podejmowane przez te fora, jakie instrumenty polityczne są w związku z tym rozwijane i w jaki sposób może się to przyczynić do otwarcia perspektyw dla bardziej zrównoważonej przyszłości. Zostaną tu przywołane główne strategie i kluczowe instrumenty na różnych poziomach zarządzania, ze wskazaniem na niektóre nowe możliwości i wyzwania, jak również na niektóre zagrożenia oraz perspektywy pomyślnego zastosowania tych strategii i instrumentów. Ukazane zostaną także wyłaniające się ograniczenia idei „zielonej gospodarki", jak też możliwe implikacje i perspektywy dla bardziej złożonych i trwalszych rozwiązań. Dodatkowo, patrząc z szerszej perspektywy, zostanie zasygnalizowana propozycja nowych elementów dot. ram systemowych w skali globalnej, które stymulowałyby rozwój inkluzywny i zrównoważony. Proponuje się tu pewne zmiany instytucjonalne, w tym dotyczące wczesnego ostrzegania i monitoringu wyprzedzającego (*preemptive monitoring*).

Abstract

This paper is going to discuss the "green economy" idea[1] as a possible answer to the global concern of human economic activities and their (harmful) consequences to the future development perspectives for our planet. Inevitably, it has to refer to the tensions between traditional polluting industry and the challenges of innovative economy. We will look at the attempts to solve the emerging problem of how to form economic systems to make them more sustainable. Some elementary answers (e.g. sustainable material cycle thinking, 3R solutions etc.) are already there. Some more complex approaches being currently developed on local, regional, national and global scales are also to be mentioned.

[1] The word "idea" seems to be more appropriate here than the word "concept". At the moment the *Green economy* is a kind of loose collection of interconnected ideas rather than a crystallized concept.

The essay will present some strategic policy responses to global environmental problems caused i.e. by traditional industrial economic activities and policies. These responses are hidden behind the notions of "green development", "green growth" or "green economy".
"Greening the economy" is increasingly perceived as a must and it brings new hopes and inspirations to political debates on different fora (like UNEP, EU, OECD) and political processes (e.g. "Environment for Europe" process within UN ECE, Rio+20 process etc.). We will show how environmental and sustainability challenge created by world economic system is being dealt with and addressed by these fora, what policy tools are being developed, and how it can contribute to more sustainable future. We will refer to main strategies and key instruments which are already in place at different levels, indicating some opportunities and challenges, as well some pitfalls and perspectives for success in applying these strategies and instruments. Finally, the paper will point out looming limitations of "green economy" idea and possible implications and perspectives for more complex and durable solutions. Additionally, looking from a broader perspective, a proposal will be put forward for new systematic framework arrangements on global scale to stimulate inclusive and sustainable development of the world. Some institutional changes/reforms are here proposed, including those related to early warning and preemptive monitoring.

key words: green economy, green growth, sustainable development, global environmental issues

1. Introduction

Traditional patterns of liberal economy along with common understanding of growth and prosperity have recently been severely challenged by notable symptoms of global environmental, economic and financial crises (Tuziak, 2010; Piontek, 2010). This challenge, has imposed a sense of urgency on political discussions in major fora - both national, regional and global. These, being magnified by expected costs of inaction to be born, caused many political leaders to declare the urgent necessity of seeking to new solutions for global economic and financial systems.
Economic growth, characterized by the volume of production and consumption has been widely perceived as predominant factor and condition for social development, while GDP achieved a status of most reliable and almost exclusive test of efficiency of the economic systems ruled by the "invisible hand". Thus the presumption is maintained here that GDP reflects also the potential of the society to develop. Since sustainable development became a major and overarching policy objective in many countries and regions as well as globally, the ongoing political and scientific discussions on possible ways out of the crisis include deliberations on how to link this development and the concept of growth, so that economic growth better contributes to the real social development while at the same time not worsening the state of the environment (Berger, Sedlacko, 2010; Durbin, 2010; Sanchez, 2008, Venkatesh, 2010; Redclift, 2009). Long lasting reflection on above problem resulted in some attempts aimed at identifying this link through formulation of strategic visions by different international fora (UNEP: *Green Economy Initiative*, OECD: *Green Growth Strategy*, EU: *Europa 2020 strategy*).

1.1. UNEP and *green economy*

UNEP's *Green Economy Initiative* (GEI) was launched in 2008, to motivate and enable governments to invest in green economies[2] (Bouvier, 2010), and it is focused on the transition process to a green economy, creating possibility for the countries to take different paths of action. The GEI encompasses three components: research products, advisory services and partnerships.
Within the framework of GEI, a *global green new deal* idea was developed in partnership consultation with UN agencies and intergovernmental organizations, and then communicated to G20 in 2009 (Berger, Sedlacko, 2010). The aim of the g*lobal green new deal* is to *contribute to reviving the world economy, saving and creating jobs, and protecting vulnerable groups* (Bouvier, 2010). Another significant goals are: reducing carbon dependency and ecosystem degradation, putting economies on a

[2] *The Green Economy Initiative (GEI) is designed to assist governments in 'greening' their economies by reshaping and refocusing policies, investments and spending towards a range of sectors, such as clean technologies, renewable energies, water services, green transportation, waste management, green buildings and sustainable agriculture and forests.*
Greening the economy refers to the process of reconfiguring businesses and infrastructure to deliver better returns on natural, human and economic capital investments, while at the same time reducing greenhouse gas emissions, extracting and using less natural resources, creating less waste and reducing social disparities.
Initially envisioned as a two-year project, the GEI has been expanded to include a number of related UNEP and UN-wide initiatives focused on providing macroeconomic evidence for significantly increasing investments in the environment as a means of promoting sustainable economic growth, decent job creation, and poverty reduction. Citation from United Nations Environment Programme's green economy initiative web page: http://www.unep.org/greeneconomy/AboutGEI/tabid/1370/language/en-US/Default.aspx (June 06, 2010).

Table 1. UNEP's intended greening actions: selected sectors

Sector	Greening Action
Agriculture	Sustainable agriculture and food system practices will increase the number of attractive, safe and knowledge-intensive jobs in farming operations, non-farm (pre- and post-harvest) supply chains and market access infrastructures
Buildings	New green buildings can help developing countries meet additional demand for residential and commercial buildings while reducing energy consumption at low incremental investment cost
Cities	Combine resource efficiency with economic and social opportunity through proximity of urban functions, modal shifts in transportation, and increased efficiency in provision of infrastructure, utilities and energy
Energy	Renewable energy investments can play a substantial role in meeting the Millennium Development Goals while adding significant co-benefits such as improved public health, energy security and economic activity
Fisheries	Rebuilding depleted stocks and putting in place effective management could increase marine fisheries catch from about 80 million tonnes to an estimated 112 million tonnes a year. This gives a total catch value or gross revenue of about $119 billion annually
Forests	Action at international and national levels to negotiate a REDD+ regime and develop forest carbon projects open up the prospect of new types of forestrelated employment, livelihoods and revenues; where local communities can be guardians of forests and forest carbon/ecosystem services
Manufacturing	Investments in improved resource efficiency across a range of key industrial sectors
Tourism	Investments in sustainable tourism solutions can contribute to the sustainable development of the sector and the transformation to the Green Economy at the national and global level
Transport	Investment in green transport could support cities by reducing congestion, air pollution and other costs through the creation of green jobs, particularly through the development of public transport infrastructure and operations, and by alleviating poverty through increased affordability of transport and improving accessibility to markets and other essential facilities
Waste	By turning waste into a resource and encouraging the reduction, reuse and recycling of waste, significant gains can be achieved in decoupling waste production from economic growth
Water	Policy regimes that facilitate rapid adaption to changing supply conditions and changing demands are essential (pricing, investment policies etc.)

Source: United Nations Environment Programme: *A Green Economy Report – a Preview*, 2010, pp.8-9, to be found at http://www.unep.ch/etb/publications/Green%20Economy/UNEP_Rio20PrepCom_GERPreview_06May10_ FINAL.pdf

path to clean and stable development, ensuring sustainable and inclusive growth as well as achievement of the MDGs (especially poverty reduction targets).

UNEP underlines importance of *greening* actions in sectors such as energy, transport, waste, fisheries, buildings, cities, water. Enabling conditions and modeling are also integral topics of UNEP's initiatives.

There are multiple economic, environmental and social benefits expected from a significant amount of the $3 trillion-worth stimulus packages invested worldwide in five areas:

- raising the energy efficiency of old and new buildings
- renewable energies including wind, solar, geothermal and biomass
- sustainable transport including hybrid vehicles; high speed rail and bus rapid transit systems
- the planet's ecological infrastructure including freshwaters, forests, soils and coral reefs
- sustainable agriculture including organic production[3].

1.2. OECD and *green growth*

The OECD Ministerial Council Meeting (MCM) in 2009[4] mandated the organization to prepare a proposal of *Green Growth Strategy* to be adopted by the MCM in 2011.

Green Growth Strategy fits into the sustainable development policy frameworks and refers to the three dimensions of sustainable development – economic, social and environmental ones (de Serres, 2010).

It is based on the assumption that development of one out of the three above areas should not cause any negative consequences for any of remaining two other areas. OECD notices a need to work out a common understanding of the *Green Growth* concept among member states and associated countries as well as to elaborate an appropriate model for green development. The departure point for above would be the formulation of comprehensive and acceptable definition of g*reen growth* and g*reen economy*. Governments of the member states will be encouraged to implement the main assumptions

[3] United Nations Environment Programme, Press release: *Delivering Tomorrow's Economy and Job Market Today. From Renewable Energy to Freshwaters: Five Sectors Key to Sustainable Recovery*, Nairobi, 19 March 2009, http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=573&ArticleID=6103&l=en&t=long (June 09, 2010). The press release refers to: the United Nations Environment Programme: *Global Green New Deal - a Policy Brief*, 2009, p.1, http://www.unep.org/pdf/A_Global_Green_New_Deal_Policy_Brief.pdf (June 09, 2010).

[4] See: Organization for Economic Co-operation and Development's environment web page on green growth: http://www.oecd.org/document/10/0,3343,en_2649_37465_44076170_1_1_1_1,00.html (June 06, 2010).

of that concept. The OECD *Green Growth Strategy* should be seen in the context of multiple crises which enforced and accelerated efforts aimed at preparation of full and final version of that *Green Growth Strategy* and its application without any delay.

Sustainable use of natural resources is being attributed great importance and it constitutes a precondition for *green* economic development, permitting for long-term preservation of ecosystems.

In transition period towards *green economy* a range of problems may occur that may result in limitation of *green* potential. Some experiences show that funds allocated to *green* investments may even exert negative influence on structural changes in economy. And some *green* projects may prove harmful to the environment (e.g. bio-fuel projects vs. eco-friendly food production).

There is a need for mitigation of (potential) increase in unsustainable natural resource use in the transition period, too. Re-arrangements in economic sectors should be supported to enhance efficient use of energy and material resources, emphasis should be also placed on development of environmental and innovative technologies leading to market extension for goods and services which are able to fulfill high environmental standards.

Green Growth Strategy is going to address social concerns, including awareness raising aimed at better adaptation to new conditions. We can see remarkable increase in expenditures strengthening knowledge based society, but still there is a need for better coordination and improved compatibility of development policy measures both on national and international levels.

To summarize, the OECD work on green growth transition is based on economic efficiency, environmental integrity and social equity concepts. But still a strategic vision is needed to better integrate environmental objectives with economic efficiency goals. Clear definition of social concerns in the green growth context still remains open (de Serres, 2010).

1.3. EUROPE 2020 strategy

The *EUROPE 2020 strategy* proposal was published on March 3rd 2010 as a response to the financial and economic crises (European Commission, 2010. The strategy was elaborated by the European Commission as a ten-years development strategy of the EU intended to replace the EU *Lisbon Strategy*. The key elements of above proposal were adopted at the European Council on 25-26 March 2010 (European Council, 2010).

Three specific words: *smart*, *sustainable* and *inclusive* has been used in the Strategy's subtitle in relation to growth in order to indicate that the EU view on the growth is directed towards innovation as well as it represents environmentally and socially oriented response to the economic crisis.

The strategy puts forward three mutually reinforcing priorities:

- *smart growth: developing an economy based on knowledge and innovation,*
- *sustainable growth: promoting a more resource efficient, greener and more competitive economy,*
- *inclusive growth: fostering a high-employment economy delivering social and territorial cohesion.*

Five headline targets are proposed by the EU in order to realize the above priorities (European Commission, 2010):

- *75 % of the population aged 20-64 should be employed,*
- *3% of the EU's GDP should be invested in R&D,*
- *the "20/20/20" climate/energy targets should be met (including an increase to 30% of emissions reduction if the conditions are right),*
- *the share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree,*
- *20 million less people should be at risk of poverty.*

There are some additional solutions and arrangements proposed to ensure achievement of these targets (including for national level).

2. Limitation dilemmas

General impression while peering into the above g*reen policy* initiatives is that measures proposed to overcome the crisis are focused on improving existing conditions and rules for economic activity and on enhancing coherence of transformation processes towards *more green* economy, rather than they are focused on paradigm shift towards completely new socio-economic system which would be sufficiently resilient and able to resist future crises. The question may be raised whether this is enough to satisfy common expectations of societies mostly affected by multiple crises, hoping for decision makers to generate solutions which allow to avoid or at least successfully survive next waves and future types of crises.

Is it realistic to meet these expectations? Seemingly, just defending *status quo* by putting some - or even a lot of - new wine (i.e. *green*) into old wineskins (i.e. traditional economy rules and structures) is not exactly the answer to all concerns arising from current crises. It might bring about some new energy for progress and, to some extent, even boost economic activity and growth all over the world, but still the set of proposed solutions proves to be a re-active response to the experience from recent past rather than a pro-active action aimed at ability

to cope with future threats in advance. *Post factum* may in some cases mean *too late*.

Policy and strategic response (green growth and green economy strategies) coming from major international fora could prove more sufficient if it would ensure that the world economy will not be exposed to large scale crises in the next future, which is rather unrealistic postulate. One could argue that the ongoing economic crisis has been deeply anchored in the paradigm of existing economic architecture, characterized by lack of resilience and by its inability to adapt sufficiently and timely to the complex (and rapidly changing) framework conditions of contemporary world. If that turned out to be true, the world economic system would require much deeper rearrangements than it seems, to put it in order again.

Another question is whether a big and complicated system facing the music of multiple crises (such as the world economy facing the deep economic and financial instability nowadays) may *per se* be able to overcome these large-scale difficulties without gradually coming into nonexistence?

There are different answers to that question. But the issue become more problematic when we introduce an additional assumption that the crisis which occurred is just an extremely strong response of the system itself to the accelerating changes in the external grid of interconnected factors or (a bit different assumption) that the crisis might be generated by the system itself as a symptom of its growing inability to cope with threats which are induced by the volume and rapid pace of alterations in the surrounding world (fast technological progress, information flows acceleration, unprecedented environmental change, population growth etc.). Then it would be easy to come to the conclusion that the only thing we can do after realizing the bitter truth of profound consequences of the crisis is to declare intrinsic and disqualifying incapability of such a system (of the system itself) to succeed in the battle with the crises of global scale. In such a case the next step should be to propose essential changes in the very inherent elements of the system aimed at enabling its capability to adjust to the external circumstances.

3. Perspectives and implications

Some inspiration for dealing with above dilemma might be found within the theory of development strategy building of whichever organization and within the science of social systems behavior (G. Nadler, J.W. Forrester, L. Michnowski).

We are witnessing a kind of explosive growth of technological progress and science development which result in creating qualitatively new conditions for overall development: high-speed changes in environment and incapability of the socio-economic systems to react and to adjust to the changing conditions (a sort of inertia).

From social sciences and cybernetics could we learn that highly organized systems tend to achieve and maintain their stability. Any system has to be re-arranged when it loses the ability to restore its stability, if affected by any factors causing disruption of the system. Such a situation may mean that a particular system is achieving its limits for development. When for certain fast-moving changes in external circumstances, some systems are not able to follow these changes and to respond to them in a sufficient manner, they are likely to collapse or they must find a new way for fundamental changes to regain the ability to adapt to the new conditions.

In the context of ongoing crises a question appears whether the proposed amendments to current economic and financial architecture (i.e. the above political visions of greening the world economic system or its main elements) are sufficient to ensure durability of such a system and to make it sufficiently crises-resistant. Another and more direct question is whether sufficient solutions to the vital problems of the existing economic order can really be produced by the system itself? And - more radical - whether just adding some new external features (e.g. by greening) without any essential changes in the system itself could be a real solution for that system which existence is severely endangered by external or - even more - by internal factors.

In other words: Is the proposed *green economy* good enough to avoid economic and environmental failure or should we go beyond it?

At the very moment it is difficult to assess the future results with absolute certainty. At the same time nobody would be able to exclude that the ongoing multiple crises are just a warning sign of reaching the limits of the global economic system's capability to self-maintenance and self-defense. In that perspective, if making our economies greener in a proposed way proves insufficient, one could draw a conclusion which might cause us to declare the final and terminal loss of vital power necessary to ensure safe survival of the system in its present form.

So, is the proposed form of *greening* the solution we need? One of the greatest challenges here is to differentiate between problems and symptoms (and to address problems, not only the symptoms). Perhaps the political discussions should be directed towards more challenging responses such as the concept of inclusive steady-state economy or truly sustainable development driven by axiology of global common good - including the interests of the poor and most vulnerable and their environment - and widely supported by advanced science, high technology and information culture (Michnowski, 2008)? Anyway the precautionary principle urges us to learn that *prevention is better than cure*. And

the pro-active, preemptive and future oriented long-term strategy for overall system transformation brings possibly less risks than the re-active, past-oriented post-factum adjustments, which may occur too late. No question that business-as-usual approach is no longer acceptable.

4. Conclusions

Regardless of the variety of doubts which could be raised towards the *green economic* policy visions explained above (the UNEP, OECD and EU propositions) there is a need for some accompanying solutions on a global level, which could be also considered as complementary to these visions. The solutions are required to safeguard the transition to the next stage on our way towards truly sustainable future based on the three-pillar approach, after the *greening* phase.

One might have noticed a sequence of urgent requests for action at global level to strengthen the resilience of the global economic system while at the same time reducing the potential for economic and environmental failure.

Such calls for a deep and fundamental change in the world economic order were conveyed by some political leaders in connection to recent G20 summits or the EU summits where the crisis issues have been addressed[5].

Looking from a broader perspective, a more comprehensive proposal could be submitted for consideration which offers solutions on a global level to be built on existing knowledge-based potential to be used for long-term decision making purposes, including:

- organizational re-arrangements within the UN system (the only one capable to responsibly deal with problems of global concern)
- information and data flows management (including large data-processing systems and advanced IT solutions),
- forecasting combined with back-casting[6] methods,
- feedback combined with feed-forward analysis,
- axiological shift: towards eco-usefulness of human activities as a rule for redistribution of benefits in the new global socio-economic system.

Implementation of such a concept[7] would require an introduction of new systematic framework ar-

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[5] For instance:

Gordon Brown, 2009:

It is a global new deal that will lay the foundations not just for a sustainable economic recovery but for a genuinely new era of international partnership in which all countries have a part to play. This programme of internationally coordinated actions includes six elements:

First, universal action to prevent the crisis spreading, to stimulate the global economy and to help reduce the severity and length of the global recession. Second, action to kick-start lending so that families and businesses can borrow again. Third, all countries renouncing protectionism, with a transparent mechanism to monitor commitments. Fourth, reform of international regulation to close regulatory gaps so shadow banking systems have nowhere to hide. Fifth, reform of our international financial institutions and the creation of an international early warning system. And last, coordinated international action to build tomorrow today - putting the world economy on an economically, environmentally and socially sustainable path towards future growth and recovery. See: Brown G., 2009, The special relationship is going global, in: *The Sunday Times*, 01 March, http://www.timesonline.co.uk/tol/comment/columnists/guest_ contributors/ article5821821.ece (June 08, 2010).

The EU leaders at the European Council meeting in October 2008:

The European Union must work with its international partners on a genuine, all-encompassing reform of the international financial system based on the principles of transparency, sound banking, responsibility, integrity and world governance. The aim is to take early decisions on transparency, global standards of regulation, cross-border supervision and crisis management, to avoid conflicts of interest and to create an early warning system, so as to engender confidence among savers and investors in every country. The Union will quickly take appropriate initiatives in consultation with its main partners and the relevant international financial institutions. These initiatives will be carefully prepared within the EU. See: Council of the European Union: *Presidency Conclusions*, 14368/08, Brussels, 16 October 2008, p.5 (par. 12), http://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/ec/103441.pdf (June 09, 2010).

N.Sarkozy on the "emergency summit" in Paris (Oct. 2008):

The aim of the conference would be to construct *the foundation of an entrepreneurial capitalism instead of a speculative capitalism. We want to build the beginning of new financial world as they did in Bretton Woods*. Source: Deustche Welle (kjb), 05.10.2008, *EU Leaders Vow to Coordinate Response to Finance Crisis*, http://www.dw-world.de/dw/article/0,2144,3690651,00.html (June 08, 2010).

See also: London Summit – Leaders' Statement, 2 April 2009, *The Global Plan for Recovery and Reform 2 April 2009*, http://www.g20.org/Documents/final-communique.pdf (June 09, 2010).

[6] Compare: "Backcasting" (notion explanation) at http://www.answers.com/topic/backcasting#cite_note-1 (June 09, 2010).

[7] The idea I am referring to is marked in Lesław Michnowski works: *To Overcome the Global Crisis - Towards a Sustainable Development Policy*, 2009, http://www..europesworld.org/NewEnglish/Home_old/PartnerPosts/tabid/671/PostID/227/Default.aspx (June 09, 2010); *Ecohumanism as a Developmental Crossing*, 2008, http://pelicanweb.org/solisustv05n10page2michnowski2.html (June 09, 2010), Eko-humanizm i systemy dynamiczne jako warunki wstępne dla zrównoważonego rozwoju (Eco-Humanism and Popular System Dynamics as Preconditions for Sustainable Development), in: *Prob-*

rangements on global level to stimulate inclusive and truly sustainable development of the world society. To ensure durability and effectiveness of proposed solutions, some institutional reforms are needed within global environment and economic management scheme, including those related to early warning and preemptive monitoring regarding the functioning of the global financial and socio-economic system.

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