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## **METHODOLOGICAL APPROACHES TO ASSESSMENT OF RESOURCE "RELATIVELY LOW-COST EMISSION REDUCTION IN THE REGION" IN THE FUNCTIONING OF MARKET MECHANISMS FOR ENVIRONMENT QUALITY MANAGEMENT IN THE REGION**

Market mechanisms control the quality of the environment in the region including market for pollution permits, auctions for pollution permits and payments for environmental pollution. The market for pollution permits operates according to the following principles:

1. The region is provided with allowable amount of pollution that obviously does not exceed the existing level of pollution.

2. In accordance with the allowable amount of pollution permits, the state issues pollution permits.

3. These permits are distributed for free among enterprises of the region in proportion to their existing pollution. Obviously, each company receives permits for pollution below the level of their pollution.

4. At the next step, these permits are sold freely within the regional market.

The key point of operation of the regional market for pollution permits is to develop their supply (characterized by volume and the lowest offer price) and demand (characterized by volume and maximum demand price). Thus, the min-

imum bid price for pollution permit (in monetary units per tonne of allowable pollution) corresponds to the cost of preventing pollution, which enables them to avoid a permit.

The maximum demand for permission to pollution (in monetary units per tonne of allowable pollution) corresponds to costs of pollution prevention that will prevent issuance of permission.

Pricing for permits to pollute the environment should be carried out according to the following algorithm:

1. Set the overall proposal permits for pollution in the region.

2. Set the current price of pollution permits, which is equal to the smallest minimum price of proposal permits.

3. Set the demand for permits to pollute the environment at the current price.

4. Set the difference between supply and demand for permits to pollute the environment at the current price.

5. Provided that the difference is less than the corresponding portion

of pollution permits, the current price of permits will be final.

6. Provided that this difference is greater than the corresponding portion of pollution permits, the portion of permits offers that shaped the current price fails, and it is necessary to return to the position 2 of the algorithm.

We now turn to the analysis of another market mechanism for managing environment quality in the region, namely auction of permits for pollution. Given the initial auction price for a permit to pollute the environment, relevant portions of permits will be less than the unit costs of an approach that will be “covered” from implementation of these resolutions, and higher unit costs for an approach that directly competes with it. In this case, the buyer of permission to pollute the environment gets economic benefits, specific value of which is equal to the difference between the specific costs of implementation of the measure and the price of a permit, and the total value – the value of the product specific economic effect and the amount of the relevant portions of permits to pollute the environment.

In terms of the secondary auction when not the state sells the permits to pollute the environment, but another company that paid for the relevant permits and for which these

values become an alternative in the amount of expenses for activities to prevent pollution that is actually “covered” from performance, specific and the overall effect should be calculated based on the mentioned points. For the second auction specific economic benefit from the sale of a portion of the auction of permits is equal to the difference of the final auction price for this portion of permits and permission for former or alternative values, and the overall effect – the value of specific quantities of economic benefit to the extent of the respective portions of permits to pollute the environment.

The scheme of functioning of payments for environmental pollution will describe the situation at the plant under conditions of functioning of payments for environmental pollution.

Thus, the use of the proposed methods will enable to assess the resource “relatively low-cost emission reduction in the region” in the functioning of market mechanisms for managing environment quality in the region. Further studies in this area are promising towards the development of specific techniques that would take into account the specifics of the relevant type of business and the relevant market mechanism for management of environmental quality in the region.