

Business in Sustainability – a European Perspective

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Abstract: Modern business consumes most of the world's nonrenewable resources – it is to a considerable extent responsible for environmental pollution and contributes to deepening of some social pathologies. Increasing global ecological and social problems deteriorate the health of the Earth, threatening the existence of future generations. The response to these adverse trends is sustainable business - a new current, developing in the world in the field of sustainable science. In the paper the authors present their own model conception of business in sustainability. A special feature of this conception is moving sustainability from peripheries of business to its centre – replacement of unsustainable resources and activities with their sustainable equivalents. The authors also discuss the necessity for creation of such conceptions and barriers to their implementation in business practice. The ideas presented in the paper have been set in the realities of the European Union, which has significant achievements in sustainable development.

Key words: sustainable development, sustainable business, sustainable enterprise

Introduction

Business should keep up with changes taking place in the world. One of the most important changes of the global nature is the deteriorating health of our planet, which is the consequence of the accelerated pace of the civilization development. The development of mankind is accompanied by growing economic and social problems and in consequence a high degree of unsustainability confirmed by the indicators presented in the Living Planet Report 2012 (Switzerland 2013). For the most part it is business, and in particular manufacturing enterprises, that are responsible for this unsustainability. Concern for future generations changes priorities of business. Ecological and social objectives become as important as economic goals. High degree of unsustainability of the system of human development forces traditional business to transform into sustainable business. To make such a transformation possible, definite sustainable business conceptions and models are indispensable. Meanwhile, in this field mainly fragmentary solutions are to be found in the literature. Some authors deal with sustainable/sustainability management e.g. (Cohen, 2011), (Haugan, 2013), (Bossink, 2012). Other scholars concentrate on sustainable/sustainability marketing, e.g. (Belz, Peattie, 2010), (Leitner, 2010), (Martin, Schouten, 2012), (Kadirov, 2010). Another field of study is *sustainable logistics and supply chain management*, e.g. (Grant, 2013), (Morana, 2013), (Howard, 2014), (Lindgreen, 2013). The above examples do not exhaust all spheres of business to which sustainability principles are applied. Another shortcoming of the solutions presented in the literature is their focus only on selected business sectors or selected sphere of sustainability.

The paper demonstrates the necessity of search for complex solutions in sustainable business pointing out to some determinants of pursuance of such activity in the European Union. Furthermore, the authors' own model conception of business in sustainability has been presented, taking into account its most important components. An important characteristic of this conception is the transfer of sustainability from the peripheries of business to its centre – replacement of unsustainable resources and activities with their sustainable equivalents.

Background

Sustainable development efforts undertaken for many years have not improved significantly the health of our planet. Growing ecological and social threats are confirmed by the Living Planet Report 2012. An analysis of the data presented in the Report led to the following conclusion: „clearly, the current system of human development, based on increased consumption and a reliance on fossil fuels, combined with a growing human population and poor overall management and governance of natural resources, is unsustainable” (Living Planet Report 2012, p. 10). The degree of this unsustainability is well reflected by Table 1.

Table 1: State of the Earth’s unsustainability

Areas	Indices
Biodiversity has declined globally	The global Living Planet Index declined by almost 30 per cent between 1970 and 2008. The global tropical index declined by 60 per cent during the same period. The global temperate index increased by 31 per cent – however this disguises huge historical losses prior to 1970. The global terrestrial, freshwater and marine indices all declined (freshwater index by 37 per cent) The tropical freshwater index declined by 70 per cent.
Human demands on the planet exceed supply	Humanity’s Ecological Footprint exceeded the Earth’s biocapacity by more than 50 per cent in 2008. The carbon footprint is a significant component of this ecological overshoot. Biocapacity per person decreased from 3,2 global hectares (gha) in 1961 to 1,8 gha per capita in 2008.
Many river basins experience water scarcity	Examining scarcity on a monthly basis reveals many river basins that seem to have sufficient supplies based on annual averages are actually overexploited, hampering critical ecosystem functions. 2,7 billion people around the world live in catchments that experience severe water scarcity for at least one month a year.

Source: (Living Planet Report 2012, p. 12)

The ever increasing unsustainability leads to surpassing of the tolerance limits of nature and uncontrolled growth of social problems, in consequence of which future generations will to a considerable extent be deprived of chances for development – as the Earth is an isolated system, powered from outside only by solar energy and in future this system will be unable to carry the burdens created by man (Pabian, 2013a, p. 3). Therefore, one of the greatest challenges for the present generation is to transform contemporary consumer societies into sustainable societies, based on sustainable production and consumption (Pabian, Bylok, Rajczyk, Rajczyk, 2012, pp. 299-300).

The European Union took up this challenge going down the road of sustainable development. The current strategy of sustainable development of the European Union is set forth in the document called *Europe 2020*. It was adopted by the European Council on 17th June, 2010. The *Europe 2020* strategy is based on the following three priorities: smart growth, sustainable growth and inclusive growth. The basic instruments of implementation of the *Europe 2020* strategy on the Member States’ level are the so-called National Reform Programmes (Ministry of Economy, 2012, p. 53). Table 2 shows figures of the significant indicators related to this strategy and their targets.

Table 2: Indicators of the Europe 2020 strategy for smart, sustainable and inclusive growth

EU-28		2005	2011	2012	Target
Employment	Employment rate (percent of population aged 20-64)	67,9	68,5	68,4	75
EU-28		2005	2010	2011	Target
R&D	Gross domestic expenditure on R&D (percent of GDB)	1,82	2,00	2,02	3
EU-27		2005	2010	2011	Target
Climate change/energy	Greenhouse gas emissions (index 1990 = 100)	93	86	83	80
	Renewables in gross final energy consumption (%)	8,5	12,5	13,0	20
	Primary energy consumption (million tonnes of oil equivalent)	1703	1645	1583	1474
EU-27		2005	2011	2012	Target
Education	Early leavers from education and training (percent of population aged 18-24)	15,8	13,4	12,7	less than 10
	Tertiary educational attainment (percent of population aged 30-34)	28,0	34,6	35,8	40 or more than 40
EU-27		2005	2011	2012	Target
Poverty or social exclusion	People at risk of poverty or social exclusion (million)	123,9	119,8	124,4	95,7

Source: (Basic figures on the EU, Winter 2013/2014 edition)

As shown in Table 2, the European Union has adopted ambitious targets in respect of sustainable development and has been successful in this sphere. The successes are proved by positive values of most of the indicators in the years 2005 – 2012. The ambitious aims are reflected by the figures in the Target column, which the European Union intends to achieve by 2020.

Entrepreneurship can contribute to sustainable development to a much greater extent than they do now. “Produce better” is one of the most important recommendations given to entrepreneurs: significantly reduce inputs and waste in production systems, manage resources sustainably, scale-up renewable energy production (Living Planet Report 2012, p. 107).

Business in sustainability conception seeks to achieve not only economic but also social and ecological goals. Preferences with regard to these goals can be different. According to Poles, enterprises should support the following most important social and ecological goals (Mirońska, Zaborek, 2014, p. 37):

- fight against hunger and poverty – 61% responses,
- helping the chronically ill – 83%,
- helping animals – 53%,
- fight against social pathologies – 48%.

Results of the surveys show that taking social and ecological goals into consideration in business can be beneficial for an entrepreneur. Many consumers are willing to pay more for a product which supports such goals. The percentage of this type of consumers in the selected countries of the European Union is as follows: Germany – 35%, Italy – 34%, France – 30%, the Netherlands – 30%, Belgium – 29%, Great Britain – 28%, Poland – 13%. In some non-European countries this percentage is much higher e.g. China – 80%, India – 71%, U.S.A. – 39% (Mirońska, Zaborek, 2014, s. 35).

Business in sustainability conception fits into the framework of the European entrepreneurship, whose condition has been presented in Table 3.

Table 3: Condition of entrepreneurship in selected EU countries (%)

Description		Austria	France	Germany	Poland	Romania	Sweden	Hungary
Sectors in which businesses are set up	Mineral extraction	1,6	5,3	0,8	6,7	17,7	9,5	12,2
	Manufacturing	11,4	17,2	14,8	41,3	21,2	14,1	26,2
	B2B services	40,1	33,4	30,5	18,1	17,3	38,2	23,4
	B2C services	46,8	44,1	54,0	33,9	43,9	38,1	38,2
Fear of failure		43,5	46,7	49,0	58,7	45,1	38,9	45,9
Motives for starting a business	To improve standard of life	38,2	58,9	50,7	30,1	37,7	48,6	35,3
	Necessity	10,8	18,1	21,7	40,7	24,2	6,8	31,1
New businesses' growth aspirations	At least 5 new jobs within 5 years	13,0	25,5	25,9	29,8	48,6	16,6	33,5
	At least 10 new jobs and employment growth by at least 50% within 5 years	7,6	21,9	21,7	15,6	35,6	9,7	22,6

Source: (Global Entrepreneurship Monitor – Poland 2012, pp. 13-14, 24, 21-22, 25-26)

The structure of European entrepreneurship is dominated by production, B2B and B2C services, which are the economy sectors where business in sustainability should be implemented in the first place. Mineral extraction should be systematically reduced, and such materials and technological solutions should be sought that will make minerals unnecessary thus leading to cessation of mineral extraction e.g. by substituting traditional energy sources with energy from renewable sources. More than half of entrepreneurs in most of the countries presented in Table 3 are not afraid of failure in business. Such attitudes foster sustainable business projects. High aspirations of entrepreneurs have an influence on the rate of development of this type of projects.

Conception of the European business in sustainability

According to the authors of this paper, business in sustainability is an ordered set of actions and things, the functioning and output of which in the form of particular products and services are in conformity with the principles of sustainable development. The idea of business in sustainability has been shown in Figure 1:

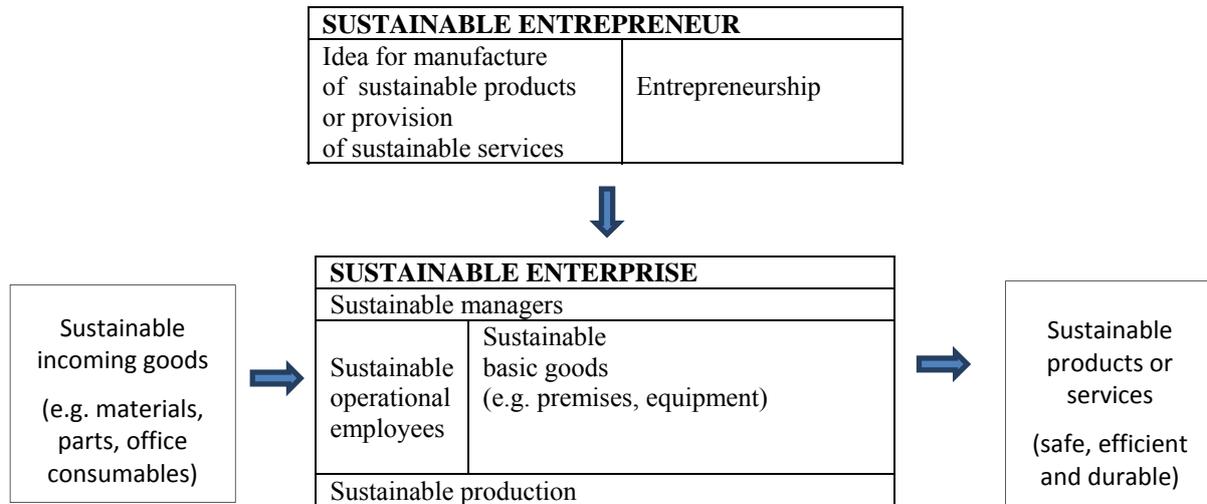


Figure 1: A concept of business in sustainability

In the suggested approach the starting point for business in sustainability is an idea for manufacture of sustainable products or provision of sustainable services. These products and services are people and environment friendly. Sustainable products are not only safe and efficient but also durable. Durability fosters protection of man’s natural environment because it reduces demand for products, which results in reduction of their production volume and hence, also in reduction of factors having a negative impact on the environment, and caused by the said production.

People and organizations initiating sustainable business projects should understand and support the ideas of sustainable development. Their ecological and social sensitivity is reflected by the following characteristics (Cohen, 2011, pp. 1-19, pp. 132-158), (Pabian, Bylok, Kucęba, Zawada, 2013, p. 7):

- they want to take responsibility for the health of Earth,
- they act for the benefit of future generations, so that they are able not only to survive, but also to develop,
- they focus on future (also very distant),
- they make efforts to achieve economic, environmental and social goals,
- they value sustainability (also in production, consumption and sales) much more than economic growth,
- they control the environmental and human effects of their organisation,
- they minimise negative impact of their organisation on the planet,
- they develop products, services and technologies in line with the rules of sustainable development.

An idea for sustainable business itself is not enough. In order to execute the planned project it is necessary to create an appropriate action structure, gather the necessary resources and set everything in motion assuming the form of production of material goods or services. Hence, there is a need for entrepreneurship understood in the aspects of action as a high degree of activity, dynamism in action, pursuance of the adopted goals. Thanks to the entrepreneurship understood in this way the idea for sustainable business will be put in practice.

Sustainable business can be carried out within a newly established or already existing enterprise. As shown in Figure 1 a sustainable enterprise is an organization whose resources and operation have a sustainable character (contribute to sustainable development). Sustainable human resources and sustainable basic goods i.e. buildings, machinery, equipment, fittings and other tangible goods owned by the enterprise rank among the most important resources of a sustainable enterprise. Sustainable human resources are ecologically and socially sensitive employees of the organization, observing the principles of sustainable development in their work. Among them there are sustainable managers (top managers, middle level managers, supervisory managers) and sustainable operational employees. A characteristic feature of sustainable employees is their triple orientation – focus on their own needs as well as on social and ecological needs of the present and future generations.

Buildings and other enclosed structures owned by a sustainable enterprise have been designed, located and erected according to the sustainable development principles. They are environment friendly and do not cause any social harm. Use of those buildings and structures requires consumption of small amount of energy coming from renewable sources. For example, solar collectors and solar cells convert solar radiation into heat used to heat water and rooms (solar thermal energy – STE) and into electric current (photovoltaics). Machinery, equipment and other appliances located within this infrastructure, used in the operation of the enterprise, also have pro-

ecological and pro-social character.

Operation of an enterprise requires incoming goods, including raw materials, materials, components, office supplies and other products. A sustainable enterprise procures and introduces into its system only such basic and incoming goods which have sustainability features.

The essence of sustainable operation and its results will be illustrated with an example of a sustainable manufacturing activity. It is based on production of safe, efficient and durable products, manufactured in the processes of clean production. A characteristic feature of clean production is elimination of harmful gases, liquids, solid substances and radiation from technological processes and limitation of wastage of energy, heat, water, raw materials and other factors of production. It is advisable that clean production should be carried out by all enterprises which form the production chain of the particular product, also by manufacturers of materials, components and sub-assemblies.

An important determinant of success of sustainable business projects is sustainable business management. In the approach proposed by these writers it assumes the form of sustainable/sustainability management. S. Cohen in his book published in 2011 in the U.S.A. states: „sustainability management is in its infancy [...]. It today will not be able to predict its pace, shape or trajectory” (Cohen, 2011, p. 146). According to that Author “sustainability management is the practice of economic production and consumption that minimizes environmental impact and maximizes resource conservation and reuse [...] At the heart of sustainability management is a concern for the future” (Cohen, 2011, p. 2). B. Bossink defines sustainable management in the aspect of eco-innovations „as the development of new initiatives in an organization to sustain, improve and renew the environmental, social and societal quality of its business processes and the products and services these business processes produce” (Bossink 2012, p. 1). A. Pabian perceives sustainable management with regard to its functions. He defines sustainable management as planning, organizing, leading and controlling resulting in establishment, operation and development of a sustainable organization, that is an entity contributing to the balance of intergenerational needs (Pabian, 2013a, p. 5).

The following question arises: is it necessary to introduce sustainable management in an enterprise if all resources subject to this management are sustainable? It is necessary to do so because sustainable resources can also be managed in unsustainable way e.g. by treating the employees unethically, by managing sustainable equipment inappropriately.

Discussion

Scholars being aware of the global ecological and social threats rather agree that sustainable development should be continued, also through changes in the sphere of business as it is business that consumes most of the world's nonrenewable resources. There is no agreement, however, as to the strategy of sustainable development. Proponents of the ideas of Thomas Malthus advocate restraint and economical resource management. Supporters of Robert Solow believe that a global disaster can be prevented by technology and innovations (Martin, Kemper, 2012, p. 48-56). In the opinion of the authors of this paper, the technical and technological progress is much slower than the rate of environment destruction and natural resource depletion. It is probable that the Earth will be destroyed before man is able to create technical and technological methods to prevent the destruction. The authors of this paper believe that business should use both T. Malthus's and R. Solow's approach. It would involve both economical utilization of available resources and seeking innovative solutions to counteract ecological and social problems.

Another controversial issue is related to the search for and presentation of the sustainable business conceptions, which in the present conditions and with the existing state of social awareness cannot be fully implemented in practice (such is the nature of the conception presented in Figure 1). These writers believe that it is necessary to look for and present such model solutions – they are benchmarks (target statuses) which the contemporary business should aim at. Every step on the way to their implementation in practice means progress in sustainable development and thus contribution to balancing intergenerational needs.

Another debatable problem is the issue of the major barriers to implementation of the presented conception of business in sustainability. This conception requires many sacrifices, including abandonment of the growth of production, consumption, sales and profits. Such sacrifices do not lie in the nature of enterprises or in the nature of entrepreneurs and managers in charge. Motivation to use sustainable management is also weakened by the fact that man does not perceive and does not understand many adverse phenomena occurring on the Earth and cannot control their progress. What is more, enterprises operate in the countries having different attitudes to sustainable development, which is the consequence of economic, political and cultural differences (Pabian, Pabian, 2012, p. 8). A major barrier to involvement in sustainable business are also high costs of its implementation in enterprises. Will, therefore, sustainable business ever become common and universal on a global scale? According to these writers, it is hardly probable.

Conclusions

We are currently pretty sure that planetary critical thresholds have already been crossed, we only do not know, to what extent (Rogall, 2010, p. 145). In these circumstances, global action towards sustainable development must be accelerated. All organisations operating in the world, including states and their associations, an example of which is the European Union, should contribute to improve the health of our planet by using all endeavours aimed at achieving sustainability objectives with respect both to the Earth, its environment, and all products created by man. The European Union is implementing the strategy for sustainable development, the effect of which is the document Europe 2020 and positive sustainability indicators. The European consumerist community will be gradually transformed into a sustainable society based on pro-environmental and pro-social approach in manufacturing and consumerism (Pabian, Bylok, Kucęba, Zawada, 2013, p.7).

Business in sustainability is still in the initial phase of its development. This development should be continued by moving the principles of sustainability from the peripheries of business to its centre. It is expressed in the gradual replacement of unsustainable resources and actions necessary in business with their sustainable equivalents.

Transformation of traditional business pursuing economic goals into sustainable business geared also towards achievement of ecological and social goals is a very difficult task. It requires primarily a change of attitudes and behaviours both of entrepreneurs and consumers, which can be achieved by raising and educating the present and future generations of manufacturers, sellers and buyers in the spirit of sustainable development (Pabian, 2013b). It is also important to induce pro-ecological and pro-social behaviours through legislation and widespread campaigns promoting the principles of sustainable development in the society. (Pabian, 2013c, s. 12-17).

Business in *sustainability* is a new challenge for contemporary entrepreneurs. Future generations will judge whether this challenge has been taken up by them and to what extent it contributed to balancing of intergenerational needs. Let us remember that “we don’t inherit the earth from our ancestors; we borrow it from our children” (Emery, 2012, p. XI).

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