

VII INTERNATIONAL CONFERENCE

16-18 June 2022



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«Advanced Agritechnologies, Environmental Engineering and
Sustainable Development»
AGRITECH-VII 2022
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«EFFICIENCY OF CARBON LANDFILL FOR REDUCING ENVIRONMENTAL
POLLUTION AND GLOBAL CLIMATE INSTABILITY»

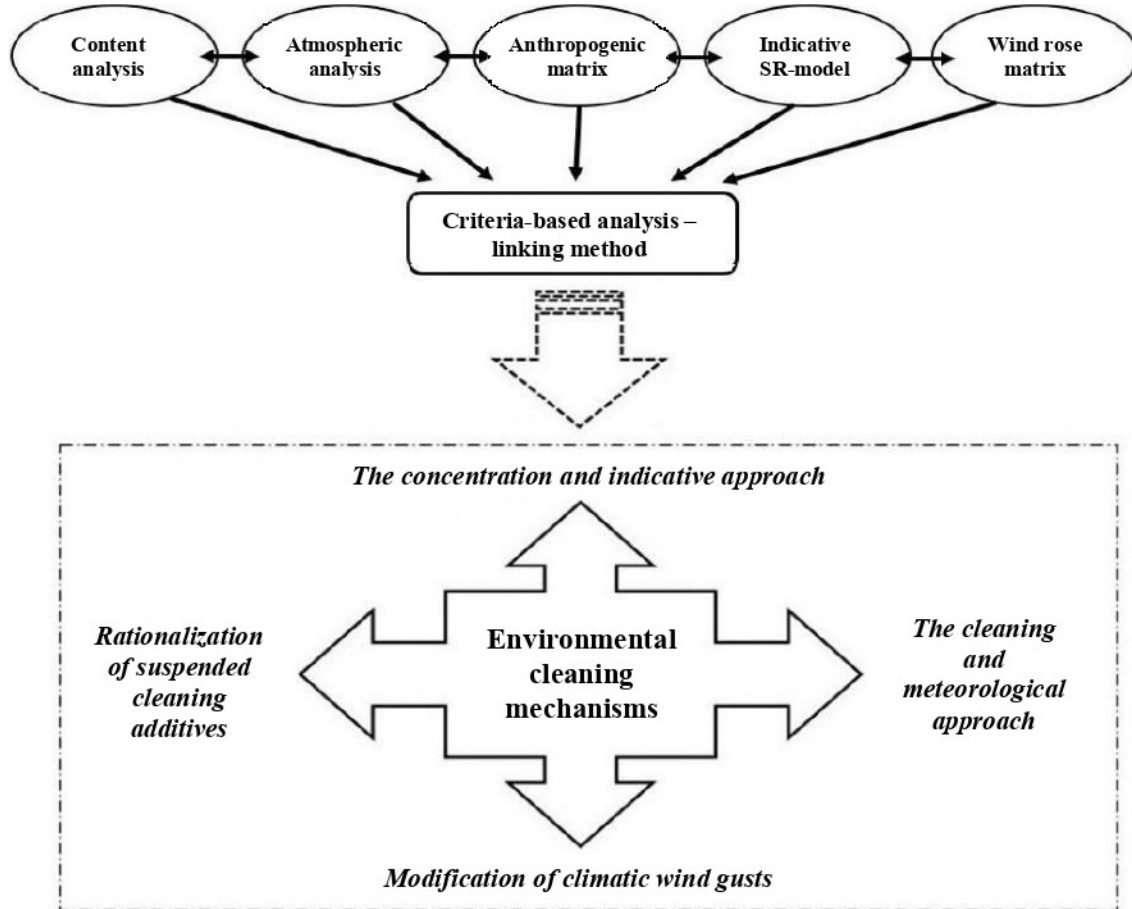
Alexey Igorevich Utkin

Problem statement

AGRI  TECH

- The problem of the research is to determine the degree of influence of highly concentrated innovative mechanisms of carbon landfills in order to use them in improving the global climate and environmental purification through the balanced scorecard concept.
- The purpose of the research is to elaborate conceptual tools for reducing environmental pollution through the balanced scorecard cluster resource-saving technology to overcome the shortcomings of standard gas emission systems at landfills, improve global anthropogenic conditions and increase global climate stability with further correction of cross-cutting criteria for evaluating the efficiency of carbon landfills.





Solution methods

- The most complete positive effect is achieved at all seasons of the year (winter, spring, summer, autumn) due to minimal deviations in the risk level of increasing the concentration of the pollutant ($R_{poll} + 0.75\%$, $R_{poll} + 0.5\%$, $R_{poll} + 1.5\%$, $R_{poll} + 1.25\%$) due to a partial reduction in the impact of harmful trace elements on the chemical composition of air masses and normalization of biologically pure atmosphere;
- Significant quantitative deviations of the risk level of increasing the concentration of the pollutant ($R_{poll} + 3.5\%$, $R_{poll} + 4.75\%$, $R_{poll} + 3.85\%$, $R_{poll} + 5.55\%$) at all seasons (winter, spring, summer, autumn) indicate a complete absence of the positive effect and do not allow to cover the main positions of environmental normalization due to an increase in the proportion of harmful trace elements.



Figure 1. Conceptual tools for reducing environmental pollution to overcome the shortcomings of standard gas emission systems at landfills in the process of global climate stabilization using integrated balanced scorecard cluster technology.

Conclusions

Results, implementation

- The improved environmental cleaning tools for evaluating the efficiency of carbon landfills using the author's method of criteria-based analysis within the framework of the integrated balanced scorecard allowed us to elaborate a system of mechanisms for modifying air masses through concentrated elements of carbon innovations;
- The usefulness of the proposed integrated model is determined by considering the efficiency of carbon landfill batteries as a structure-forming component, the level of environmental value of which depends on the polystructurality of wind gusts reflecting the specifics of climatic conditions;
- The use of a comprehensive author's methodology is possible in the formation of a multi-level system of SR-technology cleaning mechanisms with the introduction of uniform standards for the treatment of polluted air flows;
- The optimal combinations of distribution purification mechanisms in the formation of strategic projections will lead to an improvement in the polluted air of the atmosphere, which is an integral part of the climate restructuring process during the transition from uncontrolled fluctuations to stability depending on climatic seasons.

Contacts

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