PRO-ECOLOGICAL ACTIVITIES OF SMES – BARRIERS, DETERMINANTS, FINANCIAL SUPPORT MECHANISMS

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Summary: In the present chapter the authors aggregated barriers, determinants and financing sources (own and external capital) of planned and performed pro-ecological activities/investments in SMEs. The variables were aggregated on the basis of the data by the European Commission and own research in Polish enterprises of the SMEs sector - purposeful selection (enterprises declaring pro-environmental activity). The authors distinguished in the chapter an overarching determinant of pro-ecological activity in the SMEs sector, unique compared to large-scale enterprises - convergence of pro-ecological activeness and cost reduction of own basic activity.

Key words: ecological activities, SMEs, barriers and determinants of pro-ecological activity, financing sources of ecological activities

1. Introduction

The sector of the SMEs is a driver of national economies in the European Union. In the year 2013 the number of registered economic entities in this sector was 21.6 million, which in total balance constitutes 98% of all registered ones. Thus, in the European Union the value added of SMEs is 3.666 trillion Euros, which constitutes 51.8% of added value and 28% of produced GDP of the European Union. The above summary of the size of the SMEs sector in the European economy unequivocally confirm their vital economic importance and thus, a large impact on natural environment and social welfare. However, in the practice of business sources of environmental threats are attributed to large-scale enterprises. It is considered that it is mainly large manufacturing enterprises that constitute a source of threats and pollutions of lithosphere, hydrosphere and aerosphere. Thus, legal, financial and technological mechanisms are dedicated to and implemented in this group of enterprises.

While referring to the above distinguished measures confirming the size and power of European SMEs influence on economic development, one cannot omit their influence on natural environment. A unique characteristic of SMEs is their focus on executing basic goals of their operations. Therefore, the Authors opinion is that the relationships between executing basic goals of their operations and their "green activeness" are vital.

2. Areas of enterprise pro-ecological activity

Currently, in the SMEs sector one can notice combining basic goals of operation with their pro-ecological activeness in support of natural environment, as well as local community. In 2013 12.9% [1, 2] of the European SMEs indicated that a vital goal of their operation in production and transport cost reduction in convergence with reduced environmental pollution. This measure is still low. Enterprises declaring their pro-ecological activeness, in the portfolio of factors being the source of inhibition of this activity of SMEs distinguish, among others: additional external costs - environmental ones, limited access to external financing sources and often low level of environmental awareness and corporate social responsibility of the employees, cooperating entities and consumers of their value created. At the same time these

enterprises indicate that environmental goals were not separated from basic goals. According to the SME entrepreneurs (indicating environmental activeness) their operation in the scope of reducing environmental threats and pollution brings also economic benefits, frequently financial ones [2, 3].

Thus, one can state that the main determinant of pro-ecological activity of the SMEs sector, unique compared to large-scale enterprises is convergence of pro-ecological activity and reduction of basic operation costs. This concerns for example costs connected with reduction of the demand for production or services factors (e.g. energy, fuels, resources, manufacturing materials). Other factors, distinguished in the literature which may influence environmental activity such as: growth of the supply and demand for "green" products/services, financial and fiscal levies, legislative regulations, improved company image - are currently associated by the SMEs entrepreneurs with growth of production/services costs connected directly with additional environmental costs.

Therefore, what is often sought after is a binary relationship between environmental effects [11, 12] and economic effectiveness. Examples of such relationships are presented below:

- Cost reduction through the decrease in emission charges as a result of reduction of greenhouse gases emission in CO2 equivalent;
- Reduction of production costs and SME infrastructure through application of energysaving technologies;
- Reduction of the increase in the cost of rare resources acquisition through the increase in the quantitative use of resources;
- Growth of economic effectiveness as a result of more effective use of the nature resources and limiting waste;
- Higher quality of products through the growth of the qualitative resource use;
- Growth of the demand for specific products through meeting environmental tastes of customers.

At the same time it should be stressed that these activities promote execution of the European and national environmental policy, are accepted not only by the SMEs sector enterprises but also socially. These activities foster sustainable production at the microeconomic level and sustainable creation of value added at the macroeconomic level [5, 7].

While evaluating the directions of pro-ecological activity of SMEs in the European Union we can refer to studies conducted by TNS Political & Social at the request of the European Commission, Directorate-General for Enterprise and Industry, the coordinator of which was the European Commission [2]. In the group of European enterprises from the SMEs sector the greatest importance - 80% of the examined entities, is attributed to energy-saving activities. Vital directions of pro-ecological activity convergence with carrying out the basic goals of SMEs are actions connected with material management, in particular minimizing waste - 75%, materials saving 65% and directly connected with reverse logistics - recycling, reuse or processing - 56% of indications. Low percentage measures were attributed to innovative prosumer activity [4, 9, 10] 25% - connected with production of energy in Renewable Energy Sources (e.g. electricity, heat or cold) for own needs [2, 8, 9, 6].

The European Commission indicates also barriers of pro-ecological activity in the European sector of SMEs. In the present paper in order to justify the addressing the issue the authors distinguish the barriers which obtained more than 50% of indication, in particular the following ones: environmental activity cost, limited access to external financing sources, high cost of adjustment to legislative pro-ecological regulations, low level of expert knowledge (it concerns: tools, technologies, methods, financial and legislative support mechanisms) in the scope of the distinguished above areas of pro-ecological activeness. It should be stressed, that these barriers are fully compatible with the inhibition factors of pro-ecological activity

indicated by enterprises which already indicate environmental activeness in one or more above mentioned areas.

Thus, it is important to concentrate legislative and financial mechanisms as well as the ones connected with knowledge transfer and diffusion - in order to support "green activeness" of SMEs. In this reference the cognitive focus concerns distinguishing external financing sources of pro-ecological activeness of SMEs, with distinction of Funds resulting from the cohesion policy in the structures of the European Union.

3. Financing sources of pro-ecological activities of enterprises in the SME sector

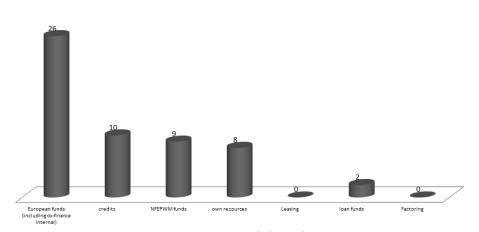
The goal of the conducted study was, among others, to determine the barriers of environmental activity, identify pro-ecological activities and determine preferred instruments of financing this activity. In case of barriers of environmental activity more than 50% of indications concerned: limited access to external capital including high cost of acquiring this capital - 42 enterprises (76%), financial risk resulting from the growth of basic activity cost -38 enterprises (69%), unsatisfactory detailed knowledge concerning environmental investments (e.g. scale, technological solutions or return rate and time) in heterogeneous areas of SMEs activity - 35 (63%). The above indications of the "target group" of the examined SME enterprises are convergent with the barriers of pro-ecological activity of examined European enterprises (point 1 of the present chapter). This confirms uniqueness of this sector in perceiving inhibition sources connected with convergence of the basic activity and operating symbiotically with the environment. Focusing on environmental activities which reached over 50% in accordance with the assumptions (point 1 of the present chapter) one can identify an inclination to investments reducing costs of SMEs activity, being simultaneously the ones reducing use of energy, fuels, raw materials, materials. With reference to identifying pro-ecological, more than 50% of indications concerns: reduction of energy intensity of buildings, halls and technological processes - 38 enterprises (69%) and reduction of resources use - 32 enterprises (58%). Other actions indicated by the examined entrepreneurs include: recycling, re-use, waste processing and use - 17 enterprises (13%), use of renewable prosumer sources - 7 enterprises (13%).

While analyzing the motives of planned above mentioned pro-ecological investments/activities 39 enterprises indicated reduced cost of basic activity (71%). The other ones include: building the company's brand and image - 16 enterprises (29%), increase revenues to the business - 12 enterprises (22%), improved relationships with the environment of the company - 9 enterprises (16%), increase in the value of products and services - 9 enterprises (16%) - in this 4 medium enterprises, increase of the competitive advantage - 6 enterprises (11%), increase of the employee motivation and their links with the company - 5 enterprises (9%).

With reference to the financing sources, paradoxically with reference to the basic activity 47 enterprises (85%) declared co-financing new pro-ecological investments - with acquired external capital. The remaining 8 examined enterprises (15%) are planning to finance these activities from own resources. The planned structure of the investment capital of the above mentioned activities according to the examined enterprises is presented in figure 1.

Figure 1. Structure of the planned financing sources of environmental activities in the examined population of enterprises of the SME sector

■ The number of surveyed enterprises SMEs



Source: Own elaboration

While referring to the graphic summary (Fig. 1) it should be indicated that 26 (47%) of enterprises declaring implementation of investments recognized as environmental ones are going to use resources co-financed from the funds of the European Union. It should be mentioned here that the examined group of the SME entrepreneurs was trained and obtained knowledge in the scope of areas, restrictions and procedures of acquiring external financial resources, including the ones coming from the European Union. Examined enterprises also tend to apply for low-interest preferential credits dedicated in particular in Poland by Bank Ochrony Środowiska. The above form of financing environmental activities with the use of external capital distinguished 10 of the examined SME entities (18%).

Nine SME enterprises in turn 9 (16%) declares applying for funds from the National Fund of Environmental Protection and Water Management (in this Provincial Funds for Environmental Protection and Water Management - 16 entities in Poland). These are financial support resources in the form of subsidies and/or preferential loans for extending the basic activity with regard to pro-ecological investments.

Only two SME enterprises are going to use loan funds, this concerns in particular venture capital ones and private equity ones. The other group of entities in the research portfolio shows lack of interest in this form of recapitalization. The low interest in loan funds are explained by, among others: high cost of acquiring capital resources and limiting decision making and freedom of operations in the basic activity of their company.

It should be also indicated that the studies companies did not show inclination to finance ecoinvestments with leasing and factoring capital.

To sum up, with reference to the external financing sources distinguished by the examined group of entities such as co-financing from the resources of the European Union's Funds and the National Fund For Environmental Protection and Water Management, in Table 1 the Authors summarize preferred programmes of eco-investment financing (in the form of subsidies and low-interest loans) in the years 2014-2020.

4. Conclusion

To sum up, the attitude of the SME sector to their basic activity implementation in convergence with environmental should be analyzed in the category of prospective reduction of costs connected primarily with the reduced demand for production factors and their waste. In this respect sources of recapitalization of investments indirectly connected with

environmental activity are relevant for this group of SMEs. On the basis of the conducted research, which is supported by the indications of the purposefully selected population of enterprises (declaring their accession to integrate basic activity and environmental one), the Authors state that it is vital to stimulate environmental awareness of the SME entrepreneurs, with particular distinction of relationships between improvement of environmental measures and economic results. In this case vital elements are environmental education, information transfer on support mechanisms of "green initiatives", as well as lobbing of the SME enterprises in legislative bodies, e.g. in the scope of fiscal benefits.

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