ECONOMIC AND ENVIRONMENTAL IMPLICATIONS DETERMINED BY THE IMPLEMENTATION OF THE NEW PRINCIPLES AND NORMS REGARD IN GREEN PUBLIC PROCUREMENT (GPP)

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Abstract

Our study highlights the potential benefits, as well as the main obstacles to the efficient application of green public procurement (GPP). In this regard, we address the main aspects of this issue, with reference to what exists in the EU and Romania. On the whole, the progress is still modest in this direction. In the same context, we treat the legal possibility of using environmental management systems to integrate environmental protection requirements into the public agenda. Given the advantages of GPP, as well as their scale at national and European level, we believe that we have sufficiently argued the need to urgently introduce requirements for environmental sustainability into the GPP system.

Keywords:

Green public procurement; sustainable development; environmental management; Government Procurement Agreement; EMAS.

JEL code: K32, K39, Q56, Q59, R11.
I. Introduction

The issue of environmental protection is currently of crucial significance. Most countries in the world have made improvements to the legislation applicable to this field, in line with the warning signals from scientists. In fact, the issue of environmental protection is a major concern for specialists in various fields: biology, chemistry, geography, medicine, law, economics, etc. As for us, we addressed environmental economics topics that we published in the previous period [1], [2], [3], [4], [5], but in fact, I have so far paid attention to the issue of GPP only from a legal perspective [6]. Our remark is that at national and international level the number of scientific papers focused on GPP has increased significantly, some of which we also refer to in this article. Actually, GPP represent the processes in which the public authorities intend to purchase goods and services with low environmental impact during the life time compared to other goods and services, with the same primary utility and which might otherwise have been purchased. Or, in other words, the products and services purchased under this name take into consideration the environmental factors. GPP aim to buy - on energy efficiency criteria - products and services, computers, building components, lighting equipment, recycled paper, green cars, electricity from renewable energy sources, appliances, clean public transport and so on.

Over time, environmental initiatives will surpass the costly inconvenience status and become sources of competitive advantage [7], [8]. Accordingly, the importance of these environmental aspirations led to the great importance of GPP [9].

II. Overview on GPP in Europe

European public authorities are major consumers, who through their purchasing power orientation towards acquisition of environmentally friendly goods, services and works, could make an important contribution in developing and supporting the production of green products. Accordingly, the orientation towards GPP by introducing requirements for environmental sustainability in the specification would be a strong incentive for eco innovation. There are studies that analyzes sustainability based on known methods, but also new practices and technologies [10]. Other studies present the major challenges for sustainable management at the level of the water use cycle in Romania, as well as a coherent, integrated evaluation framework for the use of different assessment instruments (environmental and human...
health risk assessment, life cycle assessment) or describes the main European strategies and policies for sustainable agriculture [11]. The theme discussed was partially achieved in other works, entailing some degree of complementarity / interdisciplinarity. Further investigations [12] show that the issue addressed here is very important, and that the authorities must accelerate the conditions for GPP expansion. In Figure 1 we show a summary of the elements that contribute to the success of the GPP implementation.

![Figure 1. Summary of the elements that contribute to the success of the GPP implementation](Image)

The value of EU green products market stands at €880 billion. With an collective annual budget of €2.3 trillion or 19% of Europe's GDP, public purchasers are influential groups that can guide production and consumption of durable goods [13]. This percentage varies significantly among the Member States (from 11 to 20%). For this purpose, the European Commission has set to support GPP, and determined that, by 2010, a percentage of 50% of all procurement to be green. The target was not reached by all EU countries, but many have obtained important results, such as Finland, which succeeded until 2010 to acquire 70% of green products.
and services in state institutions. About the same time, the average GPP was 38% of total public procurement (2.3 trillion euros).

To be successful, "GPP needs clear and verifiable environmental criteria for products and services". Some European countries already have national criteria (Table 1), criteria that are compatible between the Member States, and National Action Plans.

### Table 1. EU GPP criteria

| No. | Current Criteria          | Criteria under revision    | Criteria under development |
|-----|--------------------------|-----------------------------|-----------------------------|
| 1.  | Wall panels              | Roads                       | Paints and Varnishes        |
| 2.  | Water based heaters      | Office Buildings             | nc                          |
| 3.  | Waste water infrastructures | Lighting (office and street lighting) | nc                          |
| 4.  | Flushing Toilets & Urinals | Food and Catering          | nc                          |
| 5.  | Imaging Equipment        | Computers and laptops       | nc                          |
| 6.  | Combined Heat & Power    | Cleaning Services           | nc                          |
| 7.  | Street lighting and traffic signals | Furniture       | nc                          |
| 8.  | Indoor lighting          | Textiles                    | nc                          |
| 9.  | Sanitary tapware         | nc                          | nc                          |
| 10. | EEE Health care sector   | nc                          | nc                          |

*Source: Authors' synthesis of Assessment and Comparison of National Green and Sustainable Public Procurement Criteria and Underlying Schemes, EU (2010)* [14]

In 2014, the situation of all the 28 EU member states in terms of the adoption of national action plans for green procurement or equivalent documents is presented in Table 2.

### Table 2. National action plans on GPP in EU countries

| Countries where there are national action plans or equivalent documents | 22 UE countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, UK |
| Countries where there is no national action plan | 6 UE countries: Croatia, Estonia, Greece, Hungary, Luxembourg, Romania |

*Source: Authors' synthesis, EU (2014)* [15]

Given the growing importance of GPP and the development of green suppliers, "researchers have tried to keep up with practice by identifying key antecedents that could lead to such practices" [16], [17]. Several studies have been conducted at European level to highlight existing national criteria for the procurement of green products.
A study conducted in 2009 [18] on the impact of GPP in 7 EU countries ”revealed an average of 55% of contracts in those Member States for ten groups of products and services that may be defined as green” (valid for: AU, DK, FI, DE, NE, SW, UK). Another study from 2010 [19]”examined the implementation of GPP in the nine Member States, plus Norway. As part of the overall review of EU public procurement legislation in 2011, an assessment of the strategic use of public procurement (encompassing environmental, social and innovation/industrial policy goals) was also commissioned. A monitoring exercise was conducted in 2011 involving public authorities from 26 Member States. It aimed to identify the level of absorption of the general set of criteria for GPP for ten groups of goods and services (products and cleaning services, construction, catering and food, electricity, gardening services and products; IT office equipment, copying and graphic paper, textile, transportation and furniture). The results indicate that 26% of a sample of 1783 last contracts signed included all of the core EU GPP criteria, and 55% included at least one of the core criteria” [20].

From international perspective [21], ”the EU must comply with the Government Procurement Agreement (GPA) of the World Trade Organization (WTO). The legal framework establishes a set of rules and principles to be observed in public procurement. The legal framework for public procurement is defined by the Treaty on European Union (hereinafter "the Treaty") and by the EU procurement directives, as interpreted by the Court of Justice of the European Union. When we talk about national systems, ”the EU must comply with the Government Procurement Agreement (GPA) of the WTO. The legal framework establishes a set of rules and principles to be observed in the public procurement” [21].

Several countries and regions have also created sets of GPP criteria for a number of groups of products and services. In many cases, they are similar to the EU GPP criteria, with some modifications that reflect circumstances or specific priorities that have established by the authorities. Most sets of criteria are based on data life cycle analysis (LCA), where available, on eco-labels and their underlying evidence.

II. GPP in Romania

In Romania, nearly 20 percent of GDP is spent on public procurement, more than the EU average, which is 16 percent. Green procurement market in Romania is estimated at 20 billion RON.
A study [21] conducted almost 10 years ago on 17 Romanian public authorities shows that:

- 26% public procurement contracts included 1 GPP EU criteria;
- only 6% from developed contracts used all GPP EU criteria.

According to the targets assumed by the EU, Romania had to cover, six years ago, a percentage of 10% of the total purchases. Then, two years ago, the percentage had to exceed 50% of the total amount.

European Directives 2004/17/EC [22] and 2004/18/EC [23] “have been transposed into national legislation by Resolution no. 925 of 19 July 2006 approving the rules for implementing the provisions concerning the allotment of public procurement contracts from the Government Emergency Ordinance (GEO) no. 34/2006 [24] regarding the allotment of public procurement of works concession contracts and services concession contracts. They establish the legal framework in Romania on the coordination of procedures for the allotment of public works, supplies and services. The legal text presents in details the opportunities for adopting environmental considerations in technical specifications”, selection criteria, allotment and clauses for performant public procurement contracts.

In our country the basic legislation in force GEO no. 34/2006 [22] provides that the contracting authority ”has the right to request special conditions of the contract fulfillment for obtaining specific social effects or effects related to environmental protection and promoting sustainable development”.

In Romania, the documentation for a purchase to be green must include ”the contract performance criteria taking into account the environmental protection. The contracting authority is entitled to require operators to submit certificates attesting that they comply with environmental standards, by reference: either to the Community Eco, Management and Audit Scheme (EMAS), to environmental management standards based on European standards series or to applicable international environmental management standards certified by bodies compliant with the Community legislation” [25].

The Ministry of Environment and Climate Change (MECC) will develop the National Plan for GPP (NPGPP), whose noncompliance will be sanctioned with pecuniary penalty from 10 000 to 35 000 RON. The draft law was posted on the MECC site and it is now in public debate. The aim is to develop a NPGPP with specific annual targets and the inclusion of public procurement criteria for environmental protection. Thus, within 6 months of the adoption of the law, MMSC together with the National Authority for Regulating and Monitoring Public Procurement (NARMPP) will publish a guide approved by an order of the Minister of Environment and the
President of the National Authority in the Official Gazette Part I, which will include minimum criteria for environmental protection for groups of products and services, and also the standard specifications. After that moment, MMSC establishes the NPGPP until October 31 next year, which he submitted for approval following a governmental decision. The NPGPP include mandatory targets, which are expressed as a percentage corresponding to the achieved annual amount of GPP in relation to the annual value of public procurement achieved by the contracting authority for the supply of goods, services or works.

NARMPP will monitor the allotment of GPP, ordering, where appropriate, the application of contraventional sanctions.

IV. Use of environmental management in monitoring GPP

Any organization "wishing to improve their overall environmental performance can decide to adopt an environmental management system" [26].

Environmental management systems are tools designed to improve an organization's overall environmental performance. They allow organizations to have a clear picture of the effects they are causing on the environment, to focus on the most significant of them and manage them properly, for the purposes of continuous improvement of environmental performance.

Among the most relevant areas where improvements can be made are the use of natural resources such as water and energy; employee training; use of environmentally friendly production methods and the purchase of environmentally friendly office products. An organization that manages management systems environment may require certification in one of the two main environmental management systems used in the EU "environmental management system and audit" (EMAS).

Procurement directives explicitly states that environmental management measures may be used by businesses to show their technical capacity for service and works contracts, where relevant. Contracting authorities may not require companies to be certified EMAS presumed certification requirements. Businesses can demonstrate that they use equivalent environmental management measures, without been asked for a specific certificate.

There are many different stages in which they could be relevant: "i - In the stage of preparing the specifications, the purchaser may stipulate that certain environmental management measures will be applied in the implementation of a service. The existence of an environmental management system would be a way to demonstrate compliance with these
requirements. This should not have the effect of restricting competition; - In the selection stage for services and works, and only when necessary, operators may require to specify the environmental management measures that we will be able to apply when performing the contract; In the allotment stage, the existence of an environmental management system can be considered as an evidence of economic operator performance” [26].

In order to optimize the environmental strategy of the organization, a quantitative assessment of areas of intervention is very useful.

V. Conclusion - Advantages versus obstacles to achieving GPP

GPP orientation long term provides a number of advantages, which are often neglected as a result of the overall barriers.

The advantages can be specified for the following levels:

Innovation: GPP can be an important promoter of innovation in the market, favorably influencing the expansion of obtaining green goods / services.

Financial: GPP can also mean lower costs for public authorities - especially if they consider a contract costs throughout the life of the product not only the purchase price.

Environment: beyond complying with the legislative requirements (CO2 emissions, energy efficiency), it will ensure a clean environment for future generations.

There were identified the following obstacles that limit the absorption of green and sustainable procurement:

Financial: costly initial investment and low budgets. There is also insufficient information on the costs throughout the entire product life cycle and on the relative cost of green products or services. Cost / benefit analysis of environmental goods and services should be promoted.

Know how: poor knowledge of environmental protection, poor awareness of strengths related to green products / services

Legal: uncertainty about the inclusion of environmental criteria in the allotment documentation; the existence of different criteria and standards from one state to another.

Staff training: lack of technical and legal expertise in implementing green procurement standards.

Management: the lack of a strategy to integrate environmental issues.
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