



Analysis of mind behaviour gap regarding compliance with the principles of sustainable development by companies in the SME sector, in particular in the field of environmental liability and the compliance with statutory obligations in this range

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Abstract: The changes that have occurred in our country after 1989 due to the collapse of the socialist bloc countries also apply quite significantly to the area of environmental protection. In the initial period, the principles of collection and management of household waste were subject to transformation; then in 1995 it was made compulsory to pay fees for usage of the environment and finally, in 2002, it was made compulsory to pay product fees constituting a sign of extended producer responsibility. Despite the lapse of years, still a significant percentage of companies have not implement statutory obligations in the field of environmental protection, which means a risk of huge financial penalties for those companies. On the other hand, these companies declare a high level of awareness and environmental responsibility. In the years 2014-2015 the company M&M Consulting conducted a survey of 217 companies of the SME sector across the country, in order to establish the facts in this regard.

The broad spectrum of responsibilities of entrepreneurs in the field of environmental protection

A common problem with the implementation of statutory environmental obligations in Poland prompted the authors to carry out a detailed analysis in this respect. The subject of the study were the results of audits carried out in the SME sector in Poland in the years 2014-2015 and a survey which asked company representatives about the attitude of the companies represented by them about the need to implement the principles of sustainable development. The survey consisted of 10 very simple questions, answers to which were to help determine the ratio of companies op-

erating in the country to the obligations imposed on them by many existing pro-environmental legal acts in Poland (see Tab. 1). The survey was conducted using the available tools as well as by surveying enterprises participating in training courses, seminars and conferences organised by the testing unit. The answers were given by companies of the SME sector by a representative responsible for carrying out the obligations related to environmental protection in the company, not rarely was it a delegate of another functional area or a person seeking contact with a consulting company in the field of environmental protection to understand the scope and start the implementation of statutory duties.

Table 1.

Acts that an entrepreneur must observe in Poland

Category	Act/Regulation	Date	Symbol of the Journal of Laws	
Environmental Protection Law	Environmental Protection Law	27 th April 2001	Unified text, Journal of Laws of 2008 No. 25, item 150 as amended	
	concerning the lists containing information and data about the usage of the environment and the amount of fees due	27 th Feb. 2014	Journal of Laws of 2014, item 274	
	on the system of management of emissions of greenhouse gases and other substances	17 th July 2009	Unified text, Journal of Laws of 2013, item 1107	
Packaging	on the obligations of entrepreneurs in the field of management of certain waste and on the product fee	11 th May 2001	Journal of Laws of 2001, No. 63, item 639 as amended	
	on packaging and packaging waste	13 th June 2013	Journal of Laws of 2013, item 888	
	on a sample list of products that are considered or not considered to be packaging	22 nd Oct. 2013	Journal of Laws of 2013, item 1274	
Waste	on maintaining cleanliness and order in municipalities	13 th Sept. 1996	Journal of Laws of 2012, item 391 as amended	
	on the waste catalogue	27 th Sept. 2001	Journal of Laws of 2014, item 1923	
	on recycling of end of life vehicles	20 th Jan. 2005	Journal of Laws of 2005, No. 25, item 202	
	on the used electrical and electronic equipment	29 th July 2005	Journal of Laws of 2005, No. 180, item 1495	
	on the list of types of waste which a waste holder may transfer to individuals or organisational units not being entrepreneurs, and on permissible methods of its recovery	19 th Dec. 2008	Journal of Laws of 2008, No. 235, item 1614	
	on batteries and accumulators	24 th April 2009	Journal of Laws of 2009, No. 79, item 666 as amended	
	on detailed technical conditions of qualifying part of the energy recovered from municipal waste incineration	2 nd June 2010	Journal of Laws of 2010, No. 117, item 788	
	on a detailed manner of handling medical waste	30 th July 2010	Journal of Laws of 2010, No. 139, item 940	
	on R10 recovery process [Translator's note: R10 - Land treatment resulting in benefit for agriculture or ecological improvement]	5 th April 2011	Journal of Laws of 2011, No. 86, item 476	
	on mechanical and biological treatment of mixed municipal waste	11 th Sept. 2012	Journal of Laws of 2012, item 1052	
	on waste	14 th Dec. 2012	Journal of Laws of 2013, item 21 as amended	
	Water	Water Law	18 th July 2001	Journal of Laws of 2001, No. 115, item 1229 as amended

SOURCE: Own study – as of 29th September 2015

Practical experience in the application of the law suggests that entrepreneurs implement pro-environmental measures only in areas where they are forced to, e.g. by high fines such as the product fee, fees for usage of the environment or the usual administrative penalties. The analysis carried out by the company M&M Consulting shows that

most irregularities, as many as 87%, are detected in the reporting to the National Centre for Emissions Balancing and Management. (see Tab. 2). It is a specific obligation which recently has been significantly extended to smaller entities, thus the probable reason for such a low degree of application of this law – it should be concluded that the name and historically applicable law in this regard indicated that it concerned only large enterprises. The change made in this area was not supported by a sufficient information campaign; what is more, the content of the regulation expanding these obligations to small and medium-sized entities is often misunderstood, which affects its use.

Table 2.

Irregularities most often detected during environmental audits

Division		Detected company irregularities [%]
Waste management	Reporting	59.3
	Records	66.7
	No waste classification	63.0
	Unselective collection	33.3
Usage of the environment	Reporting	51.9
	Records	55.6
	Not presenting all the elements in complex reports	35.2
National Centre for Emissions Balancing and Management	Reporting	87.0
Packaging and packaging waste management	OS-OP1 reporting	40.7
	OPAK reporting	48.1
	Records	48.1

SOURCE: Own study based on environmental audits conducted by the company M&M Consulting (2014-2015).

As presented in the table, negligence in the application of environmental acts is significant. Nevertheless, the survey was to help determine the commitment and attitude towards new statutory responsibilities and assess the development trends in this area. Comparison of the results of the analysis with the survey results gives us completely contradictory images of the current situation. While nearly half of the audited companies have a problem with the correctness of implementation of most statutory obligations, declarations made in the survey provide a picture of environmentally conscious of companies, implementing in nearly 90% of their environmental responsibilities.

The attitude of Polish entrepreneurs to ecology

The first question of the survey concerned the role and significance of ecology in the audited company. Taking into consideration the results showing that this significance is large and increasing, then more than 90% of companies declare that they are not indifferent to issues related to the need to protect the environment in our country (see Fig. 1). This is an obvious manifestation of an mind behaviour gap occurring especially often in relation to issues of pro-ecological actions of people and businesses around the world [5]. The fact of giving and answer which is positive to

the environmental issues, may cause a change in business models in the future. It is expected that such established priorities will cause that at every stage of the logistics chain, in the future companies will take into account and properly manage the impact on the environment, which processes initiated by individual companies have.

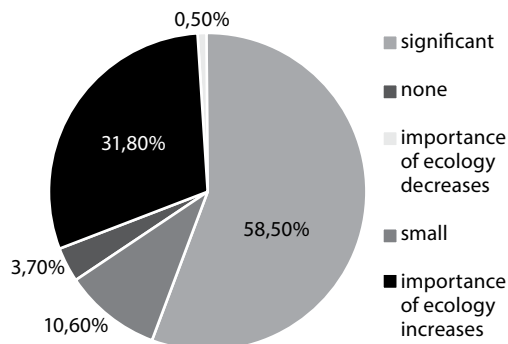


Fig. 1 The role of ecology in Polish companies
SOURCE: Own study

For example, in many effects of regulations presented by the justifications of amendments to legal acts for the economic sector, Ministry for the Environment indicates that only 20% of the companies are covered by the system of enhanced responsibility and care for recovery and recycling of products and packaging placed on the market by them. Therefore, a significant discrepancy between declarations and the actual state of affairs in this regard is evident. A similar percentage, nearly 90% of entrepreneurs – in accordance with the answers to the next question – believe that their company is environmentally responsible (see Fig. 2). A certain solution is a regulation on BDO [8] (databases of products and packaging and waste management), which is a database significantly tightening the system of monitoring the impact of entrepreneurs on the environment. As expected by the Ministry of Environment, this registry will include more than 300,000 businesses.

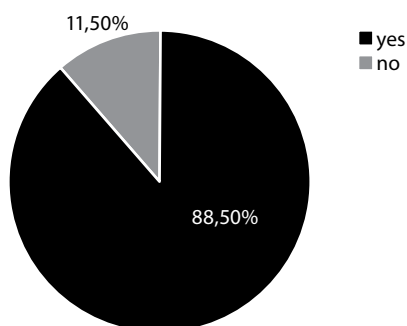


Fig. 2 Respondents' answers to the question "Is your company environmentally responsible?"
SOURCE: Own study

The results of respondents' answers to this question indicate a phenomenon of inconsistency of declarative answers with actual behaviour. It is interesting that at such a high rate of environmental responsibility, almost 50-60% of the

companies (see Table 2) do not perform basic duties such as recovery and recycling of packaging waste, proper classification of waste, record keeping and reporting in this area. The survey also wanted to discover the impact of household waste segregation on waste segregation in companies. Surveying in this respect respondents responsible for environmental aspects in enterprises can be important due to the duplication of certain behaviours from their own environments in their workplaces. It is impossible to resist the impression that in both cases a high degree of segregation indicates rather a declarative nature of the response. Almost 98% of the respondents segregates waste in households (see Fig. 3) (at 75% rate of waste depositing [3]) and in companies more than 90% have active systems for selective waste collection (see Fig. 4). Despite this, unfortunately, Poland still falls behind European countries in terms of recovery and recycling of waste.

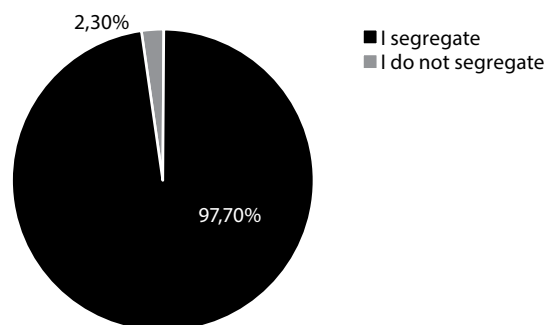


Fig. 3 Declaration of respondents on waste segregation in their households.
SOURCE: Own study.

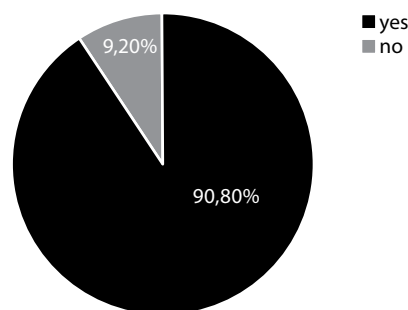


Fig. 4 Respondents' answers to the question "Is segregation of waste organised in your company?"
SOURCE: Own study.

Is there supply and demand for organic products in Poland?

Then there was an attempt to estimate the demand for products from recycling (i.e. produced from recycled materials such as waste paper, scrap metal, broken glass, used electrical and electronic equipment) or which can be described as recyclable, i.e. meeting the harmonised standards defining parameters which must be met by packaging or the product to be recycled easily and safely for the environment - only 50% of respondents declare such

purchases (see Fig. 5). Again, a clear discrepancy between the declared kindness towards environmental issues and the desire to use products from recycling or recyclable did not escape the attention of the researchers, which indeed would be an expression of such environmental responsibility, which was declared at the beginning.

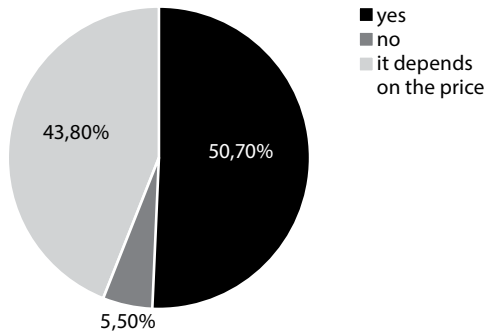


Fig. 5 Respondents' answers to the question "Are you willing to buy organic products?"
SOURCE: Own study

At the same time, only 40% of consumers are interested in the above products – sustainable production in Poland has therefore no consumer's favour in the present state and success in the disposal of such products cannot be expected. A harbinger of good changes may be that another 40% speaks very positively of ecological products despite the fact that they do not purchase them (see Fig. 6).

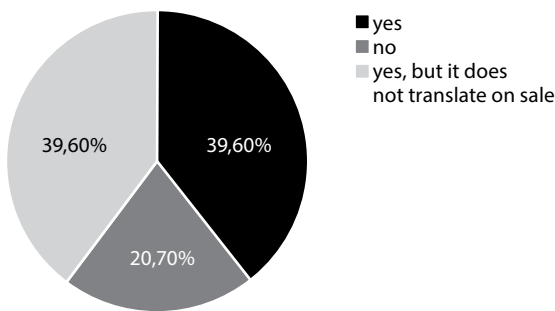


Fig. 6 Respondents' answers to the question "Do your customers prefer organic products?"
SOURCE: Own study

An example of sustainable production is the activity of Wal-Mart, an American chain, founded in 1962 by Sam Walton. In 2005 Wal-Mart introduced a new approach to the management, "Sustainability 360", whose elements were connected with the greater use of renewable sources of energy, reduction of waste and sale of products not interfering negatively with the environment. One of the steps aimed at the objective pursued was the launch of long-term cooperation with local suppliers so the distance between producers and shops (saves fuel and reduces emission) was reduced and product freshness preserved. In that region – as indicated by the presented financial results of the company - sustainable products have met with great interest of consumers.

Looking for reasons in our region why so few Poles would buy products from recycling or recyclables, we asked about the economics of ecology – in the conviction of respondents, being green is expensive (see Fig. 7). This involves either extra expenses (42.4%) or additional work (34.6%). Only 3.2% of the surveyed companies consider products manufactured in accordance with the principles of sustainable development to be cheaper – certainly that state of consciousness – not supported by studies in this area - can discourage from necessary changes. Especially as almost 1/5 thinks that it is too much burden compared to the existing problems and statutory requirements. General conviction associated with it, conditioning the demand for sustainable products and not supported by figures, is also a sign of a gap between the perception of certain phenomena and behaviour, which has a particularly significant impact on the economy in the area of environmental protection [4].

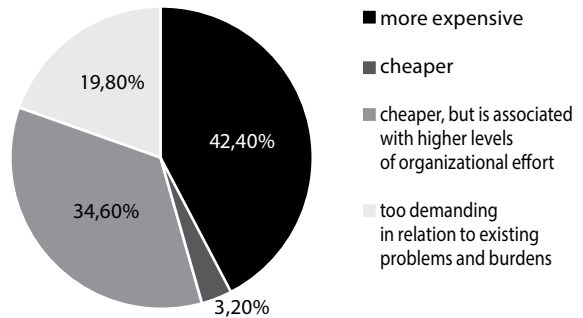


Fig. 7 Are ecological products expensive?
SOURCE: Own study

The need for a change of business models in Poland - Green Business Models

In the surveyed companies it was sought to determine whether any changes had already been made in terms of applied business model so as to adapt to new environmental statutory requirements – which as shown by the statistics – are increasing (see Fig. 8). And so it turns out that nearly 60% of companies met with the concept of a sustainable business model, but still more than 40% do not know what this term may relate to.

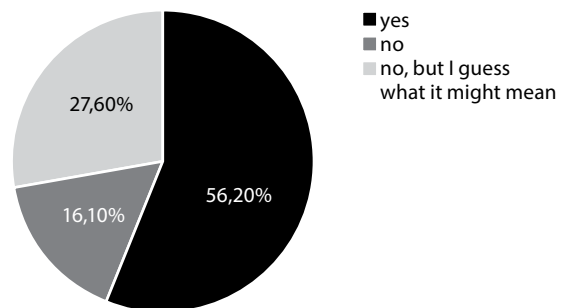


Fig. 8 Respondents' answers to the question "Have you met with the notion of a sustainable business model?"
SOURCE: Own study

This is surprising, since the subject of sustainable business models has been present in our economy for a long time. Knowledge resources, so-called “open science”, are filled with reflections on the slogan Green Business Models that are successful despite the economic slowdown, thanks to their individual approach to production and its objectives. As indicated in the report, in this area [2] green business models are generally regarded as innovative and success-ensuring for an enterprise, regardless of the economic situation.

Another proof of the occurrence of a mind behaviour gap are answers about the knowledge of CSR – more than 75% of respondents believe that it is a real improvement of the social and ecological situation with economic benefits of enterprises (see Fig. 9). In the world CSR is going through the period of its most rapid development, inter alia the obligation to disclose non-financial information. Despite this, in Polish companies we are dealing with a lack of implementation of fundamental environmental obligations (see Table 2), which is a manifestation of environmental irresponsibility.

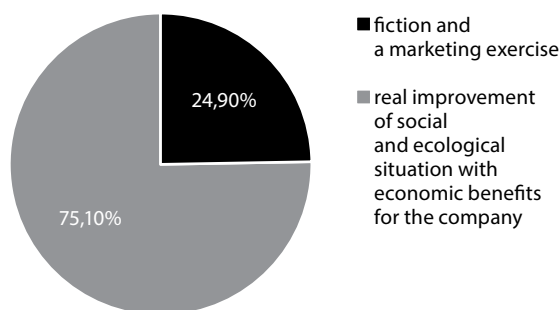


Fig. 9 Respondents' answers to the question "Do you think that CSR (corporate social responsibility) is fiction and a marketing exercise or leads to a real improvement of social and ecological situation with economic benefits for the company?"
SOURCE: Own study

An interesting set of responses to the last tenth question was received. The question concerned the position responsible for the implementation of environmental obligations in Polish companies. The spectrum of responses was impressive. It covered all the possible functions in enterprises, from a secretary to the owner of the company, through accounts, managers and specialists (health and safety services, ISO proxies, purchasing managers), directors and board members. These people voluntarily became involved or were obligated within their responsibilities, to implement statutory requirements for environmental protection.

Such different answers may constitute confirmation of the fact that the area is relatively young and companies on the one hand have not decided what functional area will be responsible for it and, on the other hand, such activities are still so few that in a huge number of functions that companies have to implement, this area is too narrow to single out a specialist for environmental protection or ecology. Another report in this area shows that the professions related to ecology are still distant future occupations among other very abstract professions. For example,

a waste data handler can become extremely sought after “even before” 2030. Polish and foreign experts also predict that future occupations will develop in the following industries: biotechnology, (...) nanotechnology, ecology and energy industry. (...) The development of the energy sector will also be linked to ecology, and consequently, a demand for specialists in the field of environmental protection and combating against climate change (climate change reversal specialist, weather modification police) and obtaining energy from renewable sources and waste disposal will increase. The future occupations are also related to the production and trade of eco-friendly vehicles (alternative vehicle developers) [9]. As you can see in the given example, responsibilities of specialists in the field of ecology are in quite an original set of new yet distant professions.

Summary

The existing currently and resulting from the carried out analyses level of business involvement in the pro-ecological activities of companies, including the implementation of statutory duties together with the statistical data provided by the Central Statistical Office paints not a very optimistic picture. However, the level of backwardness from which Polish economy started and the immense task that Polish companies had to catch up with to begin exiting from the centrally-planned system should be taken into account. This happened at a time when nobody paid attention to the impact of production on the environment. Also, other market economies were characterised by a relatively low level of involvement in environmental issues in the initial period and also a lot had to be improved there. Challenges that are put before sustainable supply chains are clearly highlighted. They are: uncertainty of demand for second-hand products, unknown quality of recovered products, homogeneity of secondary raw materials, the lack of relationship between planning of demand for used products and their supply and many, many others [7]. In view of the above, taking into account the level of difficulty of changes to be made, you can positively assess the condition of Polish companies in the pursuit of pro-environmental development and expect, but primarily promote, further positive changes in protecting the environment. Activities of this kind will protect Polish economy against known errors of other countries and against adverse effects of irresponsible operations of industry and services on ecosystem. ■

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¹ A survey based on interviews took place in the years 2014-2015 and covered 217 entrepreneurs of the SME sector who have their registered offices in the Poland – the survey was carried out under the title: *Ecology in Polish enterprises*.