

# **Social change and economic system.**

## **Concept characteristic**

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DOI: 10.12846/j.em.2014.02.22

### **Abstract**

The publication will focus on an alternative economic system based on natural resources. The author wishes to confront the current economic system of resource-based regime. Summary economic system based on the use of natural resources, renewable energy sources and working machines to meet the needs of humanity. The publication will outline our current level of technology and how we can use it to improve the global existence.

### **Keywords**

resource-based economy, the level of technology, natural resources, higher level of human life

### **Introduction**

The article concerns the characteristics of the economic system changes and their social consequences. The author analyses the current economic system development and indicates threats as well as opportunities of the slightly different economically system transition. The proposed thesis is based on the scientific evidence, findings and existing systems.

The economic transformation, a notion often used by the author, is understood as not necessarily conscious and fully controlled decisions deriving from the particular situation, environmental issues, social dilemmas. Transformation is understood as human adaptation to the existing situation using modern means of adaptation such

as: technology, knowledge, labour force. The change, also understood as a transformation, cannot be defined as positive or negative. Transformation is a fact resulting from the needs or possibilities to adjust the form. Economic transformation, where the global economy is taking into account is a system of productive, technological, commercial, financial and institutional relations between national economies of different countries, on different levels of socio-economic development, including them into the global process of production and exchange.

The economic system, according to the author, is generally a coordinating and controlling mechanism whole for taking and implementing economic decisions in the particular region or country. In the current capitalistic systems, the decisions on production, exploitation and ownership of factors of production are divided between the state and private entrepreneurs, in other words, resource owners (Smolski et al., 1999).

Later in the article the author will present ways to the development of society. Proves that using new technologies and inventions is possible to change for the better. Based on the research equipment manufacturers will show how specific inventions the world.

## **1. Global Transformations in the world**

All the global changes in the world have been taking place very slowly so far. It is appropriate to remember Copernicus here – it is been many years before the scientific communities accepted what he had discovered, what happened next with the world science. Recalling that the change may carry both positive and negative effects. Rainforest deforestation in the short term results in profits from the timber sales but in the long term it can contribute to major climate changes. Just as the transition to renewable energy resources incurring high one-off expenses, yet in the future such a system will work on the society and the natural environment positively. Nowadays, technology and information flow rule the world. These two factors affect every aspect of the society, shaping their beliefs. By dint of fields how strongly developed in the last 50 years, it is possible to access the information about every corner of the world, about every situation. In the last half-century, the collective knowledge allowed gathering alarming data on the global situation of the planet and civilization. At all levels - social, environmental, economic. And according to this development we have chance to react quickly (comparing to the past) and change all the which is not already up-to-date and causing pain or adverse for the social transformation.

To demonstrate possible development ways of the existing economic, it is necessary to present two possible change scenarios. Jane Lubchenco's, Under Secretary of Commerce for Oceans and Atmosphere and NOAA (National Oceanic and Atmospheric Administration) Administrator, words may be their proper confirmation: The actual/substantial choice we face is the choice between providing short-term economic profit and long-term abundance which: is dependent on the well environment state (<http://www.washingtonpost.com>). The first economic transformation and its consequences. Transformation as a not selected effect, as a disorganised society (Owsiak, 2012). Most likely, the transformation will be the deepening crisis in monetary economics, social crises (Owsiak, 2012), natural degradation, the overall civilization disaster, widening the gap between social classes, rising unemployment (Rifkin, 2003) followed by increasing slavery level (International Labour ..., 2005), growing energy demand along with increasing fuel prices (Hirsch, 2005), unethical genetic research (Fukuyama, 2004). The globalization effects leading to economic migration. So far changes in the world economic life have led many countries to the over-growing national debt being dependable on the creditor. Such a transformation can take place if humanity as a whole has not taken appropriate steps to reduce the exploitation of natural resources and pollution emission, it will not led to higher living standards and abiding human rights to a greater extent.

At this point, we can consider the other option where the crisis can be controlled. The world economy becomes more dynamic, ironworks, constructions, car factories and tourism revive. Energy demand shoots up - but there will not be enough energy to satisfy the needs - probably the world collides with the power ceiling getting lower and lower. Energy prices sail upward, destroying demand and stifle the economy again. The open question remains as follows: how long and deep the recession will be and how many such oscillations awaits us? Is the current economic crisis a critical point of a system crash, or just a foretaste of what will happen in the future (<http://ziemianarozdrozu.pl>)?

The second economic transformation and its consequences. Responsible choice of the earthly society. Considering the current state and opportunities. Searching prospects for the future. Rational management of planet's natural resources is based on research conducted by engineers and scientists. The gradual transition to renewable energy resources. The author was searching and has found a solution that corresponds to the description of many social and economic problems of the world. Now he wants to share them with the readers.

Today we live in a relative free-market economy system<sup>1</sup> resulting in unit profit as an almost overriding goal. It is economy based on the broken system with possibilities of the past. The author proposes to consider the transformation of the current economy into the one based on full respect for the planet, people, modern knowledge and opportunities. A man is able to create something completely new meeting one's expectations. Traced by the author a model suitable for today's world challenges using its technological capabilities is called Resource Based Economy (RBE) or natural resource based economy. It is assumed that the Earth is kind of all peoples heritage. States division would not be necessary and ownership would evolve into sharing between people. Mankind on this level would be equal and all the work done by the workers once would be taken over by machine (Rifkin, 2001).

Currently the deciding factor for transformation or development is natural materials. They state whether a given good or service can be produced or not. If one runs out of material, nothing will be produced. It is essential that the current technology is able to screen the amount of almost all the raw materials. The combined data would give a picture of the resources wealth (<http://www.netl.doe.gov>). The system evolution would lead to a situation where the raw materials and the Earth would not belong to any state or corporation<sup>2</sup>. Then it would be a possibility of rational decision-taking on materials used for the particular good production. Decisions would not be taken based on the goods ownership but on the scientific analyses. A group of scientists based on the research would be responsible for the raw materials exploitation.

Model of RBE eliminates the never-ending consumerism. The current technology along with proper exploitations strategy, would rise a possibility goods meeting each person's needs (the needs would not be triggered artificially by appropriate product marketing). Thus the goods production would become wiser and more responsible for the planet.

Using known technology people are able to generate energy meeting the needs of all the inhabitants of the earth charging the planet. The primary element of RBE would be natural environment protection. The following economic model has been designed to use the most of technology and scientific knowledge in order to humanity enrichment, without damaging the planet. It was impossible, 50 years ago, there

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<sup>1</sup> Through the concept of relative free-market economy, the author understands the current hybrid market economy such as: socio-capitalism.

<sup>2</sup> Organization established by European Union as a global network of observation GMES (Global Monitoring for Environment and Security). This institution monitoring water and pollution of the environment. Would be necessary to extend the competence of this organization by monitoring non-renewable mineral such as metal ores.

was no such technology or knowledge, therefore the free market economy was still up-to-date. Today, it is not.

The social aspect of Resources Based Economy eliminates people rivalry in terms of trade, services. The competition is replaced by cooperation. Trade actually disappears because the problem of scarcity disappears. Production and distribution systems provide to a man everything one needs. People's motivation to work is not profit but the natural instinct to help each other.

Automating global inventory levels can strike balance between production and distribution. Allowing people to producing better quality goods while planned obsolescence would be unnecessary and nonexistent. Renewable energy resources become more and more popular, but they are still rarely used. It is probably caused by the oil or gas lobby. It is also worth noting that renewable energy is cheaper as witnessed by the European Small Hydropower Association – ESHA (<http://www.energiawiatru.eu>). Today we are able to produce highly ecological goods (Malette, 2010). Not many is aware of the fact that currently there are regions working on RBE but the rest of the world continues to be dependent on oil companies. What are the means to leave the current system and transform it into modern form of existence? The author leaves this question open.

## 2. The future of the new systems

The previous chapter raises a highly important issue on the economic system evolution. It is the system where instead of planet resources - exploitation, a man lives in harmony with nature and gets indispensable energy from the renewable resources. Engineer Jacque Fresco is the project originator *The Venus Project* (<http://www.thevenusproject.com>), (TVP) proposing a feasible action plan for social change promoting peaceful and sustainable global civilization. It pinpoints an alternative where human rights are not only paper proclamations but a way of life. It is also worth noting that a small start-up of the project Venus Project exists, it is a futuristic village based on the principles of RBE. It is located in the 21.5-acre Research Center in Venus, Florida. The project, unlikely to any social system which has gone before, presents an alternative vision of a new, sustainable world civilization. The architect and engineer Jacque Fresco, except of the system, creates also futuristic buildings resistant to hurricanes. This solution has already been introduced to life. The inventor lives in self-created self-contained ecosystem.

After studying the subject of The Venus Project, many of the readers will think in the following way: at the moment we do not have the technology that would help

create an eco-city, eco-friendly means of transport, new buildings, etc. The argument for such thinking is the next part of the article in which the author focuses on the possibilities of gaining energy and plant breeding, which along with population growth, increasing in demand. Other forms and types of technological innovations are widely described in the documentary *Our technical reality* (Fresco, 2010). The film presents the technology that was available a few years ago and have been sufficient. Today it has evolved even more.

Solar energy. In one second the Sun radiates more energy than mankind has used in the history. It would be worth to capture this energy by the appropriate devices. One of them is Koyosemi solar batteries resented in 2010 under the name Sphelar solution (<http://sphelarpower.com>). This product uses a transparent spherical silicon cells in a convex shape and a diameter of 1.8 millimeters. This way it is possible to produce a special solar window gaining solar energy. Such type of products type have been already manufactured and are available for sale. Distribution channels are available on the manufacturer's website, the Japanese company Sphelar Power Corporation. The idea is not popular in Europe, but in Japan will soon become widely used.

The idea of solar energy itself is not new, but with its current use exists phenomenon of filtration in the atmosphere (clouds, location, Earth rotation interferes with radiation reception). Placing collectors in the cosmic space is something new. This way they are able to collect up to 20 times more energy and send it wirelessly to the Earth (Malette, 2010).

Thermal energy of ocean convention. This system uses the temperature differences between the water surface layer and the deep layer of ocean. The temperature differences are used to run a thermal engine producing electricity. Unlike to wind or solar power, the system can provide permanent year-round energy supply. Wave power stations. The Portuguese Government launched the world's first such type of energy station. It was built three miles from the Agucadoura coast near Porto. Energy is produced by special devices and transmitted to the base stations. Except of these technologies, we can also use geothermal energy and wave energy. The ocean is constantly on the move, so we have access to the energy, which could satisfy 40% of global energy demand on full exploitation. In Portugal, the system checks ideally, so there is no obstruction to use it on a larger scale. In this way, the problem will be solved with a year round supply of electricity. This solution is one of the best value-efficient technologies of the future.

Highly important issue of energy production are well-known wind farms (those placed on the surface of the oceans are new), new wind turbines by Regedyne

(<http://regenedyne.com>), which have special covers using larger area of wind pressure and producing more energy this way. The author wishes to draw attention to a new type of Bloom battery generating electricity by mixing proper gas with air (<http://www.bloomenergy.com>).

Agriculture. One of the projects the author wishes to draw attention to is so-called Vertical farming. They offer the vision of growing year-round, wherever we want, unaffected by droughts and weather-related events, while saving space for outside wilderness and humans. After decades on the drawing board, they are finally being built. The most futuristic examples are in Asia where crowded cities and scarce land vertical farming has made most appealing. This type of solution is an alternative to GMOs. Produced food is healthy and does not require any chemical additives. One of them is Chicago's South Side producing organic food (<http://edition.cnn.com>).

A similar project is a system of plant breeding in the barrel. The rotating ring with built-in hydroponics, where the plants grew on the inside of. One of this system is developed by NASA and known as The Green Wheel (<http://www.designlibero.com>). The system would have a non-turning outer housing, nested inside of which automobile would be a motor-driven ring, rotating at approximately one revolution per hour. A variety of herbs and vegetables would be planted on the inside surface of That ring, growing in a coconut fiber medium contained within individual perforated vases - tiny pots built into the ring, in other words. At the bottom of the housing would be a water reservoir, the vases Which would dip into as the ring rotated through. Full-spectrum lighting would be provided by a tube-shaped LED fixture, suspended in the middle of the ring. Parameters dry as the amount and color temperature of the light would be controlled wirelessly via a smart phone/tablet app Which would also alert users when the system was running low on water.

The above-described modern farming systems are fully able to meet the growing food needs of the world. Both the vertical farming and plant breeding in the barrel take up much less space and produce healthy food without artificial fertilizers and chemicals. Consolidating word of the presented information may be a simple example. Using RBE assumptions can be easily explained. If we were at the disposal of the new planet, which we would like to colonize, our investigation did not compel them toward the use of non-renewable resources of the planet. Engineers would devote their time and knowledge to provide to newly established colonies the cheapest and renewable energy. Definitely they would work on crops farming ways in order to dispose area and water carefully. The author is sure that the above examples would apply to the new planets colonization.

This article is in part a futuristic vision of the author. He wants to show how humanity can proceed to live in harmony with nature and do not pollute the environment. He also believes that the current economic systems are not able to hold its requirements economies. A change is needed. The interesting part of the article is to cite existing technology solutions that already exist in the world. Use them on a larger scale will improve the quality of life on the planet. It is very important that the described technology is already in use and does not constitute part of projects or research.

## **Conclusions**

The publication presents to the readers two extreme directions of the current economic system. In one of them they do not pay attention to environmental pollution, exploitation or the heritage left for the next generations. In the alternative system, the economy is based on renewable energy resources, it does not exploit the resources of the planet. Both directions of change are possible and the road the society will traverse is up to it.

Presented facts are based on statements of the world credible organization Heads or reports of these organizations. Each of the new technologies is supported by the research scientists and is already used by the companies.

According to the author the current capitalistic system gave a lot to the society. Every citizen has equal access to free education, abroad scholarships, getting to know different cultures and travel to various parts of the world for cognitive research or education. Along with the IT development the community has access to information from the other parts of the world. However, despite the advantages, the system has serious disadvantages: reliance on non-renewable energy resources, pollution and over-exploitation of nature, deepening differences between social classes, corporate rule.

The evolution of the economic system towards a more friendly natural environment and the public is required. Resource-based economy solutions are the most rational. Current technical reality provides opportunities. The author considers only the social blockade because of the fear of unknown, so that the economic foundation of the new RBE system cannot be implemented. The planet resource management in the scientists' hands questionable. Who will be checking their competences and controlling their actions? It is stated nowhere when they will follow their own benefits, without the long-term prosperity for the whole. The author expresses one's concern

about remaining in the current system based on non-renewable resources of energy and life in a deepening economic crisis.

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## **Zmiana społeczna a system gospodarczy. Charakterystyka koncepcji**

### **Streszczenie**

W artykule skoncentrowano się na alternatywnym systemie gospodarczym opartym na zasobach naturalnych. Autor porównał aktualny system gospodarczy z systemem opartym na zasobach. Prezentowany system gospodarczy opierałby się na wykorzystaniu odnawialnych źródeł energii i maszyn do zaspokojenia potrzeb ludzkości. W publikacji scharakteryzowano aktualny poziom technologii, która może być wykorzystana w celu poprawy poziomu globalnego istnienia.

### **Słowa kluczowe**

gospodarka oparta zasobach, poziom technologii, odnawialne zasoby, wyższy poziom życia

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