### Adaptation Of The Development Of Ecological Entrepreneurship

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Abstract: The article developed the methodological foundations of the development of adaptation tools to improve the development and functioning of ecological entrepreneurship: the possibility and conditions for the use of such tools for transferring powers to environmental benefits, such as concession, trust management, public-private partnership, are justified; Criteria are proposed for the ecological business entity to choose the organizational and legal form of the enterprise that meets the conditions for its functioning: the presence of a certain amount of work to start production; the availability and sufficiency of financial resources of the enterprise; type of products or direction of activity of the subject of ecological entrepreneurship; as a tool to support the adaptation of the development of ecological entrepreneurship, ways of integrating enterprises in this field, in particular vertical, horizontal cooperation, are considered; the use of a concession agreement is proposed, which provides for a concession fee.

Index Terms: Adaptation, Agreement, Concession fee, Concessionaire, Concessor, Development, Ecological Entrepreneurship.

#### 1 INTRODUCTION

Technical progress does not stand still, as studies have shown [1-5], with an increase in production by 1% and its constant technical level, a 1.3% increase in emissions of pollutants into the atmosphere is observed; 0.9% - discharges into water bodies; 1.7% increase in waste disposal volumes. This requires strengthening the environmental orientation of entrepreneurs, people in business, as well as the development of the corresponding type of economic activity - ecological (green) entrepreneurship (EE) - as a set of commercial entities whose activities are aimed at solving environmental problems, subject to profit [6-8]. Despite the stable and favourable conditions for the functioning of entrepreneurship as a whole, this area is still underdeveloped. This is explained by the absence or insufficiency of the study of the use of organizational and economic tools for the development of EE, as well as the general tendency to weaken the economic methods of environmental management, which determines the objective need for scientific research and the development of practical recommendations in this specific field of activity. The aim of this work is to develop methodological foundations for the development of adaptive tools to improve the development and functioning of ecological (green, environmental) entrepreneurship.

## 2 THEORETICAL AND METHODOLOGICAL FOUNDATIONS OF ECOLOGICAL ENTREPRENEURSHIP

Management of environmental protection (MEP) and rational nature management (RNM) today are carried out mainly by administrative and economic instruments of influence on business entities. However, due to the fact that these tools do not ensure the interest of enterprises in solving environmental problems (the costs of the relevant activities are considered as compelled, having no effect on the enterprise), the development of market instruments characterized by the decisive effect of market laws for the direction of economic entities becomes relevant. In an environmentally-friendly course, as well as contributing to attracting business to the protection of MEP and RNM. Under the direction of entrepreneurship, the purpose of which is to meet the environmental needs of society through the implementation of the processes of protection, reproduction, the transformation of MEP and RNM, subject to its profitability, we mean ecological entrepreneurship. Since EE is one of the types of general. principles entrepreneurship the in entrepreneurship, in general, are fair for it, taking into account the characteristics of the scope of functioning; principles of sustainable development and adaptation, since this type of business is one of the mechanisms for its implementation. Features and basic principles of EE are presented in table 1.

 TABLE 1

 BASIC PRINCIPLES OF ECOLOGICAL ENTREPRENEURSHIP.

Basic principles of sustainable development	The goal of an environmental entrepreneur is to solve environmental problems, subject to profit	Basic principles of EE
The right to a healthy and fruitful life in harmony with nature		Consideration of greening as the goal of the emergence and development of environmental entrepreneurship
Socio-economic development should be aimed at improving the quality of life of people		Consideration of meeting the environmental needs of people as a quarantee of the
Development should equally provide the opportunity to meet the necessities of		effective functioning of enterprises of EE

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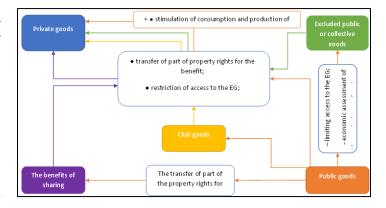
life of both current and future generations while maintaining the OPS		
Economic development, equitable development of the social sphere and environmental	EE is designed to prevent or eliminate the consequences of business activities; however, its direct production can be a source of pollution	Evaluation of the effectiveness of EP in the context of three components: environmental, social, economic
security should be combined		Using the best technology available
		Precautionary principle
The widespread use of the precautionary principle, outstripping the adoption of effective measures to prevent the deterioration of the condition of OPS		Transfer of "efforts" of EP to the initial stage of involving and using the properties and qualities of natural resources instead of existing practice to eliminate the consequences of unsustainable nature management
Development of international cooperation and global partnership to preserve, protect and restore the	EE is a part of entrepreneurship as a whole, which, firstly, involves their interaction, mutual influence, and secondly, provides its entities with an extensive legislative framework, including legislation concerning entrepreneurial activity in general, as well as in the field of protection of MEP and RNM	Dissemination of environmentally sound technologies and production management methods
integrity of the Earth's ecosystem		Promoting publicity and dialogue with the public
Ecologization of human consciousness and worldview		Providing accessible, reliable environmental information

As a participant in market relations, the subject of environmental entrepreneurship corresponds to a particular "niche" of the market - the ecological market, by which we understand the mechanism of interaction between sellers and buyers in the sale and purchase of environmental goods based on the determination of their prices and quantities (supply and demand) (Figure 1). An environmental product (work, service), in turn, is defined as an ecological good (EG), which is a means of satisfying human ecological needs. However, not all EBs possess the properties of objects of market relations. To identify the presence or absence of product attributes among various groups of electronic goods, the generally accepted classification of goods (by the degree of accessibility of the good in consumption and by the nature of the distribution of the utility of the good among consumers) was supplemented with such signs as ownership of the environmental good; equivalence of exchange after a market transaction on the sale of goods; the nature of the interaction of supply and demand in the market about the good; property of divisibility of the good. This made it possible to position the corresponding environmental benefits as objects of market relations. The positioning has shown that along with groups of private and public EGs; there are EGs that have signs of advantages of "intermediate" groups: the benefits of joint consumption, club and collective interests.



Fig. 1. The structure of the ecological market

It is characteristic of the benefits of these groups (intermediate) that, unlike the public ones, they also possess some properties of private electronic devices, which makes it possible, under certain conditions, to produce, distribute and exchange them according to the laws of the market. The main obstacle to the use of market mechanisms in the circulation of the benefits of "intermediate" groups is the state form of ownership of them. So, an exchange in the market is an exchange of property rights. Economic agents, having no ownership rights to goods, naturally, cannot transfer them during the transaction of powers. At the same time, the state or public form of ownership shows their inefficiency in this area. In this regard, the transfer of a part of the eligibility for electronic business to the EG entities and the fulfilment of the leading market requirement in this way - the possibility of exercising ownership of the environmental good - should be considered as one of the ways to give the properties of objects of market relations to electronic security (Figure 2). It should be noted that the mandatory in the resulting bundle of powers for the environmental benefit for the subjects of ecological entrepreneurship, as one of the types of entrepreneurship in general, the purpose of which is to make a profit, is the right to income.



**Fig. 2**. Ways to give the environmental good the properties of objects of market relations

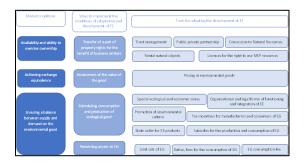


Fig. 3. Tools for creating conditions for the adaptation of the development of environmental entrepreneurship

# 3 DEVELOPMENT OF ORGANIZATIONAL AND ECONOMIC INSTRUMENTS FOR ADAPTATION OF DEVELOPMENT

The implementation of these methods to give the properties of objects of market relations to EB involves the use of several organizational and economic instruments (Figure 3). Since acquiring the properties of private goods, EGs become an object of the market. Therefore a purpose of EE activity, the listed tools are tools for the development of environmental entrepreneurship. Actual today are such tools as a concession, trust management, public-private partnership. The selection of these organizational and economic instruments for enhancing the activity of EE is determined by the availability of an appropriate legislative and legal basis for their application, as well as the fulfilment in this case of the requirement to combine the interests of the state and the subjects of EE. So. the state temporarily transfers powers to the EG for a certain fee, which makes up its income, while leaving the possibility of control in this area of activity. The subject of energy efficiency, in turn, receives the authority to ensure a sufficient degree of freedom in the implementation of economic activity and the conditions for generating income. Concession. A concession agreement (CA) allows an environmental entrepreneur to obtain ownership and use rights to an object, to carry out activities, products and income from which are its property. For the provision of these rights, a concession fee (CF) is provided, which is paid by the concessionaire to the concessor during the period of use (operation) of the object of the concession agreement (Figure 4).

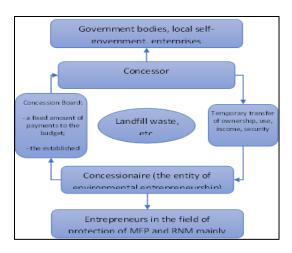


Fig. 4 Schematic representation of relationships in the case of

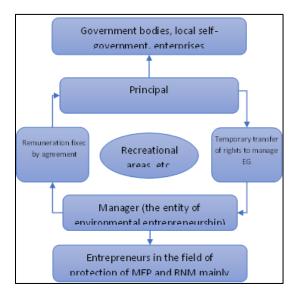
When assessing the size of the CF, the interests of both sides of the CA should be taken into account. The interest of the subject of EE will be determined by the need for the entrepreneur to achieve cost recovery:

$$CF \leq R - C - P \tag{1}$$

where R is the revenue of the environmental entrepreneur from carrying out activities using (operating) the facility K, \$; C - the costs of the subject of EE to create and (or) reconstruct the object of the CA, to carry out activities using the purpose of the CA;

P - the profit of the subject of EE, determined from the calculation of the average rate of profitability in the region.

The state, in turn, by levying CF must compensate for losses to the state budget from the inability to use the corresponding facility during the period of the concession agreement. Another tool for transferring power of EG to EE entities is trust management. The benefits that are state property are provided to the environmental entrepreneur who takes responsibility for managing them to generate income in the interests of the state. The state, in turn, guarantees for a certain period the maintenance of conditions for the implementation of the relevant services (goods) and pays a fee, the amount of which is determined by the contract (Figure 5).



**Fig. 5** Schematic representation of the relationship of the principal and manager

Public-private partnerships, as an instrument for enhancing the activities of electronic signatures, are aimed at combining the experience of a private partner and its financial capabilities with the commercial potential of state assets in the field of protection of social security zones and rural areas. It should be noted that, unlike the two forms of interaction between the state and the entrepreneur discussed above, the partnership also involves vigorous activity on the part of state authorities. This EA development tool is based on sharing risks and revenues, combining professional knowledge and co-financing projects. In conditions when an environmental entrepreneur has legal rights to own, use, and manage a natural object, i.e.

the right to carry out environmentally-oriented activities and to have its results, there is a need to choose the legal form of organization subject EE.

### Factors affecting the choice of the legal form of the subject of environmental entrepreneurship are the following:

- the presence of a certain amount of work to start production and, thus, ensuring a certain number of jobs, following which the size of the enterprise is determined;
- the availability and sufficiency of financial resources to create an enterprise;
- type of products or the direction of the EP.

A particular combination of these factors determines the economically feasible legal form of organization of the enterprise. To attract financial and other types of resources in the field of electronic business, it is proposed to use various kinds of integration or partnerships of enterprises, considered as organizational and economic tools to support the development of this business area. The purpose of such cooperation is the formation of optimal patterns of interaction between business entities to increase the efficiency of their functioning, as well as to implement the principle of cyclicality in the use of natural resources: maximum extraction and use of nutrients from extracted raw materials, taking into account its multicomponent nature, increasing the useful life of products, low-waste production processes and consumption. One of the modern solutions to these problems is the so-called recycling, the integration of enterprises in which can be represented in the form of vertical cooperation (along the product creation chain); horizontal cooperation - integration of outsourcing and insourcing types.

#### 4 CONCLUSION

Based on the analysis of approaches and methods for solving the problems of pollution of organic waste and the depletion of natural resources, it was concluded that the use of only administrative and economic instruments is imperfect and insufficient and that it is necessary to turn to the tools of forming market relations in this area, as well as to entrepreneurial activity, which is the basis market. When considering the concept of "environmental entrepreneurship", its wording was clarified; systematized and supplemented the principles of its formation and development; The ideas of the ecological market and ecological goods are clarified. The proposed classification of environmental goods according to the characteristics that characterize them as objects of market operations, revealed the need to give the ecological good the main property of purposes of market relations - a private form of ownership. To this end, the methodological foundations for the development of organizational and economic instruments for enhancing the activities of electronic signatures (including concessions, trust management, public-private partnerships, allowing transferring part of the property rights to electronic signatures to the subject of electronic signatures) were developed. The choice of these tools is due to the presence of an appropriate legislative and legal framework for their application, as well as the fulfilment in this case of the requirement to combine the interests of the state and the subjects of EE. As tools to support the adaptation of the development of electronic information, criteria are proposed for the entrepreneur to choose the legal form of the enterprise that meets the conditions for its functioning; ways of integration of enterprises in this area are considered. The methodological foundations and tools proposed in this work will allow not only stimulating the formation, adaptation and development of EE but also by developing the market relations zone for the development of environmental benefits, to attract this area of economic activity to the traditionally public sector of environmental services, thereby increasing the efficiency of its functioning. Further research can be an assessment of the effectiveness of the activities of the subject of environmental entrepreneurship.

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