

# The general idea of environmental management development

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## Abstract

In present times when the society is noticing consequences more and more obviously polluting by natural environment, the industry also has to adapt itself to more and more restrictive law regulating the level of reissued pollutions for environments and operating of natural resources. It is extremely significant for producers, because by looking after the environmental protection they are raising their competitive position - customers more often bring forward for the products environmental friendly. Moreover, the maladjustment of law regulations is exposing from this title the entrepreneurs for big financial losses in the form of penal fees about the environmental protection. And therefore producers, especially from industry sectors, are searching for getting newer solutions helping them to adapt to the law force. The implementation of environmental management processes is one of profitable possibilities along with environment administration adapted suitably.

## Key words

Management, Environment, Environment protection, Environmental management, Sustainable development

## Introduction

Companies' activity, usually based on the theory and the practice of administration, is showing that the organization is the complicated unit about versatile associations with the environment. This complexity of companies means chances to build the strategy tuned in to the profit, but also to bear allocation of responsibilities about the fact that organizations have to protect the environment which is the significant element of its outside environmental surrounding. Currently, companies have for the task to produce goods and services and to assure and maintain working places, what is tied up with the social responsibility, but also to make sure keeping reliable ethical standards of the company, determining its duties with respect to environmental friendly aspects<sup>1</sup>.

The environment is subject of the degradation year by year and the industrial activity and the various kind of companies are causing such a state. The crisis appeared in mankind history for the first time about the worldwide range, embracing both developed countries, and developing ones - crisis referring to the attitude of the person to environment. Promising signs this former crisis were visible for a long time - the population explosion, insufficient integration of the technology developed immensely with environment requirements, impoverishing arable grounds, hit-and-miss development of metropolitan zones, lessening of slow areas and the bigger and bigger risk of dying off many forms of the animal and vegetable life. The future life, to be threatened on the earth perhaps isn't subject to the doubt that if this process is being continued. So it is the matter extremely essential to consider problems of the threat environment and to take necessary arrangements up in the purpose of preventing for this risk<sup>2</sup>. It is more and more often happened to connection the sciences with management for the environmental protection, and with the practice of leading the business activity, in the purpose of its rational taking advantage and protection.

In this exactly purpose, the social-economic concept came into in seventieth years according to which, providing for material and aesthetic needs, the health care and the person's lives and protection of business of unborn generations are the purpose of the environmental protection. The concept also

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<sup>1</sup> Klassen R., McLaughlin C., *The Impact of Environmental Management on Firm Performance*. Management Science, Vol. 42, No. 8, 1996

<sup>2</sup> Paczuski R., *Prawo ochrony środowiska*, Oficyna Wydawnicza „Branta”, Bygdoszcz 1996.

rose apart from another concept of ecological development, which means integrating the environmental protection with social and economic development<sup>3</sup>.

### **Problems of natural environment pollution**

The primary object of ecological development is the assurance of such a scale of intervention in the environment so that its state was not deteriorating and in the same time were guaranteed the nature sources of functioning the social and economical systems and also better providing for physical and psychological people needs by correct arranging of its ratio for natural environment. Ecological development is the method of leading the business activity with utilizing environmental and social organization potential, what is ensuring dynamic development of manufacturing processes, the rational usage of natural sources and the improvement with preservation of the high quality of life<sup>4</sup>.

The fundamental principle of ecological development is unambiguous determining that the duty of the environmental protection is not able to be treated as being left in the conflict with business of the economy, but is posing the element of correct managing, and every activity infringing this duty is illegal.

It is known for many years already that the industry is causing the biggest damages to the environment and therefore to influence, companies were decided also through the legal system, behind means of economic tools of the environmental protection. Economic tools are means of the influence of economic subjects on business finances or other people which are making profitable the environmental protection. They are able for some companies to be the mean of economic compulsion and they are able for other people to occur in the form of awarding to protective action. They have meaning influence of the company on the financial effect in every case shaping relations of expenses and benefits in the calculus of production efficiency or through the erosion of profits as a result of punishment paying<sup>5</sup>.

From so the environmentally friendly policy of the organization is descended from perceiving of environment issues also. The environmental protection was being treated through the longer time as one of elements of the economic policy. It was being called the economic policy initially in the line of the environmental protection. However it was stated, after the reliable period, that the environmentally friendly policy also had strong connections of administration with the social policy and the discipline.

In the meantime in the ecological development process the principle is significant extremely of preventing for pollutions rising and other charges environments during every activity and at every stage of productive processes. They are able to be applied here various protective tools, like for example preventing producing pollutions by avoiding in technological processes, applying the recirculation or installing protective pollutions devices<sup>6</sup>.

Extra, with the most significant element in connection with the environmental protection natural environmentally friendly administration is before negative impact of the industry activity. It is not possible to manage with companies, not taking into consideration, important from the social point of the view, the pollutions aspect and the degradation of natural environment. The increase in pollutions is exerting negative influence of population on the state of health and the executive ability on environment, the number of illnesses is increasing, the life expectancy is being shortened and deaths caused as a result of the environmentally friendly stress with staying under the devastated environment, negative changes are appearing in mutual relations between people, social expenses of development are growing and competitiveness is falling on foreign markets<sup>7</sup>. For such a state of environment are certainly responsible with a great extent the companies - its main users. Therefore the concern for its quality has to become one of more important issues of managing them and

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<sup>3</sup> Christmann P., *Effects of Best practices of environmental management on cost advantage: the role of complementary assets*. Academy of Management Journal, Vol. 43, no 4, 2000.

<sup>4</sup> Kozłowski S., *Ekorozwój Wyzwanie XXI wieku*, PWN, Warszawa 2000.

<sup>5</sup> Tyteca D., *On the measurement of the environment al performance of firms – a literature review and a productive efficiency perspective*. Academic Press Limited, Leuven, Belgium, 1996.

<sup>6</sup> Costanza R., Norton B., Haskell B., *Ecosystem health. New goals for environmental management*. Island Press. Washington D.C., 1992.

<sup>7</sup> Penc J., *Strategie zarządzania, cz.I AW „Placet”*, Warszawa 1997.

programming their development. It has to be performed in all their spheres of action: in the research, production and marketing, i.e. both in the process of formulating of purposes, and of their realization.

### **Main idea of environmental management**

Modern administration is based on the system approach, of whom the assumption is the starting point that the company and the nature are shut agreements. Only the environmentally friendly product, trying the crew out and financial resources mean the fact that it is leaving outside, from the bet in regard to the company. However waste which are being turned round in the analyzed agreement to the production cycle and products remarked into other people, batch materials are rising in every production cycle to the other cycle or subjected to utilization and neutralization.

It is descended from it more and more popular in the activity of the organization concept of administration with the environment. Underline of the order given away to the European Union<sup>8</sup> in the 1993 year is extremely important in this subject and for managing referring just of the environment. Regulating the system of administration legally with environment guaranteeing the effective realization of purposes and tasks referring to the environmental protection of the organization, the series of standards was elaborated as the ISO 14000<sup>9</sup>.

The improvement of effects of the company activity on the environment is the general purpose, which the series of ISO 14000 standards was elaborated for, producing products at the minimal usage of natural resources, energy and water at simultaneous preservation of the quality on the same level. The system of environment administration is the integral part of the system of the business managements in accordance to this series<sup>10</sup>.

According to indications of this group of standards, elements of the system of administration are: the structure, procedures or the environmentally friendly policy have to collaborate with remaining functions of the given organization and to be favorable to its farther development at the same time integrating with its strategy. The reception of the ISO 14000 standard is voluntary currently however they are able hereafter them to become the condition sine qua non for fulfilling the organization for the chance to function. Benefits from adapting oneself to requirements of this standard are various, often in the form of the improvement in the image of the organization and the increase in the competitive position on the domestic but also foreign market, lack of referring obligations polluting by environments, using energy and materials, the more exact cost control, easier cooperation up for savings with the outside environment of the organization, and so like.

The system defined in the act is being derived from managing of the environment to the part of the general system of administration which includes the organizational structure, planning, the responsibility, mores, procedures processes and the centers necessary for elaborating, putting into practice, realizing, the review and maintaining the environment policy. Elements are qualifying to the system of environmental management and they are: environment aspects, purposes and environment tasks, environment applications, individual lists of deeds, readiness of reacting to the event of the breakdown, the operating control, managing waste, protection of atmospheric air, the economy water - waste, protection against the noise<sup>11</sup>.

However it is the purpose of the system of environmental management continuous reducing of the negative influence on the environment through ensuring compatibility with the established environment policy of working of the company. The assurance of methods, means, methods of the procedure and necessary tools is the task of this system for the reduction of occurring of the breakdown and the elimination of potential threats for environments in emergency cases.

The continuous improvement is the basic principle of environmental management, systematic minimizing within the confines of available centers of negative influence of companies on the environment. The system of environmental management includes the prevention in the field of potential environmentally friendly threats in the company, developing environmentally friendly consciousness of the whole organization and transferring information about the solution to the

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<sup>8</sup> EWG nr 1836/93

<sup>9</sup> Słysz K., *Zarządzanie i sterowanie środowiskiem*, Politechnika Krakowska, Kraków 2000.

<sup>10</sup> Zeithaml C., Zeithaml V., *Environmental management: revising the marketing perspective*. The Journal of Marketing, Vol. 48, no 2, 1984.

<sup>11</sup> Słysz K., *Zarządzanie i sterowanie środowiskiem*, Politechnika Krakowska, Kraków 2000.

environment of the interaction. Managing the activity without prejudice for requires environments of the system approach and constant improving of the system of environment administration. Such system is necessary for every company to calculating purposes of the environmental protection, and then for reaching these purposes as well as for operating in harmony with recipes in the line of the environmental protection<sup>12</sup>.

So that it was possible solving of problems tied with the environment, their earlier identification, the analysis and the estimation are necessary. They should remain every aspects diagnosed environments tied with the managed activity, i.e. the emission into the climate of gases, water-waste managing, managing waste, pollutions of the ground or also consumption of raw materials and natural resources.

In the system of environmental management very important matter is product life cycle. Planning and the effective reduction of negative influence is possible in these phases for the environment already designing products to the suitable method. Environment properties of the product are being determined tentatively, as well as length of elapsed time of this cycle, including every his stages here, from equipping with materials for winning the value back from products used up and the recycling. Such a organization of the cycle is enabling companies lives of the product for producing products not marring the property environments natural<sup>13</sup>.

Concept of environmental management is descended from managing of the quality from the system. However it is relying on determining the quality of produced products, but also controlled course of processes or significant action is determining features of the system of administration which are tolerating with regard to the purpose of administration. All processes and engaged factors are participating in the system of environmental management to producing environmentally friendly products, i.e. planning, designing, equipping with raw materials, materials and parts, production, the distribution, use, winning back and the recycling<sup>14</sup>.

Since in environmental management the product life cycle is significant including environmentally friendly consciousness to the quality of the product, is necessary making sure whether it was introduced suitably actually. They are making the estimation of environment properties of every product in this purpose in the phase already of planning, as well as getting more ambitious purposes and more far-away course of development of the given product are being determined. Phase of the preparation and of planning the product she is very important for the more far-away cycle of the life of the product and he has to be exactly conducted. The more far-away course of the cycle and his length depend on her, and quality of the product, both from the point of the view of usefulness of the product and of his environmentally friendly properties<sup>15</sup>.

It is being chosen to raw materials, materials and parts, every of components exactly in the phase of supply and analyzed from the qualitative and environmentally friendly perspective. Inadequate components are being rejected and the product is being produced only from so who are corresponding to all very restrictive standards and standards. Phases of production, sale and the transport are being analyzed exactly and also attempts at reducing consumption of materials, energy and harmful substances are being taken up here. Warning of raw rules is managing for reaching better conditions of the environmental protection hereafter<sup>16</sup>.

It is important in the concept of environmental management extremely both the phase of using the product by the customer, and of winning the product used up back and its recycling. This process is the more and more common phenomenon in operating companies on a large scale. It is developing companies bigger and bigger following the global trend serving for winning products used up or

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<sup>12</sup> Schlosser I., *Environmental management: Environmental variation, life history attributes, and community structure in stream fishes: Implications for environmental management and assessment*. Springer New York, New York, 2006.

<sup>13</sup> Costanza R., Norton B., Haskell B., *Ecosystem health. New goals for environmental management*. Island Press. Washington D.C., 1992.

<sup>14</sup> Born S., Sonzogni W., *Environmental Management: Integrated environmental management: strengthening the conceptualization*. Springer New York, New York, 2006.

<sup>15</sup> Keoleian, G.A., Menerey, D., *Life-cycle Design Guidance Manual: Environmental Requirements and the Product System*, Washington DC, 1993.

<sup>16</sup> Rogers D. S., *Going backwards: reverse logistics trends and practices*. Reverse Logistics Executive Council, Nevada, 1998.

elements back, facilitating their repeated usage systems and produced to the recycling of products which have remained earlier and sold systems. These systems have to fulfill they often very raw legal requirements, in dependence on the country and the region in the world, as well as quality requirements to be up to needs different of diversified customers. Products are generating and they are representing with oneself reliable value when they are gaining approval from customers' page. And therefore companies are transferring environment information and they are encouraging customers to purchases of these products which are reducing negative influence on the environment. It is supposed it to ensure acquisition of the responsibility for ecology for the of long standing scale by the producer<sup>17</sup>.

### **Environment protection by usage of environmental management**

Natural environment protection became the inherent element of the good strategy of the business managements in recent years. The tendency is perceptible of entrepreneurs' aiming to the maximization of production and profits, but also for the production planning and designing final goods this way in order when to be bad for the environment least. Legal requirements more and more often also force entrepreneurs to take environment aspects into consideration in of every kind of activity.

Bigger and bigger pollution environments natural and running down natural resources, as well as high production costs caused companies more often and more often to search, or they are being forced legally for applying modern methods to getting of materials with products used up for production and managing or the waste material. Possibilities so is giving putting into practice of processes operating in various production sectors of the logistics opposite to the activity of the organization. It is possible thanks to these processes reducing by polluting by environments natural, of operating of natural resources and production costs. Specification of factors conditioning these processes, should contribute to rationalization of managing of waste, but through lowering production costs for better functioning of companies. Using environmental management into practice by better understanding of outside and internal limitations as the element assisting the environmental protection natural, in it of also binding legislation, as well as returning the remark for issues should contribute to managing of waste to the increase in efficiency of production at simultaneous decrease in expenses and the pollution environments natural. Taken some more methods of the procedure are contributing to better functioning of how many kinds of industries extremely indeed suitably with waste<sup>18</sup>.

Act on the environmental protection, with term the environmental protection determines action or renunciation making it possible to keep either restoring the nature balance necessary to assure contemporary and for future generations of profitable living conditions and the realization of the right to use resources environments and preservation of its value<sup>19</sup>. Environmental protection natural is tied by environments with such action like rational shaping and managing its resources, counteracting or preventing of harmful influences on the environment, i.e. so who are able to cause its degradation and with attempts at restoring the character of some elements environments to their original state. The process is being managed in order restoring or giving the properties beneficial for the people to it through conscious influence on the environment shaping by environments.

Managing of any tied activity from determined impact of the nature on the state has the people life. The economic growth was the main priority of the state and entrepreneurs until recently and raising the living standard at home. However remarks tied with such a rate of expansion for risks weren't being returned. Currently but, turned out that resultant damages were serious as a result of such a activity and often irreversible. And therefore suitable legal adjustments rose, so like the act on waste from 1997 year, with the amendment in 2001 of year, whom the environmental protection is being monitored up-to-date thanks to. Very entrepreneurs are also noticing the problem and wanting to avoid it so often they are using specialized institutions helping to improve production technologies or to manage waste correctly.

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<sup>17</sup> Rogers D. S., *Going backwards: reverse logistics trends and practices*. Reverse Logistics Executive Council, Nevada, 1998.

<sup>18</sup> Margerum R., *Environmental management: integrated environment al management: the foundation for successful practice*. Springer New York, New York, 1999.

<sup>19</sup> Słysz K., *Zarządzanie i sterowanie środowiskiem*. Politechnika Krakowska, Kraków 2000

The principle of balanced development is the basis of the environmentally friendly policy in the line of the waste disposal, whom such lead of every action is the main assumption, 'for' so that resources and values were kept environments in condition ensuring the chance to use from him, both through present, and unborn generations. It is essence of balanced development to equal treating of social, economic and environmentally friendly rights what means the need to link the issue of the environmental protection to the policy of social and economic development of each lines of the life in front of waste in practice. In the waste disposal, how in not many other lines of the environmental protection, the direct coupling of principles of rational managing of raw materials, minimization is visible of producing of waste and the maximization of their recycling (in this recycling) with total with eliminating or limiting bugbears of waste for the life and people's health and for environments<sup>20</sup>.

The tendency is existing currently of establishing more restrictive environment standards for companies, who, although they require bigger investments making it possible to be up to them they are improving it indeed at the same time competitiveness of such companies on the international market<sup>21</sup>.

## Conclusion

All discussed advantages of environmental management are extremely significant for companies, in particular these compares intensive industry activity. However they are purposing companies which are using from the concept of environmental management and at the same time natural environment protection, is on the market still little because of low popularity of this kind of action. High expenses of putting environmental management into practice are causing such a state of the thing which it is possible to regard main and of maintaining them. Only the biggest companies are able to invest in lead of such processes. Remaining companies, whom the environment is not neutral, with they are delivering lead of such processes to organizations specialized in their first name which it is lowering expenses.

Comparing faults and advantages to companies bigger and bigger in recent years joined environmentally friendly activity, and what's more not under pressure legal, treat voluntarily, noticing consequences of the influence of the industry on the environment.

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<sup>20</sup> Welford R., Gouldson A., *Environmental management and business strategy*. Pitman Publishing Limited, London, United Kingdom, 1993.

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