

Название публикации:

Substantiation of the siting of construction facilities in the Central Ecological Zone of the Baikal Natural Area: Ecological and economic aspects

Авторы:

Karnaikh, I.a, Mikheeva, A.b, Ayusheeva, S.b, Bardakhanova, T.b

- a) Plekhanov Russian University of Economics, Ctremyannyj per., 36, Moscow, 117997, Russian Federation
- b) Baikal Institute of Natural Resources Management, Siberian Branch, Russian Academy of Sciences, Sakhyanovoi str., 8, Ulan-Ude, 670047, Russian Federation

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Аннотация:

The implementation of cost intensive construction projects is determined by the availability of natural resources and the environmental capacity of areas. The objective of the research consists in the development of a methodological approach to the assessment of the siting of construction facilities in the territories, characterized by ecological limitations and the substantiation of siting acceptability criteria. The authors analyzed the potential risks caused by the siting of construction facilities on the basis of (1) the impact produced by the facilities, used for economic activities, on the environment, and (2) the assessment of ecological and socioeconomic consequences of this impact. The core method of research consists in the integral ranking of territories, based on the environmental capacity of the natural environment's components and the anthropogenic impact, while their reconciliation represents one of the most relevant objectives of environmentally sustainable development of territories. The analytical results, generated by the co-authors, serve as the starting point for the research-based substantiation of the siting of construction facilities, because the following condition serves as the basic criterion: the anthropogenic impact, produced on territories, must not exceed the self-recovery potential of the local natural system.

Ключевые слова:

Construction industry, Ecology, Economics, Risk assessment