# ENVIRONMENTAL COMPLIANCE CONTROL AS AN EFFICACIOUS TOOL FOR RISK MITIGATION IN THE REALM OF GOVERNMENTAL GREEN PROCUREMENTS

## *O CONTROLE DO CUMPRIMENTO AMBIENTAL COMO FERRAMENTA EFICAZ PARA A MITIGAÇÃO DE RISCOS NO ÂMBITO DAS COMPRAS VERDES GOVERNAMENTAIS*

## *EL CONTROL DEL CUMPLIMIENTO AMBIENTAL COMO HERRAMIENTA EFICAZ PARA LA MITIGACIÓN DE RIESGOS EN EL ÁMBITO DE LAS COMPRAS VERDES GUBERNAMENTALES*

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**Abstract.** The "green trend" is increasingly taking center stage, both at the global and national economic levels, as well as at the level of individual companies and each person specifically. The emphasis on sustainable development and environmental preservation is no longer a mere fashion statement but rather an urgent necessity. At its core lies the efficient utilization of resources, reduction of emissions and waste, protection of nature and biodiversity, strengthening of social justice, and economic stability that does not compromise the ability of future generations to meet their needs. It is not surprising that many countries actively incorporate environmental initiatives into their agendas, including in the realm of organizing and conducting government procurement. The objective of this study is to develop effective methodological support for the integration of green procurement into the procurement activities of federal and regional authorities in the Russian Federation.

**Keywords:** Green procurement, compliance control, ecology, sustainable development.

**Resumo.** A "tendência verde" está ganhando cada vez mais destaque, tanto no contexto econômico global e nacional quanto no nível de empresas individuais e de cada pessoa em particular. O foco no desenvolvimento sustentável e na conservação ambiental deixou de ser uma declaração de moda para se tornar uma necessidade urgente. No cerne dessa abordagem estão o uso eficiente dos recursos, a redução de emissões e resíduos, a proteção da natureza e da biodiversidade, o fortalecimento da justiça social e a estabilidade econômica que não comprometam a capacidade das futuras gerações de atender às suas necessidades. Não é surpreendente que muitos países integrem ativamente iniciativas ambientais em suas agendas, incluindo o âmbito da organização e realização de compras governamentais. O objetivo deste estudo é desenvolver um suporte metodológico eficaz para a integração das compras verdes nas atividades de aquisição das autoridades federais e regionais da Federação Russa.

**Palavras-chave:** Compras verdes, controle de cumprimento, ecologia, desenvolvimento sustentável.

**Resumen.** La "tendencia verde" está cobrando cada vez más protagonismo, tanto a nivel económico mundial y nacional, como a nivel de empresas individuales y de cada persona en particular. El énfasis en el desarrollo sostenible y la conservación del medio ambiente ya no es una mera declaración de moda, sino una necesidad urgente. En su núcleo se encuentra el uso eficiente de los recursos, la reducción de las emisiones y los residuos, la protección de la naturaleza y la biodiversidad, el fortalecimiento de la justicia social y la estabilidad económica que no comprometa la capacidad de las generaciones futuras para satisfacer sus necesidades. No es de extrañar que muchos países incorporen activamente las iniciativas ambientales en sus agendas, incluso en el ámbito de la organización y la realización de las compras gubernamentales. El objetivo de este estudio es desarrollar un apoyo metodológico eficaz para la integración de las compras verdes en las actividades de compras de las autoridades federales y regionales de la Federación de Rusia.

**Palabras-clave:** Compras verdes, control de cumplimiento, ecología, desarrollo sostenible.

## 1. INTRODUCTION

The enhancement of the efficiency of the public procurement system in the Russian Federation is a pertinent scientific problem. In light of the deteriorating environmental situation, one avenue for refining the contractual system involves the establishment of foundations for 'green' procurement – a system wherein the state customer gives preference to enterprises producing environmentally friendly products or implementing ecological production technologies over other market entities (Anchishkina et al., 2020; Yemelyanov et al., 2018, 2019). Currently, such mechanisms are absent in Russia. Nevertheless, the greening of market relations is a crucial factor for the sustainable development of the state.

The relevance of the chosen topic is defined by the following contradiction: the formation of state and municipal green procurements is part of the sustainable development of the state, but at the same time, the gaps in legislative regulation and the lack of an effective methodology for their ecological transformation do not allow for the complete solution of this issue.

## 2. MATERIAIS AND METHODS

The methodological framework of the research is comprised of analytical, synthetic, generalization, inductive, and deductive methods; the comparative legal method; the mathematical-statistical method; and modeling. The results are based on the latest statistical information from Consolidated Reports on the results of monitoring state and municipal procurement in the Russian Federation for the years 2020 and 2022.

## 3. RESULTS

The inception of green procurement practices can be traced back to the late 1980s and early 1990s in Europe and North America. The impetus behind the "greening" of the procurement process stemmed from an escalating societal concern regarding the imperative necessity to safeguard the environment and foster sustainable development. This trajectory was further bolstered by the formulation of environmental standards and certifications (Rybakova, 2018).

Delving into the conceptual essence of "green procurement," it fundamentally denotes the acquisition process of goods and services, wherein considerations extend beyond the conventional "price-quality" paradigm to encompass their ecological footprint and the producer's commitment to social responsibility (Mashudi et al., 2022; Zulham et al., 2022; Pogosyan, 2021; Omodan & Addam, 2022; Chernyakova & Guslyakov, 2024; Chetthamrongchai et al., 2022; Amaechi & Motalenyane, 2023). The paramount objective underlying the implementation of green procurement resides in the amelioration of adverse environmental impacts and the optimization of resource utilization efficiency.

It is inherently rational that the designation of goods and services as "green" necessitates adherence to specific criteria, determinable by governmental bodies, non-governmental entities, or the corporate sector. These criteria encompass a diverse array of parameters, spanning energy efficiency, emissions of deleterious substances, reliance on renewable energy sources, waste management practices, and others.

Nevertheless, notwithstanding the burgeoning legislative attention to the orchestration and execution of green procurement, the current state of affairs in Russia does not manifest robust advancements in this realm (Smetanina, 2020; Kuznetsova et al. 2021; Tsuglenok et al., 2023; Kilinc et al., 2018). The prevailing legal framework lacks efficacious mechanisms for the ecological transformation of procurement practices, with not all procurement procedures accommodating their seamless integration. The conspicuous absence of the term "environmental procurement" within the legislative corpus further underscores the legislative lacunae in this sphere. This collective assessment culminates in the imperative recognition that

any endeavors aimed at catalyzing the ecological evolution of procurement processes must originate from assertive legislative reforms (Rodevald, 2022; Chetthamrongchai et al., 2022; Kurniady et al., 2022).

The absence of effective legislation in the fields of both ecology and procurement, along with the dearth of impactful measures incentivizing environmental businesses and informational and educational initiatives, coupled with the inflated prices of the majority of ecological goods, renders them non-competitive for most procurement processes or economically unfavorable for contract performers compelled to reduce prices to their detriment. These challenges are interrelated, necessitating a comprehensive solution that takes into consideration all nuances of ecological production in Russia. This solution should entail a series of measures, requiring phased implementation to address these intricacies.

In the realm of legislative imperatives, foremost is the necessitation of the formal inclusion of the term "ecological procurements" and the attendant establishment of prescribed environmental criteria. Subsequently, the imperative lies in effecting modifications to Government Resolution No. 1224, entailing the expansion of the inventory of commodities derived from secondary raw materials and the specification of a minimal proportional value for such commodities. (Rodevald, 2022; Nainggolan et al., 2024; Rahmani et al., 2022; Ram et al., 2024); Thirdly, the development of a Government Resolution outlining a dynamic register of goods, services, and works mandatorily subject to eco-certification of the first type for state and municipal requisites assumes paramount significance.

To rationalize expenditures, amendments to the Criminal Code of the Russian Federation and the Administrative Offenses Code of the Russian Federation are imperative, entailing the augmentation of punitive measures for identified environmental transgressions. Moreover, the incorporation of a statute in the Administrative Offenses Code specifically addressing deviations from green procurement requisites is imperative. The imposition of pecuniary penalties is poised to not only alleviate financial burdens associated with the integration of ecologicalization mechanisms into procurement practices but also function as a prophylactic against environmental violations.

The second phase of procurement environmentalization necessitates the implementation of distinct mechanisms throughout various stages of the procurement process:

1. In the context of auctions and requests for quotations, integration of obligatory environmental specifications for suppliers and contractors into the procurement technical specifications is paramount.
2. Concomitant with the above, competitions demand an additional evaluative framework for government and municipal contracts. In this paradigm, the price of the product or service ceases to serve as a singular criterion, with the criterion of "quality, functionality, and environmental attributes" assuming enhanced significance, constituting 70% of the evaluation weight. Notably, the evaluation committee should mandatorily include at least one environmental specialist (Goncharov, 2021; Ishenin et al., 2021; Grosu et al., 2021).

The ultimate phase encompasses the refinement of monitoring mechanisms for green procurements (Kazantseva and Plotnikov, 2019). This necessitates the development of an ecological compliance methodology comprising normative and procedural guidelines, complemented by an evaluative system founded on dynamically updated risk maps and matrices (Buying Green, 2016). From our vantage point, the institution of environmental compliance control stands poised as a potent instrument for the systematic mitigation of risks inherent in governmental green procurements.

It is noteworthy that the concept of environmental compliance emerged in response to the escalating societal and governmental concerns regarding the impact of industry on the environment. As early as the 1970s, the first environmental protection laws were enacted, ushering in a new era of requirements and constraints for companies. Confronted with the challenges of that era, major corporations initiated the establishment of environmental compliance departments to monitor the compliance of their activities with legislation and minimize their adverse environmental footprint. In our century, the significance of the environmental compliance concept is steadily increasing each year.

The core principle of environmental compliance is to ensure the congruence of a company's or organization's operations with pertinent legislation and norms governing environmental impact. This entails not only strict adherence to existing laws and standards but also the proactive adoption of supplementary measures aimed at minimizing adverse environmental effects. Essentially, the objective of compliance is twofold: predominantly, it seeks to prevent violations and address their consequences, while concurrently exhibiting a pronounced preventive function (Belokrylov et al., 2021; Masekela et al., 2024). The latter is manifest in the majority of compliance measures, which are strategically designed to proactively identify and minimize risks, thereby embodying a risk-centric approach (Sokolov et al., 2022; Skivko et al., 2021; van Vuuren, 2023; Saenko et al., 2019).

Compliance practices found their way into Russia from foreign jurisdictions, where they are predominantly employed as mechanisms of antimonopoly regulation within the sphere of large and medium enterprises, and to a lesser extent, small businesses. It is worth noting that European compliance is scarcely legislated, and the few existing norms are largely of a recommendatory nature (Dube et al., 2023; Siphukhanyo & Olawale, 2024). Compliance constitutes a system of internal acts, rules, and requirements applicable to the employees of a specific organization, governing their adherence to antimonopoly and anticorruption norms; in other words, it is the voluntary agreement of company employees to act in a certain manner (comply with the law). It is crucial to underscore that the development and implementation of compliance systems are entirely voluntary endeavors. No company can be compelled to develop this form of control. However, limited regulatory norms permit active development of compliance control by offering certain preferences to companies. For instance, the presence of a certified compliance system allows a company to reduce the level of fines in case a violation is detected, ranging from ten percent (in England and Italy) to twenty percent (in South Korea).

Within the contours of Russian regulatory practices, there is a conspicuous absence of obligatory norms compelling private enterprises to institute internal control frameworks as part of compliance initiatives. A distinctive approach, however, has been employed in the governance sphere. Pursuant to paragraph 3 of the decree issued by the Government of the Russian Federation on August 16, 2018, No. 1697-r, and aligned with the strategic pursuit of a risk-oriented paradigm, each governmental entity at federal and regional tiers, alongside local self-governance bodies, is mandated to formulate and implement an internal compliance system to ensure alignment with mandatory antimonopoly requisites. It is imperative to underscore that, within the realm of governmental bodies, compliance is construed as a facet of antimonopoly regulation. Consequently, no mandate exists authorizing the imposition of environmental requirements within these compliance systems.

However, environmental compliance within the domain of procurement could potentially emerge as the paramount mechanism for mitigating a spectrum of violations, encompassing not only ecological transgressions but also monopolistic, corruptive, tax-related, and various other offenses (Introduction of Environmental Requirements in Public Procurements in 2023). To actualize this potential, it is imperative to articulate methodological guidelines for the integration of environmentally-oriented measures within the ambit of procurement-related

compliance initiatives (Korableva et al., 2023, 2020). This necessitates the formulation of a dedicated provision delineating environmental compliance, the development of a comprehensive terminological framework, the proposition of contemporaneous maps cataloging environmental and associated risks, and the prescription of targeted measures for their mitigation.

Within the purview of this discourse, environmental compliance denotes a nuanced ensemble of norms, regulations, and stipulations designed to ensure the meticulous observance of environmental legal norms throughout the landscape of state procurements. It also encompasses mandates of an environmental nature embedded within the tapestry of procurement legislation. Environmental risk, in turn, denotes the likelihood of deleterious repercussions in the natural milieu and/or the violation of environmental rights enshrined in the Constitution of the Russian Federation. Such risks materialize as a consequence of deviations from the norms established within environmental legislation (Golovina et al., 2022; Voronkova et al., 2022). The concept of violating environmental legislation encapsulates adverse events whose occurrence precipitates injurious ramifications for the environment and/or results in the infringement of environmental rights.

Environmental risks can be dichotomized into direct and indirect categories. Direct risks denote the likelihood of infractions arising directly from the non-adherence to environmental legal norms. Indirect risks, on the other hand, encompass the probability of violations resulting from the non-compliance with norms in intersecting legal spheres (such as procurement legislation), the contravention of which may have, or might lead to, detrimental consequences for the environment. Our perspective posits that the assessment of environmental risks should be undertaken:

- systematically, with the engagement of seasoned specialists in environmental law;
- through the deployment of specialized automated information systems;
- utilizing tools such as risk maps and matrices.

It is also remarkable that among the risk-oriented conceptual frameworks, choosing one based on the assessment of potential damage from the risk and comparing it with the costs of minimizing that risk is prudent. In cases where the probability of the risk occurring is low, or the damage from it is insignificant, it is recommended to disregard that particular risk (Goncharov, 2021; Gradoboev & Tesleva, 2017; Vaslavskaya et al., 2023).

In this context, the matrix of environmental risks, also known as the matrix of probabilities and consequences, will take the same form as any other risk matrix. In other words, the matrix of probabilities and consequences serves as a tool for risk assessment, enabling the determination of the likelihood of a specific event occurring and its consequences.

In a nuanced delineation, the appraisal of risks encapsulates a dual consideration: the frequency of risk realization and the tangible or latent ramifications for the environmental milieu. Preeminent among these are risks falling into the third category, typically mandating substantial investments in ecological fortification, while risks of the first category may be summarily discounted (Dudukalov et al., 2022; Gabdulkhakov et al., 2021).

Risks categorized as the second often lend themselves to preventive measures of minimal imposition, not necessitating exigent financial outlays, contingent upon the establishment and integration of a comprehensive compliance control framework.

To discern probabilities and repercussions, thus stratifying infractions into distinct risk categories, the formulation of an evaluative scale for probabilities and consequences becomes imperative. A synthesized rendition of the probabilities and consequences matrix for compliance risks in governmental ecological procurement, concomitant with a gradation scale,

finds elucidation in Table 1.

**Table 1.** Matrix of probabilities and consequences for compliance risks in environmental public procurement and scale of their assessment

| **Consequences: cost of elimination of consequences of one violation, RUB.** | **Probability: frequency of cases in the last three years, units.** | | | | |
|---|---|---|---|---|---|
| | **-** | **1-5** | **6-10** | **11-20** | **> 20** |
| **Minor: 0 – 100 000** | 1 | 1 | 1 | 2 | 2 |
| **Low: 100 000 – 500 000** | 1 | 1 | 2 | 2 | 2 |
| **Medium: 500 000 – 1 000 000** | 1 | 2 | 2 | 2 | 3 |
| **High: 1 000 000 – 2 000 000** | 2 | 2 | 2 | 3 | 3 |
| **Critical: > 2 000 000** | 2 | 2 | 3 | 3 | 3 |

As evident from the provided scheme, to be categorized into the third risk tier, a violation must occur no less than 10 times annually and incur costs to the state of no less than one million rubles. Furthermore, such violations typically entail reputational losses, as they result in breaches of the provisions outlined in the Administrative Code and Criminal Code of the Russian Federation. Consequently, it is imperative to develop a risk map—an essential mechanism for discerning the logical interconnection between the causes of violations and the repercussions of their implementation (Table 2).

**Table 2.** Major types of environmental risks in the government procurement system of the Russian Federation

| **Risk Type** | **Characteristics** | **Causes of occurrence** | **Consequences of risk event** | **Risk mitigation measures** |
|---|---|---|---|---|
| **Direct Risks** | Violation of environmental contract conditions | 1) The client did not specify or incorrectly specified them in the documentation.<br>2) The contractor intentionally misled the client about their intentions. | 1) Reduced interest in procurement.<br>2) Reputation damage, exclusion of the contractor from procurement.<br>3) Negative environmental impacts | 1) Development of a methodology for completing procurement documents.<br>2) Thorough examination of the reputation of contractors.<br>3) Strengthening sanctions for contract breaches. |
| | A contractor who submitted false information/falsified documentation on the environmental characteristics of the product was allowed in procurement | 1) Intentional deception of the contractor regarding the quality of their goods.<br>Incompetence of the contractor/client. | 1) Reputation losses, unilateral contract termination, fines for the contractor.<br>2) Reduced procurement quality and interest. | 1) Meticulous examination of the contractor's business reputation, timely monitoring of contract performance, strict fine system.<br>2) Creation of educational text and video materials, courses to enhance the environmental competence of customers and suppliers |
| **Indirect Risks** | Corruption Risks | 1) Conspiracy.<br>2) Admission of an unsuitable supplier to green procurement.<br>Conclusion of contractual obligations with them. | Reputation losses, fines, penalty payments, unilateral contract termination. | 1) Declaration of conflicts of interest by civil servants.<br>2) Disqualification of individuals with suspected conflicts of interest from procurement. Internal investigations.<br>3) Examination of the business reputation of |

| | | | | |
|---|---|---|---|---|
| | | | | suppliers and contractors.<br>4) Strengthening penalties for corruption. |
| | Technological Risk | Failure of the information system. Performers received inaccurate/incomplete information about procurement for technical reasons. | 1) Conclusion of a contract with an improper supplier.<br>2) Procurement failure.<br>3) Reduced trust in the IS and procurement activities as a whole. | 1) System of measures to enhance the technical security of the IS.<br>2) Introduction of additional qualification requirements for electronic platform operators, timely confirmation of the last. |
| | Audit Risk | 1) Conspiracy between the contractor and auditors.<br>2) Incompetence of the audit group. | 1) Reputation losses, fines, penalty payments, unilateral contract termination.<br>2) Reduced efficiency and effectiveness of government procurement. | 1) The audit team should consist of at least 4 auditors, each of whom should properly declare conflicts of interest in a timely manner. Measures to minimise the risk of corruption are also appropriate here.<br>2) Auditors should pass competence tests and refresher courses in a timely manner. Removal of ineffective auditors from work. |

In order to institute a robust compliance control system for environmental government procurements, a comprehensive framework must be crafted. (Kuznetsova et al., 2021). This entails the development of a specialized document delineating compliance measures within the realm of government procurements, explicitly embedding environmental prerequisites. The establishment of a refined terminological apparatus is imperative, encapsulating nuanced concepts such as "environmental compliance," "environmental risk" (both direct and indirect), and "breach of environmental legislation." Furthermore, the formulation of intricate risk maps and matrices stands as a pivotal requirement, necessitating continual updates to ensure their relevance. The efficacy of the Unified Information System (UIS) must be vigilantly upheld, constituting a paramount strategy for mitigating the risks arising from technical aberrations.

## 4. CONCLUSION

In conclusion, it is imperative to reiterate that the current state of government procurement in Russia remains inadequately aligned with green initiatives. The primary culprits are the underdeveloped legislation in this domain and the tepid enthusiasm of regional and local authorities to complicate procurement procedures, fearing an associated increase in expenditures.

The procurement processes themselves exhibit non-uniform adaptation to environmental considerations. Presently, the competitive bidding procedure offers the most significant opportunities for integration, albeit at the cost of increased complexity compared to auctions or quotation requests. Consequently, current procurement practices demonstrate limited efficacy from an environmental standpoint, exacerbated by the absence of legislatively grounded mandatory environmental requirements.

The implementation of an environmental compliance framework, encompassing norms, regulations, and a dynamic risk assessment system, holds the potential to emerge as an effective tool for risk mitigation in government "green" procurements.

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