

Ministry of Education and Science of Ukraine
Sumy State University
Oleh Balatsky Academic and Scientific Institute of Finance,
Economics and Management

22nd International Scientific Conference
"Economics for Ecology"
ISCS'2016



Економіка для екології

Матеріали
XXII Міжнародної наукової конференції
(Україна, Суми, 11-12 травня 2016 року)



Суми
Сумський державний університет
2016

1. Blank I. A. Investment management: [training course] / I. A. Blank. – K. : Elgan, Nick-Center, 2001. – 448 p.
2. Homolska V. V. The organizational and economic aspects of improving the investment climate in the region // Regional economy. – 2003. – № 3. – p. 62–70.
3. Zadorozhna J.E. Increasing investment attractiveness of entrepreneurship as a way of attracting investment resources [Text] / J.E. Zadorozhna, L. P. Dyadechko// Investment: Practice and Experience. – 2007. – №2. – p.32-35..
4. Rating investment attractiveness of regions. Full story. 2014. Institute for Economic Research and Policy Consulting. Kyiv, 2014. - [Electronic resource]. - Access: <http://kiis.com.ua/materials/pr/20142904/RIPR2014.pdf>

ECONOMIC SYSTEMS ADAPTATION TO RESOURCE FLUCTUATIONS THROUGH ECO-INNOVATIONS¹

Oleksandr Kubatko

Sumy State University, Sumy, Ukraine

The "greening" of the economy implies a targeted process of economic transformation aimed at reduction of ecological impact on the environment. The concept of greening is realized through a system of organized measures, innovations, restructuring, technological transformations, and environmental policy activities at macro- and micro levels. Special attentions in greening the economy is devoted to the environmental innovations, as they both profitable and environmentally friendly. Fluctuations in availability, prices of natural resources and objective necessity of maintaining ecological balance, forces society to bear out cost of natural parks creation, ecological monitoring, conservation of species, etc. In market system, people's needs are the main driving force of social development and production. The structure in so called "demand-consumption market structure", is considered to be a powerful engine, which stimulates long chain of decisions. The EU countries due to stricter environmental legislation, high dependence on natural resource fluctuations have already passed the first stages of sustainable development and currently working on more efficient goods and sustainable life style. There are basically three main market strategies of greening and eco-innovations fostering: 1) Influence on demand, called "*push-strategy*". The idea of this

¹ The paper is prepared in the frame of State Project, registration № 0114U007076

strategy is to create a system of motivational influence (ecological standards, economic instruments, information supply) which will push the producer to manufacture "green" products; 2) Influence on supply, "*pull-strategy*" the "production-consumption train". Influencing the supply, one can pull the links of production "greening". The essence of this strategy lies in the necessity to convince a consumer both psychologically and economically to use ecologically friendly products; 3) Influence upon the communication between producers and consumers, called "*interface-strategy*" (Kubatko, 2013).

The demand side factors of green industries development directly depend on the per capita incomes of population. Thus treatment of environmental protection and ecological quality as 'luxury good' means that as the incomes of economies and populations increase, they are prepared to spend more on protecting the environment. As an example, the EU countries are more effective in implementation of environmental regulations because enforcement agencies are often better funded and more transparent.

As for the resource fluctuations, according to the Ida Auken (2013), Europe currently shifts to renewables. The main reason is high hidden costs of traditional energy sources, volatile resource prices, resource fluctuations (resources can come from politically unstable regions) and climate risk. It is stated that Denmark works on both a short-term and long-term perspective and aims to be using 100% renewable energy by 2050. As emphasized by Frondel et al. (2007), innovation in clean technology tends to be driven both by cost savings, in terms of energy and material savings, environmental management systems and by regulation. The demand side determinants are mainly seen on areas with visible effect and customer benefits such as food or baby clothes. Consequently, individuals' willingness to pay a premium for organic food or organic baby clothes is substantial. Finally, also environmental process innovations create customer benefits such as less water, material or energy use. Government intervention in green industries may be justified as a strategy to increase the supply of public goods. There are several works that tested the efficiency of different policy instruments in green industries. Thus, it is reasonable to analyze the EU countries experience of such activities. According to Daugbjerg et al. (2011) the Danish government has intervened intensively in the wind turbine industry and organic farming sector mainly for environmental reasons but with very different impact, also it should be

noted that different policy instruments were used. That is to some extent such governmental interventions can be treated as a “pure experiment” within one country green industries. While the market share of wind energy reached 20 per cent in 2007, organic food consumption lags behind with a market share of approximately 8.5 per cent in 2007. The reason is that government intervention in the wind turbine industry has emphasized the use of policy instruments designed to increase demand for wind energy, whereas organic farming policy has put more emphasis on instruments motivating farmers to increase supply. That is demand mostly represents an engine that drives innovations in green industries.

According to Demirel et al. (2010), the amount of resources invested into the eco-innovations depend both on internal characteristics of firm and external characteristics of environment. Thus firms less inclined to innovations in general try to meet minimum market requirements established by consumer demand. Amount of resources invested by such firms is not big because the main purpose of production mainly profit with minimum concern to eco-innovations. Forever the stringency of economic conditions and price resources fluctuations do promotes higher levels of innovations; the main explanation of such behavior is survival of the firm on the market. If the firm does not meet environmental standards it is more inclined to higher punishments and payments. More innovative firms do not necessarily need the regulatory push for eco-innovation.

Conclusions. Success in sustainable economic development greatly depends on human ability to effectively transform economic systems towards their permanent perfection and a decrease of nature intensity use. Specification of "greening" allows us to formulate local objectives for transformation of the economies as follows: restructuring of the economy, restructuring of enterprises, removal of needs with respect to not environmentally friendly products or services, change of ecologically non-friendly technological processes and lowering of the resource capacity of the products. Among most valuable factors that promote eco-innovations are cost savings motives, productivity improvements, supply chain pressure, networking activities, environmental management systems, extended producer responsibility, R&D activities, and industrial relationships.

References:

1. Kubatko O.V. and Leonid G. Melnyk. (2013). "The EU experience for economic systems adaptation to resource fluctuations through green industries innovations". *Actual Problems of Economics*. Vol. 12, 36–42.
2. Ida Auken (2013). "Is Europe facing a resource crisis?" Debating Europe. Available on-line. <http://www.debatingeurope.eu/2012/01/24/europe-environment/>
3. Demirel, P. Kesidou, E (2012). "On the Drivers of Eco-Innovations: Empirical Evidence from the UK". *Research Policy*.
4. Frondel M., J. Rennings H. K. (2007). "End-of-Pipe or Cleaner Production? An Empirical Comparison of Environmental Innovation Decisions Across OECD Countries". *Business Strategy and the Environment*, Vol. 16 No. 8, 571-584.
5. Daugbjerg C., Svendsen G. T. (2011). "Government intervention in green industries: lessons from the wind turbine and the organic food industries in Denmark". *Environment Development and Sustainability* .Vol. 13: pp 293 – 307.

ECONOMIC AND ECOLOGICAL FACTORS INFLUENCE ON POPULATION HEALTH IN UKRAINE

Oleksandra Kubatko

Sumy State University, Sumy, Ukraine

One of the indicators that characterize social policy efficiency is the population health; the last is heavily depends on the state of the environment. Environmental pollution influence health quality resulting in increased diseases and mortality. Prolonged exposure to air pollution may lead to irritation, bronchitis, asthma, heart diseases, cancer at al. (Brunekreef et al., 1995; Hammitt et al., 2006; Neidell, 2004; Pope, 2007).

Human health depends on the state of the environment. According to the World Health Organization (WHO, 1994): "Environmental health comprises those aspects of human health, including quality of life, that are determined by physical, biological, social and psychological factors in the environment". Environmental health is related to the theory and practice of adverse factors influence minimization.

Factors that determine human health are very diverse. However several papers (Glouberman and Millar, 2003; Bilyavsky, 2004) reveal that health quality is on 50% determined by the way life (nutrition, work and household condition, sports etc.); 20% are attributed to the quality of the