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Project GPP4Growth

ACTIVITY A1.3

**Policy recommendation report on the improvement
of existing resource-efficiency policies and GPP plans**

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1 Executive summary

This document was created as part of the project “Green public procurement for resource-efficient regional growth” – GPP4Growth, implemented within the INTERREG EUROPA Programme, which aims to improve the implementation of regional development policy instruments in the field of resource efficiency by promoting the use of green public procurement (GPP). This goal is to be achieved through the exchange of experience and an attempt to implement good practices in the use of green public procurement to the mainstream regional policy of project partners.

The submitted report, prepared as part of the project is intended to present recommendations for public institutions (government, local government) to improve existing policies and plans in the area of resource efficiency. The preparation of this report was preceded by the development of a number of other reports within the GPP4Growth project, including the description of existing green public procurement policies by each of the project partners and two reports - A1.3 Comparative analysis report on existing national and regional GPP policies, plans and criteria in the GPP4Growth regions, A 1.4: Report on the factors that influence business of key GPP4Growth sectors to participate in green contracts and tenders. These reports provided the basis for the preparation of this report, in which the authors present recommendations for further development of existing policies in project partners Member States and indicate transferable elements along with good practices from the partners' policies that are to contribute to the goal of developing a sustainable economy using green public procurement. Additionally, based on the authors' own experience and knowledge as well as the contribution of all project partners, suggestions will be made on minimizing administrative burdens for economic operators (especially representatives of the business sector) aimed at creating a single market with common environmental criteria in the area of green public procurement.

The report consists of four parts. The introduction presents mechanisms that allow considering ecological and environmental aspects in public procurement and the possibilities of creating incentives to use green public procurement by means of strategic documents and policies both at the central and local level in each Member State. In the second part of the report there is a short description of policies and GPP plans in all partner regions under the GPP4Growth project. The third part of this report focuses on the obstacles and ways of

overcoming them identified in the A 1.3 and A 1.4 reports prepared earlier as part of the project and the mapping of policies identified in second part as tools to effectively suppress the barriers. The last part contains a list of the most effective, transferable elements from the GPP strategies of partners' regions along with an indication of best practices and suggestions for minimizing administrative burdens for entrepreneurs and methods for monitoring progress in the implementation of GPP policies.

2 Context of the research

The Interreg Europe Programme, under which the GPP4Growth project is implemented, aims to initiate and develop cooperation between regional and local authorities of the European Union Member States, so that the best practices can be identified and applied in other regions of the EU. The GPP4Growth project is primarily aimed at identifying the best practices in integrating GPP into regional policy and supporting public administration and enterprises in implementing a life cycle costing approach in public procurement, which should lead to a sustainable use of resources and improved waste management in the economy as a whole.

The GPP4Growth project partners intend to use the EU public procurement reform from 2014, which entered into force in 2016, i.e. the legal framework developed by the EU, to create new opportunities for public authorities to stimulate eco-innovation, resource efficiency and sustainable development, by applying new public contracts award criteria and that would pay particular attention to environmental aspects. In particular, the new provisions allow public authorities to put additional requirements on tenderers, among others in the scope of: compliance with environmental obligations, taking into account environmental costs by using the life-cycle costing (LCC) methods, as a method of evaluating offers or delivering goods and services that meet the requirements of environmental labels, while reducing administrative burdens.

The use of new opportunities provided for by EU public procurement law is particularly important for local public authorities in order to achieve regional sustainable growth and respond to current and future environmental and economic challenges by adopting a policy for green public procurement. Spending 2 trillion Euros each year (19 % of the EU's Gross Domestic Product (GDP)) on goods, supplies, services and works, Europe's public authorities can use their purchasing power to choose environmentally friendly goods and services, including efficient electronic & electrical equipment, electricity from renewable energy resources, sustainable construction works, low emission public transport vehicles etc, promoting sustainable consumption and production patterns in their territories. GPP4Growth aims to make it easier for EU regions to apply the EU public procurement system by identifying and exchanging best practices in the field of green public procurement.

In GPP4Growth project 9 partners from 9 Member States cooperate, involving managing officials and local authorities influencing regional and national policy instruments to stimulate eco-innovation, sustainable resource management and green development by promoting green public procurement. The following institutions have joined the Project Partnership:

Table 1: The GPP4Growth partnership

no	Partner	Acronym	Policy instrument addressed	Country
1	University of Patras (EL)	UPAT	Operational Programme of Western Greece 2014-2020	Greece
2	Lombardy Region (IT)	Lombardy	ERDF Regional Operational Programme Lombardy	Italy
3	Lodzkie Region (PL)	Lodzkie	Regional Operational Programme Łódź province	Poland
4	Province of Antwerp (BE)	Antwerp	Flemish Public Procurement Plan 2016-2020	Belgium
5	Ministry of Environment and Spatial Planning, Regional Government of Andalusia (ES)	Andalusia	Andalusia ERDF 2014-2020 Operational Programme	Spain
6	Zemgale Planning Region (LV)	ZPR	Operational programme "Growth and Employment"	Latvia
7	Stara Zagora Regional Economic Development Agency (BG)	SZREDA	Operational Programme "Environment" 2014-2020 (OPE)	Bulgaria
8	Department of Communications, Climate Action and Environment (IE)	DCCAIE	Border, Midland and Western Regional Operational Programme 2014-2020 (BMW ROP)	Ireland
9	Malta Regional Development and Dialogue Foundation (MT)	MRDDF	OPI – Fostering a competitive and sustainable economy to meet our challenges – 2014-2020	Malta

By supporting public administration and enterprises in adopting a LCC based attitude and improving the overall management of resources and waste, the GPP4Growth project covers

a wide range of activities, focusing on promoting interregional learning and exchange of experience between regional authorities. Project activities include:

- Analysing the needs of GPP4Growth regions in Green Public Procurement.
- Identification of successful green public procurement cases.
- Evaluation and analysis of existing policies, plans, and criteria for GPP in the key GPP4Growth sectors.
- Analysis of the factors (barriers and enablers) that influence businesses in key GPP4Growth sectors to get involved in green tenders and contracts.
- Promoting public dialogue and consultation process to build consensus and ensure the successful implementation of regional action plans, through the support and participation of key regional stakeholders.
- Fostering interregional learning and capacity building through workshops, study visits, and policy learning events.
- Development of transferable tools & resources to promote benchmarking and policy learning, and transfer knowledge and lessons learnt beyond the partnership.
- Joint development of action plans to promote the improvement of the policy instruments addressed by the project.
- Increasing awareness, promoting and disseminating the project results and knowledge beyond the partnership.

Finally, GPP4Growth will utilise all the above activities to achieve the following results:

- Over 7% increase in the number of businesses in partners' regions, integrating environmental factors and costs when producing goods and/or providing supplies, services and works.
- Increased capacity of 200 staff of public administrations to effectively implement resource efficiency policies, applying GPP.
- 10 million of Euros investments unlocked to promote new green products and services development.
- Increased knowledge awareness of over 1000 stakeholders on the influence of GPP on the adoption of sustainable consumption and production patterns by businesses.

3 Introduction

Public spending is subordinated not only to legal regulations in the field of public finances and public procurement law, but also to other legal acts that aim to promote European Union policy in the field of sustainable development. The concept of sustainable development was first defined in 1987 in the report of the World Commission on Environment and Development (WCED) "Our Common Future" as "development that enables us to meet current needs and aspirations, without compromising future generations' satisfaction of their own needs and aspirations"¹. The declaration from the World Summit on Sustainable Development held in Johannesburg in 2002 clarified that sustainable development should be based on three interdependent and mutually supportive pillars: economic development, social development and environmental protection². The Europe 2020 Strategy adopted in 2010³ assumes that supporting sustainable development is one of the European Union's priorities for 2010-2020. Sustainable development is understood here as supporting a more efficient economy that uses natural resources, is more environmentally friendly and more competitive⁴. The principle of sustainable development has also been regulated in the constitutions of some European Union member states, including the Constitution of the Republic of Poland⁵. In the context of such a broad regulation of sustainable development, both under EU and national law, its principles must also be taken into account while concluding public contracts⁶.

Therefore, the concept of sustainable development consists of a number of different policies, the implementation of which will lead to the achieving established EU economic, political and social goals. Among the policies of the European Union, an increasingly important role is played by environmental policy⁷, the implementation of which is not any longer the domain of the Scandinavian countries, but all the Member States of the European Union. Rising of ecological awareness in societies, but also an increase in the level

¹Report of the World Commission on Environment and Development, p. 24.

² Johannesburg Declaration on Sustainable Development, Johannesburg 2002, point 5.

³ Communication (COM(2010) 2020 final) – Europe 2020: A strategy for smart, sustainable and inclusive growth, final version, Brussels, 3.3.2010.

⁴ I. Sobieraj Green public procurement as an instrument for sustainable development in Germany, *European law in practice*, No. 4/2017, p. 36 and next.

⁵ Art. 5 of Polish Constitution of 02.04.1997 (Dz.U. 1997, Nr 78, poz. 483).

⁶ S. Valaguzza, *Sustainable development in public contracts. An example of strategic regulation*, Neapol 2016, p. 9;

⁷ According to art. 11 of Treaty on functioning of the European Union (C 326 , 26/10/2012, p. 1) Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development, compare: B. Sjaafjell, A. Wiesbrock, *Sustainable Public Procurement under EU Law*, Cambridge 2016 , p. 10 and next.

of environmental pollution and civilization diseases, and thus financial losses for the economy, necessitates the inclusion of environmental protection in many sectors of the economy.

Green public procurement aims to support the objectives of environmental policy, in particular taking into consideration significant public sector expenditure on goods and services. According to the European Commission's research, the public procurement market accounts for approximately 14% of the GDP of all European Union Member States, equivalent to about EUR 1.8 trillion annually⁸.

In the European Commission's Communication "Public procurement for a better environment" of 2008, green public procurement was defined as "a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured"⁹.

GPP can be implemented in a number of different ways, and environmental considerations can be taken into account at different stages of the tender procedure, using different criteria which are considered by the contracting entity as important for the implementation of a specific tender. The basic provisions governing the procedure and rules for the award of public contracts are established at the level of the European Union and subsequently transposed into the national regulations of the Member States. These allow the authorities to apply very freely and flexibly the ecological aspects, in a manner fully adaptable to their needs.

Therefore, it is extremely important to establish and promote the key steps of the public procurement procedure where it is permitted to introduce environmental criteria. It has been identified at the EU level that the introduction of GPP in the procurement process, Member States can effectively create and manage the development of their own regions to achieve sustainable economic growth first and then move towards a circular economy.

⁸European Commission (2015). The above indicators come from surveys commissioned by the European Commission in 2013 and do not include expenses incurred by public utilities enterprises. Previously conducted studies (2011) included expenditures borne by enterprises, and the value of the public procurement market was estimated at about 19% of EU GDP, ie the equivalent of approx. EUR 2.3 trillion annually.

⁹ COM (2008) 400, p.4.

3.1 Market dialogue

Before initiating a public procurement procedure for a specific product or service, the contracting authority may review the market in order to gain knowledge of the latest offerings from professionals. For example, when considering an investment in the construction sector, you can obtain knowledge from experts in the use of biodegradable materials or the re-use of asphalt from the demolition of the previous road.

In EU law, market dialogue is regulated in art. 40 of Directive 2014/24/EU. According to EU law, before starting the proceedings, the contracting authorities may conduct market consultations with the intention of preparing the contract and informing the contractors about their plans and requirements for the contract¹⁰. Public entities can therefore consult independent experts or authorities or other market participants provided that this advice will not infringe competition law. Therefore, the authorities must ensure equal treatment of all entities participating in the dialogue. In accordance with the principle of transparency, information about the dialogue and its subject should be made public on the website, and then at the stage of initiating the procurement procedure, i.e. it should be demonstrated that there was no distortion of competition.

It should be emphasized that market dialogue is only a stage preceding the description of the object of the contract. It aims to familiarize the customer with the best market, technical and organizational solutions. It is therefore a flexible form of consultation with the private market, which can also be used to familiarize with environmentally-friendly goods and services¹¹. It also serves to identify risks related to the implementation of the order, which may be a guideline for the contracting authority, as to the choice of a specific procedure for awarding the contract or selection of specific awarding criteria. Market dialogue can also make the public authority aware that there are no available goods or services on the market, or that their supply is limited or that their price exceeds the budget allocated to the contract.

¹⁰A. Soltysińska, H. Talago-Sławoj, European public procurement law. Commentary, Warsaw 2016, p. 392-402.

¹¹W. Bajda, Technical dialogue as an instrument to identify the needs of the customer [w:] J. Sadowy, B. Bańko (red.) Amendment to the Public Procurement Law of October 12, 2012 - introduction to the provisions of the Act, Warsaw 2012, p. 45 and next.

3.2 Description of the subject of the contract

The description of the subject of the contract must be made in an unambiguous manner, using sufficiently precise and understandable terms, taking into account all the requirements and circumstances that may affect the preparation of the offer, and at the same time in a manner consistent with the principles of fair competition. Therefore the description of the subject of the contract needs to be clear, comprehensive and containing all the elements necessary for the proper preparation of the tender offer.¹²

In the description of the subject of the contract, the contracting authority may specify requirements related to the performance of the contract, which may include economic, environmental and social aspects or those related to innovation or employment. For the purposes of this report, the possibility of introducing environmental aspects into the description of a public procurement should be particularly emphasized.

When describing the subject of the contract, the contracting authority must take into account "all requirements and circumstances that may affect the preparation of the offer". This issue is very important in the context of estimating the value of the contract and determining the time of contract implementation. If the necessary circumstances are not specified in the description, the calculation of the offer price will be based only on the bidders' decisions, and not on the calculation based on the evaluation of the risks that may occur when the contract is performed. Defining the offer price too low may result in later increase in the perceived order costs for the ordering authority, whereas overcharging the contract costs may cause losses for the contractor or prevent him from submitting an offer.

In order to make it easier for the contracting authorities to prepare "green" technical specifications and terms of the public contracts, the European Commission has developed the so-called environmental criteria that are helpful in making a pro-ecological description of the subject of the contract¹³. Currently, the environmental criteria are developed for 19 product and service groups, namely: cleaning products and services; computer and monitors; copying and graphic paper; electrical and electronic equipment used in the health care sector; electricity; food and catering services; furniture; gardening products and services;

¹²P. Granecki, Public procurement law. Commentary, Warsaw 2016, p. 394.

¹³Available at: http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

imaging equipment; office building design, construction and management; paints, varnishes and road markings; road design, construction and maintenance; sanitary tap ware; street lighting and traffic signals; textiles; toilets and urinals; transport; waste water infrastructure; water-based heaters. These criteria have been developed in two versions: the first is the basic criteria and the second are the comprehensive criteria. EU law leaves the decision whether these criteria are obligatory or optional in the given legal system to the Member States.

Ecological labels (ecolabels) may also be used to support environmental protection in public procurement. The law allows the use of ecological labels in the description of the subject of the contract, in the award criteria and in the conditions of the contract. It is necessary to underline that the requirements set for a given label must refer only to the criteria related to the subject of the contract. There are few requirements that must be jointly met by the label if it is to be used in public procurement:

1. They must be based on objectively verifiable and non-discriminatory criteria,
2. Terms and conditions for the award of the label should be based on a transparent procedure in which a wide range of entities should participate,
3. The requirements for labelling must be determined by a third party that is independent from the contractor and is not subject to its influence,
4. The labelling must be available to all interested parties.

All the above aspects of the description of the subject of the contract can be used jointly or selectively in each public order being carried out, and their selection depends solely on the objectives set by the contracting authority itself.

3.3 Conditions for participating in the proceedings

The contractors' participation in the public procurement procedure is subject to verification in the context of satisfying the positive prerequisites, as well as the absence of negative premises, which result in exclusion from participation in the procedure.

Conditions for participating in the proceedings (i.e. positive prerequisites) may relate to:

1. Competencies or allowance to conduct a specific professional activity,
2. Economic or financial capabilities,

3. Technical or professional capacity.

In practice, this means that the contractor can be requested, for example, to have prior experience in implementing investments, which included environmental aspects or dispose of appropriate facilities. The technical capacity of contractors to carry out an environmental order may also be verified by the implementation of specific environmental management schemes. According to article 62 par. 2 of Directive 2014/24/EU, it is possible to request a list of environmental management schemes that the contractor will be able to apply while performing the contract. For this reason, in the description of the subject of the contract, it is necessary to indicate additional requirements with regard to environmental management, which are related to the subject of the contract. In this way, the condition for the implementation by the contractor of certain environmental management schemes may be a condition of participation in the procurement procedure, but it must be proportional to the subject of the contract.

Negative conditions for participation in a public procurement procedure in the context of the implementation of GPP are related to environmental offenses committed earlier. Depending on national regulations, they may have an obligatory character - then the exclusion takes place by virtue of law, or optional, when the ordering authority determines whether to exclude a certain category of potential contractors from the possibility of applying for a given order.

3.4 Award criteria

Public procurement law specifies that in the public procurement procedure, the contracting authority should choose the most advantageous offer, that is, the offer, which presents the best balance of price or cost and other criteria relating to the subject of the contract or best meets criteria other than price or cost when the price or cost is fixed or offer with the lowest price or cost, when the only criterion is price or cost. The introduction of the cost criterion allows for the selection of the most advantageous offer based on LCC methodology, i.e. the methodology for calculating expenses incurred at particular stages of the product life

cycle. Also at this stage of the procurement procedure, the awarding entity must abide by the rules of public procurement, in particular the principle of non-discrimination¹⁴.

Non-price award criteria may include, among others:

- quality, including technical parameters, aesthetic and functional properties;
- social aspects;
- environmental aspects, including energy efficiency of the subject of the contract;
- innovative aspects;
- organization, professional qualifications and experience of people appointed to perform the contract;
- after-sales service and technical assistance, delivery conditions, such as delivery date, delivery method, delivery time or implementation period.

Taking into account environmental goals in public procurement contributes to achieving sustainable development goals. It also fits into the currently developing trend of promoting a circular economy¹⁵. Therefore procedures for public spending should take into account the environmental protection issues. Environmental aspects may be taken into account at the stage of procurement procedure preparation, during the proper procurement procedure and at the stage of contract implementation. Pro-ecological conditions may already appear during the preparatory phase of the proceedings, e.g. in market dialogue, as well as in the description of the subject of the contract, the participation criteria and among the conditions for exclusion of contractors or at the stage of awarding the contract, eg. by implementing lifecycle cost calculation. Green public procurement can also be an important driver for innovation, in particular in the construction, health services and transport sectors.

¹⁴Królikowska–Olczak M., The principle of non-discrimination in the European Union's public procurement law, [in:] Economic and legal issues of public procurement. Polish and European Union's experience, A. Borowicz, M. Królikowska–Olczak, J. Sadowy, W. Starzyńska (red.), p. 9 and next

¹⁵Z. Bukowski, Circular economy and environmental law, [in:] Ecological justice in law and practice, T. Bojar-Fijałkowski (red.), Gdańsk 2016, p. 45-54.

4 GPP policies in partner regions

The preparation of this report takes place at a time when most of the Member States, including most of the GPP4Growth project partners, have already implemented some form of strategy or policies to promote green public procurement at the central or regional level. Partner regions differ significantly in terms of detail, advancement and measures implemented under their policies. Some regions have multi-faceted, multi-level, detailed policies for the implementation of green public procurement using local and regional predispositions. Other regions, in turn, have implemented relatively general central strategic assumptions; however, they gave the authorities a set of useful tools and instruments to facilitate the practical implementation of environmental criteria in their purchases. Still few EU Member States, such as Greece, are currently in the process of developing public procurement plans that take into account green, innovative and sustainable aspects, and are even more interested in the experience and practice of other countries so far.

Nevertheless, the goal of all EU Member States, including partner regions and institutions associated under the GPP4Growth project, is to facilitate, accelerate and make the most of the opportunities offered by green public procurement. In order to achieve these objectives, it is necessary to conduct a stable and well-thought policy in the field of promoting green procurement so that it can assist contracting authorities in overcoming barriers that are relatively similar in all Member States.

The above support is absolutely necessary because the process of implementing GPP, as a kind of novelty for contracting entities, can be easily disturbed or even completely inhibited by such factors as:

- the experience or conviction that greener is more expensive;
- lack of information about environmentally friendly alternatives
- not recognizing the link between government consumption and environmental policy
- not recognizing the possibility to use public procurement as an instrument to support sustainable policies and to promote more environmental goods and services;
- the perception of sustainable procurement as a difficult task
- not enough people/time to do GPP;
- the uncertainty as to the legal consequences for including sustainability standards in tenders, in a less known market;
- not distinguishing real needs instead of reordering what has ran out;
- failure to integrate social and environmental costs during the full life cycle of products into the calculation even if the TCO (limited to costs incurred during the use of the product in question and waste management) is considered in choosing the most economically advantageous tender;
- by the downsides of environmental alternatives (e.g. range of electric vehicles).

All of the above threats and barriers have been identified within the framework of this project, and the goal of partner institutions' policies is to find a way to overcome them. This part of the report will analyse the policy of each of the partner regions, in accordance with the materials provided by the partners, and will identify practices, tools and instruments transferable to the policies of other EU Member States that are most likely to meet the challenge of effectively promoting GPP.

4.1 University of Patras - Greece

In Greece, the overall action plan of public procurement, including GPP, is not yet implemented, as currently it is being prepared. Nevertheless there is a legal framework concerning public procurement, which enables, but not obliges, the public authorities to implement and GPP. As long as there is no uniform and solid political framework, the decision on the choice of green criteria and ensuring that environmental aspects are taken into account depends on the recognition of the individual organization conducting the tender.

Although the Green Public Procurement Action Plan has not yet been implemented, in 2010 the act no. 3855/2010 entered into force and it introduced green public procurement as legally permissible. It is currently the only legislation regulating this issue. The Act established a national inter-ministerial committee to create policies in the field of green public procurement. In particular, the main objectives of the committee were:

- develop the GPP policies and form the action plan
- examine the adaptation of the EU green criteria or the creation of new ones if necessary
- inform the stakeholders in public and private sector
- select the products' categories that green criteria will apply.

While the regulation regarding GPP was basic and provided more a framework than a detailed instruction, the act also established energy efficiency criteria in public procurement. Without being directly related to the green public procurement, efficiency criteria set the objective of reducing energy consumption in the public sector through mandatory enforcement of the energy efficiency standard EN 16001 in each public procurement for electronic equipment. The above requirements included in particular: street lighting, construction of public utility buildings using alternative sources of green energy and replacement of public vehicles with greener ones.

In preparing this public procurement action plan, the Greek government took a step beyond the use of basic public dialogue and benefited from a much wider consultation and knowledge exchange process, involving such actors as:

- Representatives of the ministries/policy makers, so as to receive all the information about GPP resulting from other participants.

- Representatives from Universities and research centres, to provide know-how and studies on the environmental impact of green products or services.
- Legal organizations and specialized legal representatives to interpret the EU regulations in GPP and to indicate ways to ensure the application of GPP.
- Representatives from large organizations conducting public procurements to provide the necessary experience on carrying out GPP and to indicate the most common and most usual problems in public procurements. They could also examine the application of green criteria and pinpoint issues to be solved.
- Representatives of the market e.g. Chambers of Commerce, Industry, SMEs to describe the exact situation of the enterprises and how it would be possible and most importantly feasible for the enterprises to introduce eco-labels and meet green criteria. What is more, they could also provide information on the time needed by the market to integrate and adopt energy-efficient and eco-friendly procedures, in order to start producing the new enhanced and environmentally friendly products.

To this end, an action plan in Greece on public procurement went to public consultation process in February 2016 and it is still a work in progress. The plan tries to set the strategy, the objectives and the direction of public procurement in Greece. It also sets the principles on which the plan is based, and these included the improvement of the legal framework, the development of IT solutions for the monitoring of the procurement and the promotion of sustainable growth according to the European guidelines. While the action plan mentioned specifically several GPP actions and suggestions, it also proposes the creation of a separate action plan specifically on GPP. Since the general action plan is still under preparation, it is estimated the GPP action plan has long way before it comes to legislation. Below and in the next sections, the actions in the proposed action plan that either directly or indirectly affects the implementation of GPP in Greece are mentioned.

The action plan proposes to adapt the national technical specifications so that GPP would contribute to climate change mitigation and adaptation, while saving the public resources. Initially it suggests the use of the European green criteria as minimum specifications that all public procurement contracts must follow. Secondly, it suggests the creation of a second optional set of green criteria. The inclusion of this second stricter set should be dependent on the product and the availability of the market to support these criteria. To this end, there is an ongoing process to identify the products and services in the Greek market that can support green criteria, in order to identify the market's readiness for the introduction of green criteria in public contracts. Its findings will facilitate the creation of the GPP action

plan and will help the creation of a Greek green product database which will help public authorities when creating tenders.

4.2 Lombardy Region - Italy

The National Action Plan for GPP (NAP GPP) was adopted in Italy in 2008 and revised in 2013. The Plan targets all types of public authorities and has identified 11 product groups for which minimum environmental criteria are developed and approved by Ministerial Decree once they are ready for use. With the approval of the latest Procurement Code (Law Decree 50 of 18 April 2016) and the “correction” Decree of 19 April 2017, the adoption of the minimum environmental criteria defined by the GPP NAP became compulsory. The change of status of GPP from a “voluntary” to a “regulatory” tool resulted from the combination of two factors:

- the government’s aim to boost the green economy through a mix of tools and measures included in the Environmental Annex to Financial Law of 2015;
- the experience of regional and local authorities that showed that the application of GPP was feasible, yet needed further stimulus and support to widen its application.

However, the change does now also require the establishment of a wide system of support for public purchasers that do not yet have the necessary competences and skills to define and manage green procurement. In addition, monitoring tools are foreseen to be developed but are not there yet. The Ministry of Environment has identified the regional governments as key actor in the process of building up the knowledge and operational framework that shall allow the implementation of new law provisions.

4.3 Lodzkie Region - Poland

At domestic level, the basic act regulating the process of awarding/granting public contracts is the Public Procurement Law Act (Act of 29 January 2004). The regulations of the Act provide a number of solutions that allow for social or environmental aspects to be taken into account in the conduct of public procurement proceedings but most of such regulations remain voluntary. On the one hand, it allows the contracting authority to make an assessment as to whether social or environmental aspects can be taken into account in the scope of the procurement proceedings. On the other hand lack of mandatory application of a larger number of minimum environmental criteria means that many, in particular smaller entities, will not take up the additional effort of introducing environmental aspects into their tender documents.

An important document for the promotion of GPP is “National Action Plan on GPP for period 2017-2020”. A number of actions which will be implemented were listed in this document, e.g.:

- In-depth study on the state of sustainable public procurement in Poland,

- Training and conferences addressed to contracting authorities, representatives of control institutions (including Regional Chambers of Audit, Supreme Audit Office) and Central Anticorruption Bureau representatives,
- Publications about sustainable public procurements,
- Examples of good practices in the application by polish contractors of environmental and social aspects in public procurement,
- Standard records for tender documentation, including social and environmental aspects.

Green public procurement also supports fulfilment of other national policies such as „Strategy of energy security and environment – perspective to 2020”, “Efficient State Strategy 2020”, “Strategy for innovation and efficiency of the economy for years 2012-2020 Dynamic Poland”. In addition, the actions planned under the National Action Plan will contribute to the achievement of the objectives of the Plan for Responsible Development adopted by the Council of Ministers on February 16, 2016.

Sustainable public procurement is mentioned in the above documents of strategic importance for Poland. One of the instruments supporting the improvement of the quality of the environment is "Strategy of energy security and environment – perspective to 2020", “Efficient State Strategy 2020". This strategy estimates increase in the level of green procurement so that half of the public contracts awarded are ecological. Among its specific objectives are indicated:

- Increase the awareness of officials in range of the application of environmental criteria in public procurement,
- Implementation of awareness raising campaigns as well as the use of other instruments to encourage green procurement and the spread of good practice in the private sector.

In the next strategy “Efficient State Strategy 2020” it has been pointed out that, in order to effectively manage material and financial resources, public administrations should emphasize the dissemination of existing legal arrangements for taking into account the ecological aspects of procurement procedures. Furthermore, it has been emphasized that increase of percentage of GPP may be caused by increase in the number of entities with a verified environmental management system and applying certified environmental technologies and domestic certified products

In “Strategy for innovation and efficiency of the economy for years 2012-2020 Dynamic Poland” there is a reference to green public procurement. Characterizing the economy of the country, it is pointed out that there is an inefficient use of natural resources and raw materials. Wider usage of GPP was mentioned within remedy instruments contributing to reducing the energy and material consumption of the economy.

Moving to the strategic planning on the regional level it needs emphasizing that the policy of the Lodzkie Region in perspective of the coming years is directed towards realization of the assumed development vision and regions mission which is: consistence of the region in range of territory and image, creative and competitive on the national and European scale, with the best communication accessibility, distinguished by investment attractiveness and high quality of life

“The Development Strategy for the Lodzkie Region 2020” is a main tool of the regional policy. The strategy clearly indicates necessity for strengthen and decidedly more effectively use of the unique development potentials characteristic for this region. The strategy point out also that the Lodzkie region is characterized by high dynamic of industrial production in comparison to the rest of polish regions. Activity of the most companies is involved in the branches of energy, textile, ceramics, construction, furniture, agri-food and other non-traditional industries, as well as modern services such as logistics, storage and outsourcing, and the rapidly growing biotechnology sector.

The Regional Strategy of Innovation for the Lodz Region – “LORIS 2030” is another strategic document. Its operational aims have been prepared for three main priorities:

Priority 1: Regional specialization - covering the crucial branches being accelerators for the development of the region;

Priority 2: Development of innovation potential - covering the widespread exploit of innovation in all areas and industries operating in the region, apart from regional specialization;

Priority 3: Innovation management in the region – covering improving the efficiency of innovation policy in the region and creating conditions for innovation development in the region.

All the above planning and strategic documents developed both at the central and regional levels are primarily aimed at enabling the implementation of the EU's sustainable development policy.

4.4 Province of Antwerp - Belgium

The European public procurement directive 2014/24/EU – which confirms the policy on sustainable public procurement in many ways and takes away most of the remaining obstacles to sustainable public procurement - was transposed into Belgian legislation by the Act of 17 June 2016 on public contracts.

The Federal Government coordinated its policy on sustainable public procurement in the circular of 16 may 2014 (after the Federal Action Plan Sustainable Procurement 2009-2011 where the Federal Government focused on 50% sustainable purchases by 2011), defining how the Federal contracting authorities need to take into account sustainability in their daily procurement. The federal policy is controlled by the Federal Institute for Sustainable

Development (FIDO), connected to the Chancellery of the Prime Minister. To help the public procurers to include sustainable criteria in tender documents, a guide for sustainable procurement was developed with sustainable criteria for about 70 products and services.

The Flemish Government issued action plans on sustainable public procurement for 2009-2011 and 2012-2014 and now included the policy on sustainable public procurement in an overall plan, which sets objectives on five other procurement themes as well (SME access, e-procurement), the Flemish Public Procurement Plan, adopted on January 29, 2016. Starting point is the effective and efficient use of public procurement as an instrument to contribute to the implementation of policy objectives of the Flemish Government. The Flemish Government aims at 100% durable purchases by 2020 within their organisation.

The Flemish Public Procurement Plan focuses on the Flemish Government. But it also mentions the wish to strengthen the cooperation with other actors, confirming that the impact of a public procurement policy is largest when the purchasing power of authorities is added together. Besides engaging in dialogue with the private sector, the Flemish Government declares the will to support local authorities in organizing more sustainable and innovative public procurement using the European initiative to establish effective coordination within and outside the organization.

The policy is coordinated by the Central Purchasing and Public Procurement Service in the Department of the Chancellery and Public Administration. Their website on sustainable and innovative public procurement provides manuals, product files (on 17 product groups), most of them developed in collaboration with the FIDO, standard clauses, etc. Preliminary monitoring data are only accessible to the staff of the Flemish Government.

None of the current policy plans contain obligations concerning sustainable procurement or even activating measures for local authorities. Therefore only several provinces, municipalities and cities are engaged in sustainable public procurement, but in a rather fragmented fashion. Some local authorities have drawn up policies for sustainable public procurement (e.g. Antwerp and Gent). Province of Antwerp developed 28 product files with criteria for sustainable procurement, compulsory within the organisation. The cooperation agreement 2008-2013 on sustainable environmental policy of the Flemish government with local authorities stimulated a lot of the latter to start with GPP promoted in "Theme environmentally sound product use". Additionally, Umbrella Association for Cities and Municipalities (VVSG) provides a Focal Point Sustainable Public Procurement.

4.5 Ministry of Environment and Spatial Planning, Regional Government of Andalusia - Spain

Currently, the Consolidated Text of the Public Sector Contracts Law envisages in its articles the possibility of including environmental criteria in procurement procedures. In addition to the Spanish state administration, the application of this Law extends to the contracts signed

by the Autonomous Communities (regions) and the entities that form the Local Administration (e.g., Municipalities), or the entities dependent on them as well as contracts subsidised by any of these entities.

In accordance with the assessable criteria of tenders, more than one criterion may be used in the award of contracts, such as lower environmental impact, saving and efficient use of water and energy and materials, life cycle assessment, ecological processes and methods of production, the generation and management of waste or the use of recycled or reused materials or environmentally friendly materials. Likewise, it is envisaged the consideration of environmental aspects as contract performance conditions (e.g. requirements on the use of electricity or water, waste management or the use of recycled products).

In January 2008, the GPP Plan of the General Administration of the State and its Public Bodies was approved by agreement of the Council of Ministers. This Plan intends to articulate the connection between public procurement and the implementation of environmentally friendly practices. For that, quantified targets are established for several product groups, services and works considered as a priority for the incorporation of environmental criteria by the European Commission. The products and services included in the Plan belong to the areas of construction and maintenance, transport, energy, office equipment, paper and publications, furniture, cleaning services, and the provision of event services. The Ministries are responsible for implementing the Plan in their respective areas.

Various entities at the regional level have developed their own GPP criteria for different product and service groups. Although these criteria may change, they are generally similar to those proposed by the EU.

In October 2016 the Governing Council agreed to promote the incorporation of social and environmental clauses in the contracts of the Regional Government of Andalusia.

The Ministry of Finance has prepared a guide for the inclusion of social and environmental clauses in the contracting of the Regional Government of Andalusia in the different phases of the procurement process. It establishes mandatory clauses for all contracting entities, as well as recommended clauses that they can adapt or modulate according to the characteristics of each contract.

The draft of Andalusian Law on Climate Change, promoted by the Regional Ministry of Environment and Spatial Planning and currently being approved by the Parliament of Andalusia, aims to contribute to the fight against climate change and move towards a low carbon economy. In particular, it has the possibility of including the carbon footprint of the products or services that are the subject of the bids as an assessable criterion.

4.6 Zemgale Region - Latvia

Integrating the provisions of Directive 2004/18/EC and Directive 2004/17/EC into Latvian legislation, the possibility for Latvia to implement GPP is set out in the Public Procurement Law. Also, the possibility to pursue the GPP is defined in the Public Service Providers' Procurement Law, as well as in the Law on Public Transport Services

In the current situation, the following actions have been carried out for the GPP promotion in Latvia - Adoption of amendments to the Public Procurement Law, the adoption of the Ministers cabinet's Regulations No.673" Regulations on the Application of Environmental Criteria and Determination of Offer Criteria for Procurement of Food Supply and Catering Services" in October 28, 2014, and also adoption of the Ministers' cabinets regulation No 83 "About the Green Procurement Promotion Plan 2015-2017" which implementation was delegated to the Latvian Ministry of Environmental Protection and Regional development. The Latvian "GPP Promotion Plan 2015-2017" is aimed to ensure the increase of the financial share of the GPP from public procurement reaching 15% in 2015, 20% in 2016 and 30% in 2017.

After evaluating the financial contribution of the GPP over several years, it can be seen that after a significant decline in 2012 and 2013, starting with 2014, the proportion of GPP in public procurement is increasing, reaching 19% in 2015. The fall in the share of GPP in 2012-2013 was largely affected by the closure of the Climate Change Finance Instrument projects, as environmental criteria had to be applied in all purchases of this instrument. By contrast, the increase in the proportion of GPP from 2014 was ensured by the requirement in the Cabinet of Ministers Regulations No.673 of October 28, 2014 "On the Application of Environmental Criteria and the Determination of Selection Criteria for Procurement of Food Supply and Catering Services", on the mandatory application of environmental criteria for food products and catering services.

Apart from the mentioned legislative, political measures for the GPP promotion in Latvia there are a series of other direct and indirect political measures to promote the GPP:

1. Latvia's Sustainable Development Strategy until 2030 (Latvia 2030), which defines that: "The criteria for state and municipal procurement tendering should include energy efficiency and considerations of product life cycle analysis";
2. Within the framework of the National Development Plan 2014-2020 of the Latvian National Development Plan (LNDP 2020), the following needs to be ensured: "Wider provision of energy efficient and environmentally friendly products and services (Green Public Procurement) in public procurement";
3. The Environmental Policy Guideline 2014-2020, developed by the Ministry of Environmental Protection and Regional Development, which aimed to achieve environmental policy objectives has task to promote GPP on the national level;

4. "Informative Report on recommendations for promotion of green public procurement in state and local government institutions and recommendations for promotion of environmentally friendly construction" which had been developed by the working group of inter-ministerial and external experts coordinated by the Ministry of Environmental Protection and Regional development in 2008;
5. In the framework of Cabinet of Ministers Order No 83 "About the Green Procurement Promotion Plan 2015-2017" the GPP guidelines have been developed "GENERAL GUIDELINES FOR GREEN PUBLIC PROCUREMENT" in 2015, which are used for public authorities for the GPP implementation;
6. Ministers' cabinet rules No 353 "Requirements for green public procurement and the procedure for their application" of 20.06.2017 which defines certain rules and principles in the GPP implementation in Latvia;

Additionally the State Regional Development Agency of The Republic of Latvia has developed the Electronic Procurement System (EPS) in 2009, at the moment the EPS system provides "Green" Catalogues which are updated every year. With the help of this system, public authorities can purchase green product by simplified electronic procurement form, buying products with ecolabels, energy savings labels and other "green" certificates. The recent data shows, that in 2015 the share of "green catalogue" products in EPS was about 10%. Moreover the Ministry of Environmental Protection and Regional Development developed an online life costs "calculators" for several types of products (light bulbs, computers, imaging equipment) in 2015, this system is used by the public administrations, especially by procurement specialists to calculate the benefits of the "green" or "energy low consumption" products.

4.7 Stara Zagora Regional Economic Development Agency - Bulgaria

The latest available data (for 2014) indicates that only 47 out of 11 881 public procurements are "green" and out of those 47 public procurements contracts have been signed for 37 of them. In financial terms this equals to 14 million BGN (around 7, 15 mln EUR) out of 3,8 billion BGN (around 1,94 billion EUR) which equals to 0,37% of the total number of public procurements in Bulgaria for this period. Only 10% of all municipalities in the country have held green public procurements. The green public procurements held by Bulgarian municipalities include activities related to construction, followed by purchasing of office equipment, street lights management systems and transportation vehicles.

The analysis of past practices for the inclusion of environmental criteria in the procurement documentation and the implementation of the National Action Plan for the Promotion of Green Public Procurement for the period 2012-2014 clearly shows the need for targeted measures to cover all participants in the process. Further efforts are needed to clarify the opportunities for purchasing environmental products through public procurement and understanding the concept of the overall life cycle of products.

Addressing this problem, the Council of Ministers adopted the "National Strategy for Development of the Public Procurement Sector in Bulgaria for 2014-2020" which contains a concrete measure for accelerating the development of green procurement. It is envisaged to issue a practical handbook for such contracts, to be developed.

At this stage, green criteria may be included voluntary in any procurement regardless of the bid selection criterion chosen by the contracting authority: "lowest price" or "most economically advantageous tender". In the follow-up to the procurement process, environmental criteria can be specified in the technical specification, the tender benchmarks for the criterion "the most economically advantageous tender" (when choosing the last criterion, the contracting authority may include eco-Indicators to be assessed only if they are related to the subject of the contract, clearly stated in the tender notice and documentation, concrete and objectively quantifiable, not in breach of the general principles of the law), included in the clauses of the contract.

4.8 Department of Communications, Climate Action and Environment - Ireland

To date within the EU, GPP is regarded as a voluntary instrument for public authorities and individual member states to implement however the transposition of Directives 2014/24/EU & 2014/25/EU into Irish law have ensured that GPP be considered in procurement processes within the state.

While GPP is a voluntary instrument there are mandatory European and national environmental laws which must be taken into consideration in the tendering process, e.g. Clean Vehicles Directive 2009/33/EU. Other examples are national waste regulations and Irish building codes.

Many of Ireland's procurements are likely to already qualify as 'green'. At present there is no system for measuring the current status of GPP in Ireland. The need to adhere to basic legal requirements in the criteria used in the tendering process would indicate that the majority of tenders include minimum environmental standards. Therefore future development of GPP should focus on extending these criteria beyond the legal environmental standards in order to drive innovation and increased 'greening' of the public procurement market.

An action plan for the implementation of GPP in Ireland is already completed. 'Green Tenders – An Action Plan for Green Public Procurement' (DoECLG, 2012) was launched in 2012. This plan is supported by the 'Green Procurement Guidance Document' (EPA, 2014) for procurers in the public sector. Ireland's Action Plan is featured in the framework document for the implementation of sustainable development considerations across all sectors of society called "Our Sustainable Future" (OSF, 2015). An annual progress report specifically traces the advancement and implementation of the Green Tenders Action Plan.

The centralisation of most procurement to a number of key bodies, the Office of Government Procurement (OGP) and the Local Government Operational Procurement Centre (LGOPC) means that information about GPP can be spread amongst the relevant procurers efficiently.

A new national plan on Corporate Social Responsibility 'Towards Responsible Business' (DEI, 2017) supports the social and environmental aspects in business practices.

4.9 Malta Regional Development and Dialogue Foundation - Malta

The implementation of Green Public Procurement (GPP) in Malta was formalised in 2011 through the publication of the first GPP National Action Plan which spanned from 2012-2014. The requirements on GPP apply to all public tenders falling within the scope of the Public Procurement Regulations irrespective of tender type, value, tendering procedure or the nature of the contracting authority.

The National Action Plan established GPP targets for 18 product and service groups and proposed a series of measures for reaching those targets. The targets set out in the Plan were set to be incremental, in order to follow market developments, avoid potential market distortions, and to allow sufficient lead time for the market operators to adapt to the new government purchasing policy. Measures on how to attain the GPP targets for those product and services groups have been formalised by an Inter-Ministerial Task Force (IMTF) on GPP. Through Department of Contracts Circular No. 21/2011 "GREEN PUBLIC PROCUREMENT AND OTHER PROCEDURES" all Contracting Authorities have been instructed by the Department of Contracts to integrate green public procurement criteria, according to their respective targets, by following the National Guidelines for Green Public Procurement.

The transposition of Directives 2014/24/EU and 2014/25/EU into Maltese legislation has ensured that the slow GPP uptake in the beginning has now received a new impetus and is being considered in procurement processes by a growing number of Contracting Authorities. Furthermore, it is now widely acknowledge by Contracting Authorities that the inclusion of environmental performance indicators in public tenders has the potential to drive sustainability, increase resource efficiency and reduce waste in Malta. Consequently, by 2015, the Maltese Government has made a commitment to have 50% of its public procurement compliant with GPP.

In light of the developments in procurement policies, Malta's National Action Plan is currently being reviewed in order to further strengthen the GPP process in Malta. The GPP office within the Ministry for Sustainable Development and Climate Change (MSDEC) has been tasked to devise and launch a new and updated National Action Plan which takes into account the difficulties experienced thus far and offer a realistic and ambitious plan for the coming years.

5 Identified barriers and mechanisms to overcome them

According to the reports mentioned at the beginning: A 1.3: Comparative analysis report on existing national and regional GPP policies, plans and criteria in the GPP4Growth regions; A 1.4: Report on the factors that influence business of key GPP4Growth sectors to participate in green contracts and tenders, as part of the GPP4Growth project it was possible to specify a number of barriers for development of the GPP sector occurring both on the side of public institutions and entrepreneurs participating in tenders. In addition, the project partners also indicated the most beneficial mechanisms that would overcome the existing barriers and effectively introduce GPP into the practice of contracting authorities of the Member States.

The task of this report is to determine how previously identified restrictions (indicated below) and mechanisms to combat them should be included in existing or to be created GPP policies and strategies, so as to maximize the obtained results.

5.1 Barriers for the contracting authorities

Public institutions that try to implement GPP in their purchasing processes often face similar challenges that hinder the successful preparation and implementation of green contracts. The results of research carried out as part of the GPP4Growth project and the A 1.4 report point to 6 basic obstacles:

- Limited access to information on GPP deployment.
- Lack of training for public administration employees involved in the technical preparation and implementation of green tenders.
- Shortage of technical skills and experience in applying environmental criteria.
- Lack of management and political support for wider implementation of GPP.
- Insufficient integration of GPP conditions in the administration management system.
- Perception of green products as more expensive compared to their common alternatives.

From the surveys carried out as part of the project, one can conclude that there is a significant knowledge and information flow gap that affects the practical use of green orders. Lack of knowledge and professional support means that public administrations, and in particular officials responsible for preparation of tender documentation, are reluctant to alter existing public procurement policy. The lack of widely available, tested and practical tools contributes to the knowledge shortage, as GPP often is a complex procedure that requires having specific technical knowledge, both in the preparation of tender documentation and subsequent evaluation of offers and performance of the contract.

5.2 Barriers for the entrepreneurs

To increase the involvement of the private sector in green public procurement, it is crucial to understand the main barriers faced by businesses when considering environmental protection requirements in public procurement. Most companies (regardless of their size, country of origin and type of activity) face similar constraints in introducing green practices and they may be divided into two broad categories: internal and external.

The first category includes barriers that exist in the company structure itself and negatively affect its ability to participate in green public procurement, the most important of are:

- the necessity to make investments, lack of own financial resources and difficulties in accessing financing from external sources;
- lack of appropriate technology;
- low ecological awareness among employees;
- lack of internal capabilities and technical knowledge to prepare documentation related to public procurement;
- uncertainty about business benefits and assumption that product price growth after adopting green practices;
- management problems (time management, strategic orientation, operational efficiency).

External barriers include all those factors that are beyond the control of the enterprise - market structure, competitive pressure, lending terms, policy framework and regulations, customer expectations and trends are just some of the factors that affect every company. As far as the private sector involvement in green public procurement is considered the most frequently mentioned barriers relate to the complexity of administrative procedures. Businesses have limited access to information about green tenders; procurement procedures usually involve significant bureaucracy and time constraints.

5.3 Mechanisms to overcome barriers

The GPP4Growth project identified mechanisms to overcome barriers to the development of green public procurement in partner regions, 5 groups of actions have been distinguished, which should be included in future planning documents to maximize the development of green public procurement and guarantee sustainable economic development within the whole European Union.

1. Preparation of training materials and seminars for public sector employees involved in GPP. Indication of how to track and acquire new ecological opportunities and solutions appearing on the markets. Increasing knowledge about contractors is a precondition for stimulating innovation and can contribute to the growth of green jobs and reduce negative environmental impacts through gaining green innovations.

2. Public dialogue, exchange of information and experience between both public institutions and the private sector, to ensure that employees responsible for public procurement and stakeholders are always aware of the latest ecological solutions and their impact on the environment.
3. Creating of a coordination mechanism for the implementation of green public procurement by indicating the person responsible for coordination of green orders or ICT tools that will harmonize and at the same time guarantee the stabilization of environmental criteria used in procurement, so as to address the lack of specific responsibility between public sector employees. The coordinating mechanism should in particular guarantee support at the stage of preparation of tender documentation in terms of the substantive application of environmental clauses.
4. Developing a more complete list of environmental criteria to be used in GPP for many separate fields taking into account criteria already established by the Commission. In addition, it would be valuable to supplement existing and future criteria with a methodology for calculating life cycle costs.
5. Creating appropriate monitoring mechanisms for GPP and to control the development of this sector.

6 Transferable elements of partner regions' policies

The purpose of this report is primarily to identify transferable elements of policies, strategies and other planning documents, as well as their practical implementation in all partner regions. Additionally, the authors of the report aim to assign selected transferable elements of policies to challenges and barriers in the development of GPP, identified in the earlier stages of the GPP4Growth project, so as to maximize the effectiveness of the proposed solutions.

It is worth paying attention to the fact that in each of the project partners' countries many methods of dealing with obstacles to the development of green tenders had been developed. The Member States have already developed good and effective mechanisms to overcome the barriers as described in Section 5 above, only each of them has so far used those methods selectively to focus on the problems that it considered most relevant. At the moment, it is enough to gather the best examples and experiences of individual countries to propose a comprehensive solution that will combine all the best practices into one coherent strategy aiming at the most effective use of the GPP as the instrument of sustainable economic development.

There are seven solutions and strategies that we have identified as having the greatest potential to be transferred to other Member States, these are:

1. Multilevel and multi-aspect consistent planning.
2. Methodical use of innovative IT technologies.
3. Extensive consultations and public dialogue combined with education in the field of green public procurement.
4. The successive implementation of obligatory environmental criteria instead of fully abandoning them.
5. Wise implementation of ecological certificates into public procurement policy.
6. Monitoring the implementation of GPP objectives.
7. Limiting administrative burdens for entrepreneurs taking part in the procurement procedure.

6.1 Multilevel and multi-aspect consistent planning

In each of project partners, countries, there are policies that cover different aspects of the use of public procurement. Greece is currently in the process of developing a comprehensive and coherent policy in this respect, but its legislation also already allows for the implementation of social or green public procurement, which are to serve the additional objectives set by each of the public institutions as part of their internal policies.

Nevertheless, although each partner country has a public procurement policy, even partially addressing environmental aspects, not everyone uses the full potential of more extensive planning.

In the example of Poland and Latvia, it can be noted that extending planning to cover various elements and types of state's activities including economic, social or regional development brings additional benefits such as using synergy effects between particular interrelated regions or fields covered by planning. Obviously the development of any strategy should proceed from general to specific aspects. Therefore, the starting point should be the strategy adopted at the central level, which should indicate the direction of development of the whole country, its instruments and mechanisms developed at the central level through which the government guarantees support to all public institutions at every level. In connection with documents created at the central level, for example the National Action Plan on sustainable public procurement, regional administration bodies should develop their own strategic documents by implementing the assumptions of the National Action Plan, using local development potential while trying to use the resources existing in the region. However regional institutions should neither close nor limit themselves solely to the local potential. The first aim of a coherent strategy should be to identify and then use existing opportunities, both already present in the region and possible to introduce or transfer to specific territories, in particular in the field of innovative technologies or solutions such as smart cities. One of the objectives of the strategy should be to support innovative enterprises in such a way that they are able to efficiently execute public procurement for local contracting entities in the future, taking into account environmental aspects.

An important complement to the strategic documents and documents developed at particular levels is the analysis and justification for the adoption of a specific strategy. When developing a policy for the implementation of GPP, it is necessary to conduct a broad benefit analysis covering both real environmental benefits and potential economic savings; because many green solutions are cheaper than traditional products or services in overall calculation. The above additional materials and justification for the adopted policy is itself an important tool for contracting authorities, as it enables them to understand the objectives of the policy and that contributes to increasing the motivation in its implementation (for more on the exchange of knowledge within the framework of the policy, see point 6.3.).

It is extremely important to plan the planning process and strategy creation itself. A predetermined model should be adopted, which will consist of interrelated elements forming a certain whole together, but functioning independently of each other, so as to avoid the risk of strategic gaps. Thanks to the interconnectedness and strategic use of the development potential of each region, along with the addition of subsequent parts of the strategy, it will improve its efficiency starting from the central level, through regional plans, down to individual plans for the development of cities and towns. In this context, it is important to specify the reasons why we decide to plan, in the context of green public procurement the most important ones include:

1. Generating and looking for niches - by requiring new hitherto non-existent solutions, the policy has the potential to stimulate development and create entirely new branches of the economy.
2. Searching for innovation and its popularisation - green public procurement is often based on innovation, it has a natural tendency to create new sectors of the economy that have never been present at all or were absent in a given regional market.
3. Flexibility of supply and demand - it is possible to accelerate the development of specific branches of the economy by including them in planning documents, so that later on they are able to guarantee the supply of goods and services to the demand generated by GPP (more on introducing new goods and services using environmental criteria in section 6.4.).
4. Securing the use of specific technologies or resources identified by the planner as beneficial or preferred.
5. Standardization of proceedings - the policy can also serve to guarantee the stabilization and uniform application of available legal instruments in a given area and to prevent a situation where each contracting authority follows different objectives or uses different criteria and requirements for the acquisition of the same goods.
6. The durability of applying the principles and policy objectives in time - that should constitute an incentive for entrepreneurs when investing in innovative, ecological technologies. The stability of the process in the form of promoting specific principles and solutions contributes to and encourages sustainable development.

It should be remembered that each strategy should be verified in terms of its effectiveness and efficiency in achieving the initially set goals. That is why, before developing the policy itself, it is necessary to set goals that we intend to achieve, and then the tools that are to be used to achieve them, and finally determine the methods of evaluation with which we will be able to measure them. Without these three initial assumptions, one should not even begin to create any policy, because its implementation is exposed to the risk of lack of any verification. That is why it is so important to simultaneously develop methods for monitoring progress in the use of GPP, more on this topic please see in item 6.6.

6.2 Methodical use of innovative IT technologies

The introduction of new technologies for administrative procedures is indispensable for their improvement, simplification and acceleration.

Among all partners Latvia has the greatest experience in the use of IT technology in the practical functioning of the state. Starting from electronic citizenship, through the possibility of dealing with most official matters online, to conducting public tenders with the help of an electronic platform. Observing the speed of IT technology development, the diversity of its applications and the simplifications that it brings, it is impossible to reach a different conclusion than that it is the only and irreversible development direction for any

organization that intends to improve its own functioning. In particular, this should apply to the state and public institutions whose effective operation is in the interest of all citizens.

Following the example of Latvia, it is necessary to indicate the creation of a public procurement portal as a transferable element of the GPP policy. It is important that the platform not only enables the tender itself, but also combines several different tools that facilitate green purchases, for example: the knowledge and information exchange, enables the use of methodology for assessing the life cycle costs of products, offers ready-to-use environmental criteria, and it additionally is a source of information for the entrepreneurs about tenders and a clear indication of the public institutions policy aimed at the promotion of ecological products, services and construction works.

The very functioning of electronic public procurement is not surprising - every EU Member State is currently in the process of developing the implementation of this innovative procedure into the national public procurement system. Nevertheless, combining so many functions in one place, which is the most accessible for an unlimited number of people - starting from officials, through entrepreneurs, down to all citizens, brings with it almost unlimited possibilities for the implementation of each of the mechanisms developed under the GPP4Growth project.

With the use of an extensive electronic platform, it is possible:

1. Extensive consultation and public dialogue - it is natural to create a forum for the exchange of experience, while creating the platform for public procurement, this is an additional functionality constituting an added value - more about the importance of public dialogue in point 6.3.
2. GPP education - as in item 1 above, the central platform will become a repository of knowledge both in terms of the theoretical basis for creating tender documentation and exchange of good market practices. The main task of the platform administrator will only be to collect and organize all the knowledge accumulated on it.
3. The successive implementation of obligatory environmental criteria using the portal will become even easier than with the help of any legal regulations. Not taking into account environmental criteria in the tender for which they are required will result in the inability to publish it.
4. Introduction of GPP monitoring mechanisms, after developing the monitoring and reporting methodology, which is discussed in more detail in section 6.6. The data collection in the portal will take place automatically and additionally access to the latest data will be possible in real time, as well as possibility of tracking the trends and finding new innovative solutions.
5. The reduction of administrative burdens for entrepreneurs taking part in the procurement procedure takes place automatically while using the electronic platform. A certain amount of formalism and documentation may be required when setting up your own profile on the portal, but later demonstrating the experience, positive references, abilities and capabilities to perform individual contracts will be possible

almost exclusively thanks to the experience gathered by each contractor within the portal.

6.3 Extensive consultations and public dialogue combined with education in the field of green public procurement

According to the results of the GPP4Growth project so far, one of the most important mechanisms to support the development of GPP is to create a network for the exchange of information, good market practices and education in the use of environmental criteria. According to surveys conducted among representatives of public institutions fear and uncertainty resulting from lack of knowledge of officials is one of the main barriers to the use GPP. The persons responsible for the preparation of tender documentation underline lack of technical and environmental expertise to assess whether the application of specific environmental criteria is justified, proportionate and non-discriminatory in a given situation. The lack of specialized knowledge should be compensated by an extensive information exchange network or the appointment of persons responsible solely for introducing environmental aspects into public procurement carried out by a given unit. Exactly this solution was suggested by the Lodz Region, which indicated the need to appoint a person or an organizational unit responsible and specialized in environmental issues, whose task would be to supervise and improve the tender documentation. The above effect can also be achieved thanks to the exchange of knowledge and information with highly specialized experts in a specific field of knowledge. Therefore, as a model, one can indicate the solution currently applied by Greece when preparing a public procurement action plan, consisting in the introduction of the widest possible consultation and public dialogue to guarantee the correctness of the planned solutions.

It is suggested to involve as many entities as possible in each public consultation and to create a knowledge exchange network consisting of:

- Representatives of the ministries/policy makers, so as to receive all the information about GPP resulting from other participants.
- Representatives from Universities and research centres, to provide know-how and studies on the environmental impact of green products or services.
- Legal organizations and specialized legal representatives to interpret the EU regulations in GPP and to indicate ways to ensure the application of GPP.
- Representatives from large organizations conducting public procurements to provide the necessary experience on carrying out GPP and to indicate the most common and most usual problems in public procurements. They could also examine the application of green criteria and pinpoint issues to be solved.

- Representatives of the market e.g. Chambers of Commerce, Industry, SMEs to describe the exact situation of the enterprises and how it would be possible and most importantly feasible for the enterprises to introduce eco-labels and meet green criteria. What is more, they could also provide information on the time needed by the market to integrate and adopt energy-efficient and eco-friendly procedures, in order to start producing the new enhanced and environmentally friendly products.

In order to deepen the efficiency of information exchange, its archiving and easy use in the future, it is possible to use a specialized public procurement platform (analysed more in point 6.2.) and thus create a community of green public procurement that exchanges current experiences and the latest knowledge.

6.4 The successive implementation of obligatory environmental criteria until fully abandoning them

As one of the basic methods of promoting green public procurement and increasing their share in the total volume of contracts, obligatory use of environmental criteria created by the European Commission or developed individually by Member States is indicated. Undoubtedly, imposing a legal obligation to use environmental criteria for specific categories of products and services will increase the nominal amount of green public procurement. Nevertheless, from the experience of countries like Italy, it seems that the mere imposition of an obligation is not always fully effective and the problems with the availability of individual products and the lack of technical knowledge of officials in the preparation of tender documentation remain valid. Additionally, imposition of mandatory use environmental criteria which is sudden and not preceded by a market analysis, may lead to the inability to perform a number of tender procedures due to a lack of supply. Therefore, for using environmental criteria, and in particular introducing them as an obligatory element for each public contract, it is worth taking advantage of the experience of Member States that have already decided on such a step - i.e. Italy, Malta or Latvia.

It should be emphasized that the optional use of environmental criteria developed by the European Commission is currently fully admissible in all Member States. Therefore, as part of this study, the preferred model of transition from optional to obligatory application of environmental criteria will be indicated up to the point when we reach expected changes in market practices and announce to gradually tighten the criteria in order to always improve.

The first step should be preparing a GPP strategy in line with the suggestions contained in point 6.1 above and researching market opportunities - with particular emphasis on the supply possibilities of green products and services. On the basis of market research it

will be possible to identify those branches of the regional market that have the greatest potential for the development of green technologies and implementation of ecological practices. The promotion of the optional use of environmental criteria should focus on these specific market segments, and after confirming the supply possibilities of entrepreneurs, the transition to their mandatory application - so as to guarantee public institutions the fulfilment of the basic procurement objective - purchase of specific goods, services or construction works. The effect of long-term obligatory application of environmental criteria should be the adaptation of a given market branch to the demand, increase of the supply and simultaneous decrease in prices of green goods combined with the elimination traditional non-ecological versions. The above mechanism was observed on the example of Belgium, where the requirement to deliver only recycled paper resulted in the withdrawal from the market of paper obtained in another way.

6.5 Rational implementation of ecological certificates into public procurement policy

This point was not strictly brought up by the project partners however it was indicated in their experience. On the one hand, use of ecological certificates to describe the subject of the contract and as a means of confirming specific product features is recommended in every case and in many cases makes the tender procedure much easier. On the other hand, too many certificates, too many aspects analysed, makes their use more and more troublesome and a contracting authority may face a challenge of comparing individual certificates and confirming that they are equivalent.

In a situation where a specific contracting authority is familiar with a specific certificate, knows the procedure for its granting and the characteristics of products undergoing testing, there are no contraindications to the use of a given certificate. However, extreme caution is recommended before introducing an obligation to use ecolabels or other proofs in the tender documentation.

The task for public authorities, in the context of this report, is to identify such categories of products, confirm their properties, make them public and indicate the aimlessness of their certification in conjunction with the conclusion that such products are ecological by their sole nature, and each their purchase under public procurement should be treated as green.

6.6 Monitoring the implementation of GPP objectives

Undeniably, the development of mechanisms for monitoring GPP is currently the biggest challenge that public authorities are facing. In the absence of a uniform methodology, conceptual grid, the number of technologies considered today as ecological, and after a few years as obsolete, it is extremely difficult to indicate one correct way to monitor and report on green tenders.

It is possible to apply a number of methodologies for counting and monitoring both the quantity and the quality of green tenders that are carried out. Starting from the simplest method - quantifying tender procedures in which any environmental element appears. Through more extensive reporting obligations including the value of the order itself and relative indication of the value of the environmental criteria used, e.g. by indicating the percentage value of green elements covered compared to the entire order. Completing with the complex indicators taking into account such factors as the innovation of the technology used, its real impact on the natural environment and the reduction of the whole life cycle costs of the product, taking also into account the environmental impact.

In practice, it is most efficient to combine and use each method to monitor green tenders in a way adapted to the subject of the contract. An ordinary quantitative methodology based on the nominal counting of green tenders seems to be a completely basic necessity and illustrates only the information about knowledge on the possibility of using GPP. It should be used for all orders executed in a given institution and be included in the standard reporting process.

Additional requirements should be introduced along with the increase in the value and complexity of individual tenders, so that they do not constitute an unnecessary burden for officials performing standard ones. In other words, the more significant the tender, the greater the number of reporting obligations should be associated with it.

One can imagine that the order for complicated construction works - for example a modern underground station in the city centre may be associated with a number of additional requirements regarding the technology and taking into account environmental criteria (for example mandatory use of rainwater), and thus with expanded reporting duties and monitoring of GPP, because it will not involve an excessive burden on the contractor or contracting authority, who, with this investment, regardless of the above, are required to carry out regular monitoring of construction works.

6.7 Limiting administrative burdens for entrepreneurs taking part in the procurement procedure

According to many suggestions of both stakeholders and partners in the GPP4Growth project and on the basis of the conducted research, it is necessary to abandon excessive formalism and the requirements to provide more and more documents in the tender procedures, because it hinders the functioning of both contracting authorities, which are flooded with exorbitant amounts of unnecessary documents, as well as entrepreneurs, who are forced to prepare these documents. The above conclusion concerns public procurement as a whole, and not only orders that take into account environmental aspects. Nevertheless, inclusion of additional criteria in the standard tender procedure is indispensably connected with additional formalities and the need to present further documents, at least to confirm own qualifications or ecological features of the products offered.

The natural and irreversible direction of development of the public procurement procedure is its digitization and management using IT technology, described in more detail in section 6.2. This will significantly reform the tendering procedures, simplify them and speed up the decision-making process.

A certain amount of formalism and documentation may be required when setting up your own profile on the portal, but later demonstrating the experience, positive references, abilities and capabilities to perform individual contracts will be possible almost exclusively thanks to the experience gathered by each contractor within the platform.

Until the full implementation of electronic public procurement and including GPP there, it is advisable to limit formalism at the stage of the traditional tender procedure, primarily by relying on the statements of the contractor himself, wherever it is possible. It should be emphasized that it is not always obligatory to present documents and certificates from third parties and it should be sufficient for the contracting authority to submit a personal statement by the bidder. Obviously, every bidder submitting false statements, apart from a possible threat of criminal liability, should face severe sanctions in the form of exclusion from participating in subsequent proceedings.

Naturally, the language barrier will remain the basic and unchanged formal barrier in international cases, but it is not directly related to excessive formalism. The development of digital technologies, considerable automatism and progress in the automatic translation of documents raises the potential for combating this obstacle too.

7 Summary

All mechanisms and strategies to promote GPP are extremely important and make it easier for the officials responsible for tendering to take environmental aspects into account.

Nevertheless, the most important factor that must be taken into account is the internal belief in the importance of environmental protection, the importance of sustainable economic development and the willingness to preserve the planet in a non-deteriorated state. The essence of today's policy in the field of green public procurement is in fact to bring about a situation in which it will not be needed at all, because it will be obvious to every public official in the European Union that there is no possibility of conducting a different tender than an environmental one, that it is not possible to apply other technology than that guaranteeing saving of natural resources, and environmental criteria will simply become the basic criteria when awarding contracts or describing technical specifications of each tender.

Some EU Member States, such as Ireland, Belgium or the Scandinavian countries, seem to be closer to achieving this goal, and some, just like Poland, are still developing this awareness among citizens.

Therefore, it is extremely important, apart from using all the instruments and tools developed within the GPP4Growth project, to expand public awareness and promote the idea of a circular economy as an indispensable and natural development direction for the entire European Union.

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