SUSTAINABLE DEVELOPMENT OF MINING COMPANIES IN MODERN ECONOMIC CONDITIONS

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ABSTRACT

Sustainable development of a mining company is affected significantly by principals of external economic environment that is local, national and global economies. The actual balance between economic, ecological and social sectors of mining company development is influenced by many factors intrinsic to developing countries such as Ukraine. A vertical between lowest company level and highest national economy level of sustainable development is not introduced yet.As a consequence sustainable development framework need to be improved for the mining company purposes. In turn achieving its sustainability requires a new approach to strategic planning, monitoring and reviewing activities of the mining company as sustainable development applies for sustainable management. Therefore running mining company in a sustainable way means that interests of all economic agents are met optimally subject to constraints on sustainable development principals, lifecycle of the company is as long as possible and its profitability is resilient to unfortunate costs.

INTRODUCTION

Exploring the core essence of sustainable development namely its principals and concepts, analyzing relationship of sustainable development and other economic theories and studying current ideas of how to make mining companies to growth sustainably provide some insights into contradictory connection of sustainable development itself and mining company activities within the market economy. As we see it these contradictory challenges remaining untaken up prevent mining companies from adhering to balanced economic, environmental and social interests in practice and disallow to put economic, social and ecologic sectors of internal and external environment together around the mining company providing its integration into local and national economies.

RESULTS

The first challenge could be described as fundamental contradiction between postulates of the market economy according to which mining companies perform and managers' estimation of a level of importance and significance that social and environmental projects are of. As a consequence it mirrors their attitude to such projects which in such case do not occupy priority positions among company goals. Saying reverse sustainable development process is considered by managers and owners of assets to be of high cost and low benefit.

At the same time a mining company is committed to the market economy rules and recognizes benefit as the only one driver for its activities. Unfortunately usual results and outcomes of ecologic and social projects benefit society as they are services provided in education, health, culture and rest sectors without direct financial profit for a company.

Thence the conceptual platform for sustainable development of mining company is required to integrate the process of sustainable development itself into market economy model to ensure that the company benefits from being committed to sustainability principals and that such benefit is clearly measured in money equivalent. Globally there is a good example of it concerning artificially made world market for quotas on CO_2 emissions according to Kyoto Protocol where a company is able to sell unused quotas to other demanders secured after implementing innovative green technologies. In such the case green technologies become an investment project with certain level of profit.

The second and the third contradictions are relevant to life cycle and basic activities of a mining company. In fact mining company according to the core essence of its activities breaks principals of sustainable development not only during the mining process itself but also after being abandoned and closed. Herewith closure of the mining company means as finished mining process so terminated legal entity status. Then the dilemma could be found in mining company sustainable development and overall performance. It is offered to consider that dilemma under the name of Sustainability Roll in Transitive Mining. Further description of it may be encapsulated in the following statements.

At the moment of terminating the process of digging resources which is the point of actual transition of the mining company from being a mine to uncertain phase of its life cycle a special phenomenon of changing sustainability roll or such roll's occurring could be observed in interaction of economic, social and ecological internal and external systems of the company. The economic nature of the sustainability roll allows defining that the mining company is rolled when resources are concentrated to achieve goals of one or two of three balanced sectors of the company. If it is so, economic interests of certain stakeholders are satisfied more or in a better way. During intensive mining development of the mining company cannot be identified as sustainable absolutely because of dramatic impact on environment. It is therefore social and economic sustainability roll. Destroying environment comes to a stop when mining is recessed. But then social and economic shocks of spatial development occur. It is ecological sustainability roll. Thus as mining company activities so its closure does not contribute to absolute sustainability of interaction of internal and external systems. Consequently a principal question arises whether it is possible to achieve sustainable development of a region or territory where mining company is situated even after its status of legal entity being terminated.

Sustainability roll is a dynamic feature of mining company development that is shown due to its changes occurring at the moment of cutting extraction of minerals off. Hence sustainability may be supposed to roll over time that is different phases of the mining company life cycle can suffer economic, social and environmental slowing down caused by certain model of production factors' distribution.

In addition to current theory of providing development of the mining company according to sustainability principals the following items can be delivered. The mining company sustainability does not appear and vanish but is a permanent for it as the company always has internal economic, social and ecologic environment as well as always is integrated into local (regional) equal systems. But the extent to which sustainable development of the mining company is beneficial economically and efficient socially depends on the level of harmony met by economic, social and ecologic systems in their interacting. Particularly this harmonic interaction can be described by means of sustainability roll that changes during phases of transition. As mentioned above, the mining company also has sustainability roll even after terminating the process of digging minerals and such roll is stuck to post closure phase.

Let's consider in details contradictory challenges arising from mismatch of sustainable development principals and mining company market activities over phases of mining and its stop as well as negative impact of these contradictions on the company itself and local economy.

Primary activities of the mining company for extracting not renewable natural resources come into conflict with the sustainability principal to save nature for future generations. But keeping existing reserves of not renewable natural resources unused that requires a rapid closure of mining company along with complete their exhausting lead to a necessary closure of mining company identically. As a consequence mining company closure directly affects spatial depression while sustainable development supposes economic systems to be developed in a long period to provide high life standards on those territories.

The mining company liquidation requires new investment projects to be found by the owner. For employees it means losses of their jobs. By extension, environment destroyed through mining need to be recovered or otherwise it is the company that has sole responsibility for it and nothing excludes liability for its fraud.

Contradictions pointed out above make risks of shaping or exacerbation of economic, social and ecologic spatial depression with deprivation of source of financing state and local budgets, pushing up unemployment, resettlement and reeducation of miners including members of their families, worsening ecology and having risks of territorial flooding and underground gas methane explosion.

Thus the concept of mining company sustainable development must suggest its life cycle extension through diversifying its activities in a way that ensures absence of sustainability roll particularly during the process of transition from digging minerals to its termination.

The forth conflict item is that socially and ecologically important objects of external environment are not integrated into the model of the mining company particularly into the legal one. But at the same time sustainable development suggests that economic, social and ecologic systems to be closely related. As rule social and ecologic objects are local or the state property so they are not included into the model of the mining company and don't meet distributed company's resources. However the company is relatively responsible for such objects development to achieve its own sustainable development. In this connection a strong factor of interpersonal agreement between owners of the company and social and ecologic objects is to be found that in different cases drives or slows down redistribution of resources for these objects.

Consequently uncertainty of organizational hierarchy and lack of rights and liabilities of the company to run social and ecologic objects located on the nearby territory reserved by law make such objects to be considered by the company only as ones for sponsorship in case of appropriate profit and owner's wish.

For regional economy this contradiction means loss of stable finance source for maintaining social infrastructure and objects of ecologic safety, their destroying and high dependence on decision of company's owner. Thus the concept of the mining company sustainable development must suggest that social and ecologic objects should be integrated into the company model in a certain way.

DISCUSSION

The above stated analysis of existing contradictions between principals of sustainable development and principals of mining company activities allows the way of running mining company for the purpose of its sustainable development based on OVAL framework. OVAL is a short name for Object Value Based Sustainable Development. It must be pointed out that in the context of the article Object Value Based Sustainable Development approach does not refer to widely used in practice Activity Based Costing, Process Accounting, Responsible Center Accounting that show methods of cost accounting in a whole.

The main objective of these methods is to monitor production costs for the purpose of their reducing and redistribution of overhead costs. Wherein the object of cost accounting (function, process, center of generating costs) is differ from the object of cost calculation which is products and services.

Unlike these approaches the OVAL sustainability approach pursues the goal of analyzing economic activities of the company to provide its sustainable development with a view to finding and using reserves of enhancing harmony of economic, social and ecologic systems interaction through eliminating above mentioned sustainability roll.

An option to control costs subject to constraints on mining company development only according to the principals of OVAL-sustainability could be a field for further study.

The OVAL – sustainability consists of two fundamental concepts: object and value. And this must be the most debatable point of the research as it is still unclear how to separate objects in a sole production chain of the company. An integration of these concepts for the purpose of adaptation to harmonic company's development may contribute to solving the conflict between sustainable development principals and market economy rules.

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