

“Green” public procurement mechanism formation: international and domestic experience

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Abstract: The article analyzes the scope of green public procurement based on foreign and domestic experience. Authors note that the main feature of such procurement is the existence of a larger number of criteria amongst which is the environmental criteria which is used in the goods and services suppliers’ assessment process. The purpose of the study is to develop domestic and foreign experience in relation to “green” public procurement. The study predetermines the regulatory framework analysis, as well as different researchers’ opinions on the problems of “green” public procurement from the perspective of Russian and foreign practice. Techniques of analysis, induction, deduction, and abstraction in public sector organizations served as the methodological basis of the study. This study pays considerable attention to the basics of the “green” public procurement system, which are structured and meaningful, but at the same time has flexible points of interaction when organizing procurement activities. Also, more attention was paid to the environmental criteria for products and services procurement. The authors consider the experience of foreign countries, namely the USA and Germany, and also determine the level of development of national “green” public procurement in 2023. The authors emphasize that in the past year, the Government of the Russian Federation adopted a regulatory document that makes it possible to implement the basic principles of resource management when organizing and conducting procurement at both the federal and municipal levels, as well as to effectively use secondary raw materials in certain types of new products. This research made a conclusion that international and domestic experience in implementing “green” public procurement helps to solve a number of problems common in each country.

1 Introduction

One of the key factors in any state economic development, effective functioning of the market, sustainable business management (small and medium-sized), as well as increasing

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the competitiveness of enterprises, is procurement at both the state and municipal levels (hereinafter - government procurement) [1-14].

“Green” public procurement (hereinafter - GPP) is a concept that has long been familiar to European, Asian and American countries, but is still quite innovative for the Russian Federation. The main feature of such procurement is the existence of a larger number of criteria that amongst which is the environmental criteria for products and services procurement. This feature allows to minimize possible harm to the environment and achieve a high level of sustainable development. By complying with certain requirements regarding the environmental safety of our country, a country not only significantly improves the quality of the goods provided, used for public needs, but also, by its example, demonstrates how to approach the choice of products so that they are healthy and environmentally friendly [8].

To indicate the main points on which environmental criteria are based, let's pay attention to such a phenomenon as the gradation of budgetary needs. In this case, special attention is paid not only to those needs that can be met by carrying out “green” public procurement, but also to the entire range of services that in one way or another have an impact on the state of the environment and its quality. Most of all the negative consequences that one has to face from time to time arise from both direct human influence and indirect ones. Therefore, in this case, it is especially important to choose possible options for assessing and identifying the risks of potential, real threats.

2 Purpose of the study (Objective)

The aim of this study is to develop domestic and foreign experience in relation to “green” public procurement. This research is theoretical in nature and is aimed at developing procurement process approaches from the point of view of environmental characteristics.

3 Materials and methods (Materials and methods)

The study predetermines the regulatory framework analysis of “green” public procurement issues, including environmental standards at the international level. An analytical review of different researchers' opinions on the problems of public procurement in general was made [8], with paying attention to “green” public procurement in the Russian Federation [4, 11, 12], from the point of view of the international approach to this type of procurement [5-7, 13, 14].

The methodological basis of the study was qualitative and quantitative methods, which included techniques of analysis, induction, deduction, and abstraction.

4 Results of the study and their discussion (Results of the research)

At the present stage of world development, the principles of “green” public procurement are applied very actively and by a considerable number of countries. Thus, according to the latest statistics prepared by the Organization for Security and Cooperation in Europe (OSCE), almost without exception, the countries that are members of this organization have their own strategy aimed at implementing a green procurement policy. In addition, almost 70% of OSCE participants already carry out green procurement and constantly monitor this process [10].

Russia in this case was not exception. Every year, the state pays more and more attention and interest to the problem of green procurement. The regulation of the process of conducting this type of procurement is regulated at the legislative level by Federal laws and the Decree of the Moscow government, namely:

- Federal Law of July 18, 2011 No. 223-FZ “On the procurement of goods, works, services by certain types of legal entities” [1];

- Federal Law of April 5, 2013 No. 44-FZ “On the contract system in the field of procurement of goods, works, services to meet state and municipal needs” [2];

- Decree of the Moscow Government of April 20, 2012 No. 332-PP “On environmental requirements for the quality and technical characteristics of products purchased under the state order of the city of Moscow, and directions for improving environmental certification and audit systems” [3].

However, it cannot yet be said that in Russia the system of public “green” procurement is fully formed and can be recognized as fully operational due to the following:

- the requirements for purchased “green” products are still not structured and clearly defined;

- “green” public procurement does not have an officially established status in the Russian Federation;

- consumers are practically unaware of the labels classified as “green”;

- there are frequent cases of the “greenwashing” usage which is marketing purposes’ presentation of unconfirmed information regarding the environmental friendliness of declared products.

As noted by T.P. Smetanina and E.V. Agapova, often suppliers, who do not have the necessary level of competence either in general in this field or in relation to green procurement principles usage, take part in the “green” public procurement procedure. There are clarifications from authorized government bodies regarding the provisions contained in the above-mentioned laws [12]. All these factors do not allow the area of public procurement to develop effectively and efficiently.

A number of problems that can be solved through the acceptance, development and improvement of public protection include:

- improving the environmental level quality and its conservation;

- stimulating the markets covered by these legal relations;

- improving the level and quality of life in the state;

- minimizing costs for the acquisition and usage of goods and services;

- stimulating the development of small and medium-sized businesses;

- price reduction for goods that have environmentally friendly status;

- compliance with requirements and existing obligations regarding to the most promising and environmentally friendly areas of economic development [9].

Of course, mastering the basic principles of the implementation of public health protection is possible with an integrated approach, competent management and effective tasks solutions. The implementation of this process is feasible by sequentially performing the following stages [12].

At the first stage, at different levels of government, it is necessary to decide on the importance of meeting environmental requirements and including them in public procurement documents, namely, it is necessary to develop and adopt a national plan for the implementation of such requirements in the field of public protection with further transfer of made decisions to the regions and municipalities.

At the second stage, it is necessary to develop and gradually include environmentally friendly characteristics in the goods produced and services provided, which will preserve the

environment, make goods and services more meaningful and accessible, and reduce their cost. In addition, resource consumption will be significantly reduced, as well as reduced electricity consumption will also be observed [13].

At the final third stage, the principles and requirements of the Public Procurement Law are directly introduced into the national economy by changing the content of procurement contracts at both state and municipal levels.

The basic component of all public procurement contracts is structured and meaningful, but at the same time has flexible points of interaction during procurement activities management. In this regard, it is necessary to highlight several functions that public procurement performs, in particular, procurement procedures:

- planning procurement for state and municipal needs;
- posting information about orders on official websites and in the media;
- conducting a competitive selection of suppliers with the subsequent conclusion of agreements (contracts);
- maintaining management control over the fulfillment of contract terms;
- monitoring and summing up the implementation of agreements and contracts’ execution.

Due to the fact that public health protection is directly related to careful attitude towards the environment and green economy, it is necessary to constantly monitor and record indicators that have a direct impact on the natural ecosystem (Fig. 1).

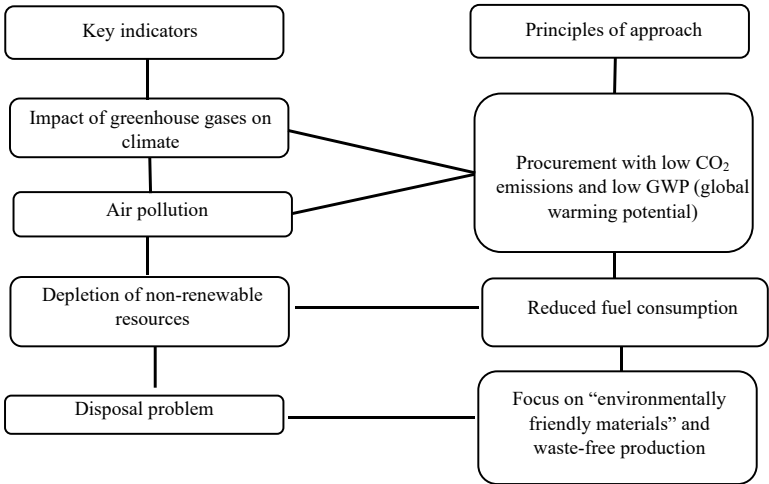


Fig. 1. Basic principles and indicators of the State Land Protection [11]

As can be seen from Figure 1, each problem that acts as a key indicator of a negative impact on the environment corresponds to the principle of green procurement formation approach.

It is necessary to highlight the international level environmental standards existence, which are marked with the Ecolabel designation, which allows one to judge the level of the environmental impact. Such markings are classified into three types:

- Type I (ISO 14024) - refers to environmental labeling programs that may be voluntarily administered by public or private agencies at the national, regional or international levels;

– Type II (ISO 14021) - the essence of this type of marking is that its product packaging application is not accompanied by the usage of any graphic signs. In this case, examples of markings are: “contains recyclable materials”, “biodegradable”, “does not harm the environment”, etc. Absolutely any authorities that are in one way or another involved in the development or distribution of a certain product have the right to apply type II markings;

– Type III (ISO 14025) - a feature of this type of marking is the fact that it is issued to those organizations that are not associated in any way with the manufacturer of the product. For example, parameters of the product life cycle or inventory analysis of the product life cycle. Among other things, type III implies the possibility of posting additional information about the content of harmful and toxic substances.

Having considered the theoretical basis of the environmental component of public procurement, we can move on to studying the experience of their implementation. To do this, let us turn to the experience of foreign specialists.

Thus, German public procurement system is based on principles developed and regulated by the European Union provisions. This requirement is mandatory since the state is a member of the designated integration association. The control system in the field of public procurement in a given state necessarily includes two components: an appeal authority carried out by an independent organization, and judicial bodies that administer justice on controversial issues [14].

In German public procurement system, two features can be distinguished, the first of which is that with the help of the court in this country it is possible to challenge the results of placing a public order, and, secondly, the risks of delays in spending budget funds are minimal, due to the fact that the program is quite transparent and implies an expedited mechanism for various complaints against the customer.

If we would look at the practice of the “green” economy in Germany, we should notice that since 1978 the national eco-label “Blue Angel” has been in force. This sign and the corresponding certificate mark environmentally friendly goods and services that meet the following criteria:

- absence of harmful solvents in products;
- products have low emissions;
- content of safe levels of preservatives in products;
- products have been tested in accredited testing laboratories for testing harmful organic compounds;
- renewable raw materials are used in the production of products.

In addition, each of the products undergoes mandatory testing for compliance with European standards and regulations.

There is another “green” standard in Germany called the DGNB (Deutsche Gesellschaft für Nachhaltiges Bauen) – Council for Sustainable Construction in Germany, which consists of more than 1,200 organizations and more than 500 experts [6]. DGNB certification involves the assessment taking into account the life cycle of the building and in accordance with the criteria:

- environmental quality;
- economic efficiency;
- socio-cultural qualities and functionality;
- quality of technical equipment.

Since Germany is one of the countries with a strongly developed environmental side of the economy, “green” public procurement is the main area of governmental activity.

As noted by O. Anchishkina and Yu. Gracheva, in the current conditions of the formation and functioning of the US federal contract system, several aspects can be identified that allow

authorized US government bodies effectively exercise their powers and manage the public procurement process, namely:

- firstly, detailed and formulated principles of the procurement planning process;
- secondly, powerful public procurement legislative regulation, where it is difficult to find gaps or conflicts;
- thirdly, a well-established organization of process management in terms of public procurement. The powers of government bodies do not overlap, everyone does what they are supposed to do, as a result of which management is carried out at a high level;
- fourthly, the presence of a specific information system, a certain database on key elements of the public procurement process, namely contracts, suppliers, certain regulatory provisions;
- fifthly, the presence of a classification fixed at the legislative level in relation to the methods used in the public procurement process, as well as types of contracts, depending on the specifics of the elements of the process under consideration;
- and, finally, sixthly, the existence of a single register, which contains all the necessary information templates for documents used in the public green procurement process [4].

Special attention should be paid to the Russian Federation practical experience, the United States of America and Germany in implementing green procurement in 2022.

So, if we would look at the Russian Federation experience, we can note the following. Firstly, in Russia there is a set of requirements presented in the public green procurement process implementation. This set, in general, is quite well-developed and understandable. However, this cannot be considered as structured and consistent. Many provisions are not given in the sequence in which they are often applied, etc. To solve this shortcoming of the system under consideration in the Russian Federation. It was decided to amend the current legislation and adopt Resolution No. 1224 “On the features of the description of certain types of goods that are the subject of procurement for meeting state and municipal needs, the procurement of which is subject to environmental requirements” [2]. The adopted regulatory legal act makes it possible to regulate legal relations in the market for secondary resources. market directly related to the public green procurement implementation. This change helps to simplify the existing system by eliminating the need to comply with and implement additional requirements for manufacturers into the process.

Decree of the Government of the Russian Federation dated July 8, 2022 No. 1224 came into force on January 1 of this year and, starting from this time. When implementing the State Land Protection Order, it is necessary to describe the direct object of legal relations and the percentage of secondary raw materials that was used by its producers. This object falls into one of the following product categories:

- paper products for household and sanitary purposes (for example, toilet paper);
- elements of landscaping that are classified as hard (for example, curbs);
- elements of landscaping that are classified as soft (for example, rubber tiles);
- containers and bins used for collecting waste;
- fertilizers classified as organic, etc.

It should be emphasized that, according to the above resolution of the Government of Russian Federation, certain shares of recyclable materials will be provided. At first, this figure will be equal to 3%, namely in the current year in 2023, and then, by 2024, it is planned to increase it by another two percentage points to 5 % [2].

In the United States, 2022 was marked by the greening of the planet and the application of the GPP in the field of carbon-free energy. Thus, the American Energy Information Administration notes that in 2022, the capacity of “green” generation increased by 46

gigawatts due to the integration of alternative generating capacities into the country's energy grid - "green" power plants [5].

Approximately 21% of the total number of alternative technologies are gas power plants (9.6 GW), 17% are wind power parks (7.6 GW). This also included two new nuclear reactors at the Vogtle Electric Generating nuclear power plant. Their capacity will be 2.2 GW.

It should be noted, that solar energy in the United States is experiencing steady growth, which is explained by the favorable climatic conditions of individual states of the USA. Thus, the majority of solar power plants were built in Texas - 28% of the total for 2022 or 6.1 GW, and in California - 4 gigawatts. Both states are characterized by an increased number of sunny days per year and are excellent for the location of solar power plants.

In addition, the development of alternative energy in the United States, and as a consequence, the development of public protection, is also facilitated by the increasing capabilities of industrial energy storage systems. Their storage volume will increase by 5.1 GW (84%). However, in the United States, a number of problems arise with increasing the volume of solar energy for two reasons - eco-activists do not allow the technological process to be fully established, and also in the United States there is no developed infrastructure for this, which cannot be said about Germany.

Solar energy and public protection zones are also being revived in Germany, which has secured the support of Brussels. Germany was once the world leader in installed solar energy capacity. Thus, Saxony's Solar Valley, located near the eastern city of Chemnitz, will be used to restart solar cell factories [7].

As Germany and Europe seek alternative energy sources, partly to make up for missing supplies from Russia and partly to meet climate goals, there has been increased interest in reviving an industry that in 2007 produced one in four solar cells in the world.

Currently, according to the State Land Protection Plan, the demand for solar energy is increasing significantly. Thus, new residential photovoltaic systems registered in Germany became in demand by 42% more in the first seven months of 2022, compared to the same period, notes the country's solar energy association (BSW).

5 Conclusions

Thus, it can be stated that international and domestic experience of implementing "green" public procurement helps to solve a number of problems in each country, namely: environmental conservation; market stimulation; improving the quality and standard of living, stimulating small and medium-sized businesses, reducing production and sales costs, improving the products quality, as well as achieving high rates of economic growth of the state and its constant sustainable development.

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