

The Uptake of Green Public Procurement in the EU in Light of New Directives, Policies and Expectations: Towards a Modern Holistic Society, or Just an Integrated Economic Governance for the EU?

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Abstract: Green Public Procurement (GPP) in the European Union is becoming more and more relevant, with the new directives on public concessions 2014/23/EU, on classic public procurement 2014/24/EU and on Utilities 2014/25/EU the aim is to reach the 50 percent GPP target. The environmental awareness demanding Public Procurement to turn into GPP/SPP opens to a modern holistic society, in which environmental issues come into major relevance. This study collects several data from other researches and Organizations works, with an innovative approach, regarding also Small and Medium Enterprises (SME) to identify problems and related legislative solutions, analyzing best sound procurement performance in the EU with a focus on Nordic good practice and Worldwide situation. The study inquires whether the article 11 TFEU and the new environmental consciousness are just strengthening the current integrated economical governance concept or if, instead, they are moving towards a new concept of modern Holistic Society.

Keywords: Green Public Procurement; holistic society; article 11 TFEU; GPP; integrated economic governance.

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1. *Introduction: Public Procurement and Green Public Procurement*

Competitiveness and growth in a market are widely influenced by public procurement. The main purpose of a unified European public procurement market consists in better overall welfare in the services market through progressive removal of substantial non-tariff barriers to intra-community trade by introducing an element of competitiveness to prevent favoritism policies from single States¹. Best sound administration management in goods delivery by public entities is represented by public procurement regulations². Under this point of view, Green Public Procurement (GPP) is its necessary implementation, in light of the environmental principles expressed in the Treaty on the Functioning of the European Union (TFEU)³. Thus, aiming at "a process whereby public authorities seek to procure goods, services

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1. See Christopher H. Bovis, *EU Public Procurement Law* VII–IX and 6 (Edward Elgar 2nd ed. 2013).

2. So far, EU public procurement accounts for 1.8 trillion euros, accounting for 14 percent of the whole EU GDP, and 20 percent of the whole public expenditure on goods, workers in single-member States. It is regulated by EU directives 2014/23/EU, 2014/24/EU and 2014/25/EU. See DG GROW G4, *Public Procurement Indicators 2013* (European Commission, 2015) available at <https://ec.europa.eu/docsroom/documents/11022/attachments/1/translations/en/renditions/native> (last visited April 26, 2020).

3. See article 11 TFEU.

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 procure"⁴.

One of the elements characterizing green public procurement is the life-cycle cost (LCC), which is described as an "economic assessment considering all agreed projected significant and relevant cost flows throughout analysis expressed in monetary value. The projected costs are those needed to achieve defined levels of performance, including reliability, safety, and availability"⁵.

LCC aims at specifying the financial value of assets in connection with the environmental cost by enabling a strict connection between the green procurement field and the environmental research field. The forerunner of LCC is the life-cycle assessment (LCA), which is a concept developed by the Society of Environmental Toxicology and Chemistry (SETAC) in 1993⁶. It is now drawing attention in EU procurement whether, as a matter of theory, it can be compatible with LCC, now spread in every EU green procurement practice.

At the same time, another procurement concept, the Sustainable Public Procurement (SPP) has been introduced. SPP inscribes itself right inside the GPP, empowering its purposes of sustainability⁷. Having said this, it is important to outline the main and actual legal framework of EU GPP, as well as the new tendencies towards a progressive and effective implementation of GPP throughout whole Europe, and only then, SME contributions and needs to effectively participate within this environment.

4. Commission of the European Communities, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Public Procurement for a Better Environment*, COM/2008/0400 §3.1.

5. International Organization for Standardization, *Buildings and Constructed Assets — Service Life Planning — Part 5: Life-Cycle Costing* (ISO 15686-5:2017) as cited in Oshani Perera, Barbara Morton, and Tina Perfrement, *Life Cycle Costing in Sustainable Public Procurement: A Question of Value I* (International Institute for Sustainable Development, 2009), available at https://www.iisd.org/pdf/2009/life_cycle_costing.pdf (last visited April 26, 2020).

6. See Walter Klöpffer, *The Role of SETAC in the Development of LCA*, 11 *International Journal of Life Cycle Assessment* 116, 116–22 (2006).

7. See Fernando Pacheco-Torgal, et al. *Eco-Efficient Construction and Building Materials Life Cycle Assessment (LCA), Eco-Labeling and Case Studies 4* (Woodhead 2014).

2. Legal Framework, Award Criteria and Soft Law Instruments for GPP

If Public Procurement can be a major driving factor for development in a market, it can be reasonably stated that green public procurement shall be a major driving factor for the sustainability in that market development⁸. Therefore, under the aegis of the EU directive 2014/24/EU recital 91: "Article 11 TFEU requires that environmental protection requirements be integrated into the definition and implementation of the Union policies and activities, in particular, to promote sustainable development. This directive clarifies how the contracting authorities can contribute to the protection of the environment and the promotion of sustainable development, whilst ensuring that they can obtain the best value for money for their contracts".

An element has been introduced into procurement to turn it "green"⁹. Due to explicit remit of article 11 TFEU: "Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular, to promote sustainable development"¹⁰.

The future EU bodies' policies must be adopted considering the environmental sustainability and protection *in species* promoting sustainable development¹¹. For this purpose, it has been noted that "integrating environmental protection in all areas to the extent necessary to secure sustainable development is a prerequisite to securing the very basis of our existence"¹².

8. See Organization for Economic Co-operation and Development, *Mapping Out Good Practices for Promoting Green Public Procurement* 3–4 (2013), available at https://www.oecd.org/gov/ethics/Mapping%20out%20good%20practices%20for%20promoting%20green%20public%20procurement%20GOV_PGC_ETH_2013_3.pdf (last visited April 26, 2020).

9. See Commission of the European Communities, *Communication* (cited in note 4).

10. Article 11 TFEU.

11. See Beate Sjøfjell and Anja Wiesbrock, *Sustainable Public Procurement under EU Law: New Perspectives on the State as Stakeholder* 114–116 (Cambridge University Press 2015); Ida Auken, *Green Procurement Is the Key to Green Growth* (Ministry for the Environment and Food of Denmark, 2012), available at <http://eng.mim.dk/newsarchive/2012/okt/20121009-green-procurement> (last visited April 26, 2020).

12. Anja Wiesbrock and Beate Sjøfjell, *The Importance of Article 11 TFEU for Regulating Business in the EU: Securing the Very Basis of Our Existence*, in Beate Sjøfjell and Anja Wiesbrock (eds), *The Greening of European Business under EU Law: Taking Article 11 TFEU Seriously* 1 (Routledge 2015).

Indeed a clarification is needed: what has been done so far, not only within the EU but also in other parts of the globe as in China, Mercosur, Russian Federation, and the United States, was to achieve a welfare State¹³ assuring services to the most, but this now appears not to be sufficient enough. In the long run, that aim is indeed interwoven with the needs of a new kind of society, from now on say, "holistic society", which sees the general and universal need of preserving and somehow encouraging the stability of the ecosystem¹⁴. And there exactly is where article 11 TFEU plays a role: it stands as a general interpretation clause, policy guidance for all of the future aims and works of every EU institution¹⁵.

GPP policies in Europe began in the 1990s, with the *Communication on the Community law applicable to public procurement and the possibilities for integrating environmental considerations into public procurement*¹⁶; the Communication introduces for the first time in Euro-communitarian context the concept of an Integrated Product Policy (IPP), along with the first action plans (NAP), the aim of which was to enhance the nationwide uptake of these politics, and promote a green procurement policy mainly by setting goals in terms of percentage of green public procurement contracts out of total ones. Despite these measures, only a few nations were regarding the push towards a GPP as a comprehensive phenomenon, with Denmark being one of the first

13. See Giovanni Guzzetta and Francesco Marini, *Lineamenti di diritto pubblico italiano ed europeo* 139 (Giappichelli 2014) (where by "form of state" is meant how the constitutive elements – people, territory, sovereignty – interact together in the various experiences).

14. Reasonably in this sense Wiesbrock and Sjøfjell, *The Importance of Article 11 TFEU* (cited in note 12) (naming it as the holistic approach of article 11 TFEU). See also Rita Roos, *Sustainable Public Procurement Mainstreaming Sustainability Criteria in Public Procurement in Developing Countries 2* (Leuphana University of Lueneburg, Centre for Sustainability Management, 2012) (which notes this concept is borrowed from the United Kingdom Sustainable Procurement Task Force).

15. It is *de facto* connected to article 3 of the Treaty on European Union (TEU), which states that the EU shall work for the sustainable development of Europe, therefore including protection and improvement of the quality of the environment.

16. Commission of the European Communities, *Interpretative Communication on the Community Law Applicable to Public Procurement and the Possibilities for Integrating Environmental Considerations into Public Procurement*, COM/2001/0566.

in implementing a NAP on GPP in 1994¹⁷. The revolutionary aspect in IPP consists of a toolbox of policy instruments aimed at "greening" the market on both supply and demand sides by cutting environmental impact¹⁸. After the COM (2008) 400, as of now, every EU State adopted an action plan on GPP¹⁹. As shown in EU factsheets²⁰, the need for a common framework applicable to public procurement shall not possibly come only from legal provisions, but from common standards too²¹. In this sense, the european *Eco-label*²² comes in aid, as the selecting of technical environmental criteria suited for each product is a task which requires specific expertise, Procurement Officers can be made available this new instrument whose criteria allow them to greatly simplify the tender documents²³. These eco-labels preferential

17. See Martin Charter, et al., *Integrated Product Policy (IPP) and Eco-Product Development (EPD)* (Centre for Sustainable Design 2001). This Paper was prepared for the 5th International "Towards Sustainable Product Design" Conference (October 23–24, 2000) and published in Martin Charter and Ursula Chitner, *Sustainable Solutions: Developing Products and Services for the Future* (Routledge 2001), available at http://www.cfsd.org.uk/ipp-epd/ipp-epd_discuspaper2.html (last visited April 26, 2020).

18. *Id.* at 98.

19. Particular forerunners were the Nordic–Baltic Countries, as stated in Isa-Maria Bergman, et al., *Mainstreaming GPP in the Nordic Countries – A Scoping Study 7* (Nordic Council of Ministers, 2012).

20. See Chambers Ireland, *Factsheet: Green Public Procurement (GPP) 1–2* (Chambers Ireland 2015); Mariusz Maciejewski and Christina Ratcliff, *Public Procurement Contracts, Fact Sheets on the European Union* (European Parliament Think Tank, 2017).

21. See article 10 subsection 4 of directive 2009/125/EC *establishing a framework for the setting of ecodesign requirements for energy-related products*, L285/10 OJ (2009); and, as for single states, see article 11 of regulation (EC) 66/2010 *on the EU Ecolabel*, L27/1 OJ (2009); recital 4 subsection 2 of directive 2014/23/EU *on the award of concession contracts*, L94/1 OJ (2014). In light of article 191 TFUE (formerly article 174 of the EC Treaty), and for ICT procurement standards, see European Commission, *Commission Implementing Decision (EU) 2016/120 on the Identification of the Extensible Business Reporting Language 2.1 for Referencing in Public Procurement*, L23/77-78 OJ (2016).

22. See regulation (EC) 66/2010 (cited in note 21).

23. Directive 2004/18/EC, L94/65 OJ (2004) repealed by directive 2014/24/EU *on public procurement and repealing directive 2004/18/EC* article 43, L94/65 OJ (2014); directive 2014/25/EU *on procurement by entities operating in the water, energy, transport and postal services sectors and repealing art. 61, directive 2004/17/EC*, L94/243 OJ (2014); article 18 subsection 6 of directive 2009/81/EC *on the coordination of procedures for the award of certain works contracts, supply contracts and service contracts by contracting*

criteria appear to be somehow mitigated by the provisions which do not allow contracting authorities to impose in the tender procedure arbitrarily, choosing to admit, reject or award proposals based on either a pretext environmental criteria, or of a lack of a particular eco-label²⁴. The GPP administration can choose to insert in the tender call the same environmental criteria underpinning a particular label. The former ones must necessarily comply with specific needs and link to the subject-matter of the contract for which the tender call was issued, and not refer to any other managerial or financial aspect²⁵. Once the public entity has set the criteria and the public tender notice, the bidders make their offer into a sealed envelope, and the administration has to choose which one is to be awarded the tender according to several principles and criteria²⁶. Whilst the minimum requirements which all bidders must abide are set by the "technical specifications", the "award criteria" reward those bidders who offer enhanced performance under all those headings which have a strict connection with the subject-matter of the contract itself²⁷.

The new directives on GPP also innovate under this point of view, as stated in their recital, the old best price award criteria (BPA) is being changed with the new criteria of the most economically advantageous tender (MEAT)²⁸. This has to be interpreted by taking into account the LCC sustainability of goods or services related to many factors such as environmental impact, production process, and utilization. Indeed public administrations are still free to choose a BPA

authorities or entities in the fields of defense and security, and amending directives 2004/17/EC and 2004/18/EC, OJ L216/76 (2009).

24. Article 43 of directive 2014/24/EU (cited in note 23); recital 1–2, article 61 subsection 1 of directive 2014/25/EU *on procurement by entities operating in the water, energy, transport and postal services sectors and repealing directive 2004/17/EC*, OJ L134/114 (2004).

25. Article 43 subsection 2 of directive 2014/24/EU (cited in note 23); article 61 subsection 2 of directive 2014/25/EU (cited in note 23).

26. See Sofia Lundberg, Per-Olov Marklund, Elon Strömbäck and David Sundström, *Using public procurement to implement environmental policy: an empirical analysis*, 17(4) *Environmental Economics and Policy Studies* 491, 491 (2015).

27. See Environmental Protection Agency, *Green Procurement Guidance for the Public Sector*, available at <https://www.epa.ie/pubs/reports/green%20business/greenprocurementguidanceforthepublicsector.html> (last visited April 26, 2020).

28. Recital 90 last subsection directive 2014/24/EU (cited in note 23); Recital 97 last subsection directive 2014/25/EU (cited in note 23).

or BPA-LCC criteria, as most relevant on MEAT, evolved from LCC (and LCA)²⁹. Within the MEAT are to be considered several categories of components which the administration needs to take into consideration. They are total price, qualitative features, delivery issues, environmental aspects and civil, ethical aspects: hence best price still plays a major role³⁰. It was noted by doctrine, that article 68 of the new directive states that the LCC criteria do not comprise the so-called "sustainable" GPP; whilst if using best quality-price ratio criteria (BPQR) and MEAT, such values can be comprised within the award of contract. This is probably an intent of the European Legislator to balance the needs of an internal market with the environmental policy goals, in a much more effective way than the previous 1990s policy which would have led to important – yet stochastic – effects³¹.

Provided those criteria are linked to the subject-matter of the contract, and that they do not confer an "unrestricted freedom of choice" upon the contracting authority or entity³², it is also possible for such authority to conduct market consultations, eventually with external experts, to inform economic operators of their procurement plans³³. Directive 2014/24/EU on *Innovation Partnerships* introduces a peculiar green policy tool incentive and an important opening up for research and development (R&D) in the green market: according to article 31, it is possible for contracting authorities, stated the need of an innovative product which cannot be found on the market, to state in a procurement that they are willing to start a partnership with the awarded bidder, to get that product³⁴. Such argument can reasonably be stated in light of article 67, since the contract must be awarded under the

29. *Id.* respectively, article 67 subsection 2 and article 82 subsection 2.

30. See Katriina Parikka-Alhola, Ari Nissinen and Ari Ekroos, *Green Award Criteria in the Most Economically Advantageous Tender in Public Purchasing* 257, 264 in Khi V. Thai, and G. Piga (eds.), *Advancing Public Procurement: Practices, Innovation and Knowledge Sharing* (PrAcad Press 2007).

31. See Gustavo Piga and Tunde Tatrai, *Public Procurement Policy* 231–233 (Routledge 2015).

32. Article 41 of directive 2014/23/EU (cited in note 21); article 82 of directive 2014/25/EU (cited in note 23). *C-513/99 Concordia Bus Finland Oy Ab, formerly Stagecoach Finland Oy Ab v Helsingin kaupunki and HKL-Bussiliikenne*, ECR 2002 I-07213.

33. Article 40 of directive 2014/24/EU (cited in note 23).

34. *Id.* article 31.

best quality-price ratio criteria. It was notably assessed³⁵, that it is uncertain in what measure GPP principles will be made enforceable by single States courts³⁶, so far it has been ignored in a wide majority of cases at National level notwithstanding the ECJ continuous – but still too bland – pressures, for reaching a common environmental concern level in all of the EU institutions and the Member States, the *acquis communautaire* is still lacking in this area³⁷.

Except from recital 91 of directive 2014/24/EU, article 11 TFEU and article 3.3 TEU, GPP EU rules are mainly outlined by TFEU and EU directives, according to the relevant case-based interpretations of the European Court of Justice. It has to be noted that every State and organization adhering to WTO have also to comply particular agreements which are either soft law or bi-lateral, multi-lateral treaties³⁸. The international law instruments are well acknowledged as a source of law for GPP whereas the EU accepts to introduce green standards in international instruments when establishing trade agreements which concern new and specific rules that apply to third countries the same rights that EU envisages for its economic operators³⁹. As outlined

35. See Wiesbrock and Sjäfjell, *The importance of Article 11 TFEU* (cited in note 12); David Grimeaud, *The Integration of Environmental Concerns into EC Policies: A Genuine Policy Development?* 9(7) Eur Envtl L Rev 207, 207 (2000).

36. See Sue Arrowsmith, et al., *EU Public Procurement Law: An Introduction* §3 at 61 (EU Asia Inter-University Network for Teaching and Research in Public Procurement Regulation 2010).

37. Only four sentences are relevant under green public procurement: they were decided before new directives came into play and state environmental principles must be read in light of the EU Treaties and directives. C-368/10 *European Commission v Kingdom of the Netherlands*, ECR 2012 I-284; T-331/06 *Evropaiki Dynamiki – Proigmena Systimata Tilepikoinonion Pliroforikis kai Tilematikis AE v European Environment Agency (AEE)*, ECR 2010 II-00136. C-448/01 *EVN AG and Wienstrom GmbH v Republik Österreich*, ECR 2003 I-14527. C-513/99, *Concordia Bus Finland* (cited in note 32).

38. United Nations Division for Sustainable Development, *International Expert Meeting on a 10-Year Framework of Programmes for Sustainable Consumption and Production (Chapter III of the Johannesburg Plan of Implementation)* (2003), Plan of Implementation of the World Summit on Sustainable Development, available at <http://enb.iisd.org/crs/sdscp/curtain.html> (last visited April 26, 2020).

39. Important agreements are the ones concerning third-party green procurement goods coming from Singapore, after the new FTA, offering each other best treatment and commitment even more than the WTO's respective ones. And new agreements are to be signed with Russia, Singapore, and other Asian governments.

by the 2015 EU *Commission action plan on Circular Economy*⁴⁰ special emphasis will be given on GPP aspects connected to a circular economy, its criteria will be encouraged in public institutions throughout Europe, initially voluntarily, thus ensuring a greater uptake of the promoted criteria, the Commission itself prompts through EU funds and its institutions the widest use possible of GPP principles⁴¹.

2.1. *European Commission Action Plan on Circular Economy and Europe 2020 Strategy*

With the aim of "modernize and transform the European economy, shifting it towards a more sustainable direction"⁴² and "mainstream the circular economy into the full lifecycle of products" through the implement of GPP criteria and best practices in public procurement, it has introduced an element of "circularity" within public authorities in several products, for now, GPP criteria are only used voluntarily, but it will be encouraged as GPP "will play a key role" towards the CEAP implement, and Commission is working to ensure such criteria can become the standard practice, considering public procurement sector accounts for a large part of EU expenditures⁴³.

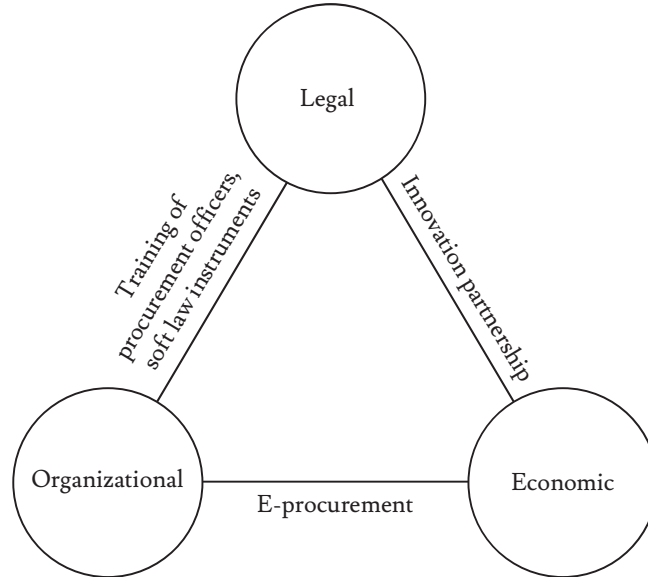
40. European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Closing the loop – An EU action plan for the Circular Economy* (2015) COM/2015/0614.

41. See *id.* § 2 at 6.

42. European Commission, *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the implementation of the Circular Economy Action Plan 2* (2017) COM/2019/190.

43. See *id.* at 8.

3. Development of GPP: Analysis of Obstacles and Solutions



Legal issues	Environment knowledge and environmental criteria development Research and development Incentive needs
Economic issues	Perception that environmentally friendlier products would be more expensive
Organizational issues	Management support, strategic focus, and organizational policy Practical tools and information (such as handbooks and Internet tools) Training of public procurement officers Bureaucratic load

The chart and the table above show GPP main issues organized into taxonomic categories they attain to. Due to the interdependence of some no single category related issues, the arrows, and related captions show the possible solution to each problem according to the

actual instruments, introduced with the new Procurement Directive and Europe 2020 Initiative. Hence, the main problems are revealed by recent Surveys on GPP, as well as EU Action Plans presented in this Chapter.

3.1. *Core GPP and Comprehensive GPP*

The empirical studies on GPP offer an innovative point of view on the phenomenon. In fact, according to recent data, it is duly distinguished between core GPP and comprehensive GPP: the former is the environmental criterion usually implied in the eco-label, and thus it is suitable of use throughout the whole EU and its contracting authorities, with low or without verification cost, as it refers to the key environmental issues. The latter is a functional criterion for which the administration evaluates the market, choosing the most sustainable product among the ones available at the state-of-art. Since it goes further on the best green environmental practice commitment, and it implies a market research, an administration does not need to implement yet⁴⁴.

3.2. *GPP and SME Participation*

If on the one hand there are the Public institutions, on the other hand there are their suppliers: GPP is getting more and more mandatory for Public EU institutions, but it is not sure whether GPP rules can be made suppliers friendly. Despite as stated by UK National SME Engagement Programme, new EU public procurement directives are "aimed at achieving greater flexibility, facilitating access to contracts for small and medium-sized companies (SMEs)", the latter are skeptic about an immediate implementation *rebus sic stantibus* of the new EU criteria and Action Plan. Claiming that out of the 26 percent SMEs participating, 40 percent claim that bureaucratic load is a major hindrance to their participation into GPP calls⁴⁵. Indeed steps

44. See Lundberg, et al., *Using public procurement to implement environmental policy* (cited in note 26).

45. See European Association of Craft, Small and Medium-Sized Enterprises, *Position Paper on the EU action plan for the Circular Economy* (Brussels, March 2016), referring to Commission, *Communication* (cited in note 40).

need to be made towards SMEs to let them achieve a mayor GPP acknowledgment and, above all, market-friendly entry conditions. And thus "supporting the strategic use of public procurement for environmental and social policy goals, providing more clarity on the application of the rules, and shifting to full electronic procurement".

Considering "an adequate, balanced and flexible legal framework for the award of concessions" would prevent distortions in the functioning of the internal market and ensure SMEs' effective and non-discriminatory access to the market to all Union. This is what is meant when recital 1 of directive 2014/23/EU states that "Particular importance should be given to improving the access opportunities of SMEs throughout the Union concession markets"⁴⁶. Directive 2014/23/EU further insists on the importance of creating a "basis for and means of further opening up international public procurement markets and boosting world trade", through the proactive involvement of SMEs within the process⁴⁷.

3.3. OECD Discussion Paper on Public Procurement: Six Points of Importance for the EU

Far from being considered just as a local phenomenon, GPP is increasingly striving to become a global one and international meetings acquire relevance as a source of law development and, before that, a model for GPP⁴⁸. Indeed, one of the most important organizations involved in the process is OECD: during its meetings, policy and scientific debates are held, and various GPP experts and researchers can show their results and eventually elaborate new policies in the note of guidance for future policies. The *Discussion Paper on Public Procurement of 11–12 February 2013 Paris*, OECD Conference Centre, states out six main dimensions, in which it is possible to collect data for GPP good practices⁴⁹. As the first step, setting a clear and detailed GPP legal

46. Recital 1 of directive 2014/23/EU (cited in note 21).

47. See *id.*

48. See, for example, Organization for Economic Cooperation and Development, *Recommendation of the Council on Improving the Environmental Performance of Public Procurement*, C (2002) 3.

49. See OECD, *Mapping out good practices* at 3–4 (cited in note 8).

framework to assist buyers: that for EU specific case means a new standard applicable to every country in Europe⁵⁰.

Secondly, there is the need to adapt this legal framework to every specific local market's green technical cost-solutions up-taking capacity. In this latter case, a relevant EU example is shown by the Swedish market. When Stockholm County Council first tried introducing a biogas ambulance, it had to face, among other technical-related issues, also the lack of manufacturers on the market: it was only after five years of dialogue with builders that it managed to realize the world's first biogas powered green ambulance in 2009⁵¹.

A third point, there is a need for the introduction of new environmental standards directly into technical specifications, selection and award criteria, as well as in contractual performance clauses. This has been partially implemented with eco-labels and environmental standard criteria. However, at a deeper level, it should be noticed that recent streams and researches suggest a major need for a uniform and harmonized common framework of environmental standards for EU, as well as the creation of an environmental standard regulation authority⁵².

The fourth point is the need of additional professionalism in the procurement function: too often a particular training is requested for nowadays procurement officers, not needed before⁵³. In particular,

50. See International Council for Local Environmental Initiatives (ICLEI), *Green Public Procurement (GPP) Training Toolkit – Module 1: Managing GPP Implementation* (European Commission, DG Environment-G2 2008), available at http://ec.europa.eu/environment/gpp/toolkit_en.htm (last visited April 26, 2020).

51. See Center for International Climate Research (CICERO), *Second Opinion on SLL's Green Bond framework* 9 (2014).

52. See Parikka–Alhola, Nissinen and Ekroos, *Green Award Criteria* at 257 (cited in note 30); Regulation (EC) 761/2001, L114 OJ (2001), repealed by Regulation (EC) 1221/2009 *on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001*, L342/1 OJ (2009); European Commission, *Decision 2001/681/EC*, L247/24 OJ (2001) and European Commission, *Decision 2006/193/EC*, L342/1 OJ (2009), both repealed by Regulation (EC) 1221/2009, *on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS), repealing Regulation (EC) No 761/2001 and Commission Decisions 2001/681/EC and 2006/193/EC*, L342 OJ (2009).

53. See Maarten Bouwer, et al., *Green Public Procurement in Europe 2005 – Status overview* (Virage Milieu & Management 2005), available at <http://europa.eu.int/comm/environment/gpp/media.htm> (last visited April 26, 2020).

according to a 2005 survey on some tender calls by the EU 27 plus the United Kingdom, lack of training of public procurement officers is seen as an obstacle to EU–GPP criteria adoption into tendering procedures. And it is stated as a major problem in Denmark, Finland, Ireland and Malta. The modern holistic society paradigm requires not only the executive branch, but also administrative one to be aware of the needs of environment protection⁵⁴. And exactly here comes the fifth point, which requires raising the awareness of GPP solutions. Last points would be to monitor the results of the green public procurement, as essential for the benefits deriving from, and as a demonstration of, the reaching of the 50 percent Green Procurement policy goal in the EU⁵⁵.

Even if very tantalizing, this setting has to be further improved: it is necessary to mention the environmental effectiveness cost–efficiency parameters in concrete; under the financial perspective, it is required to further improve and analyze market factors, such as GPP attitude of being a real cost–efficient environmental policy instrument, able to affect EU–global competition over tenders made, and if so, in which way⁵⁶. Indeed, this kind of approach has important antecedents in doctrine⁵⁷ and reminds much of the classical public procurement system⁵⁸: it is useful to save this setting as it shows GPP as a system in a stable equilibrium, due to the proficient interaction of a force or a set of forces whose result is the overall proficiency in the public procurement efforts⁵⁹. This view of GPP/SPP – in terms of the result of forces – is stressed also in the economical doctrine and is a constant to whoever wants to deepen the relationship between

54. See Harro van Asselt, *Green government procurement and the WTO*, W–03/06 IVM Report 20, 35 (Department of Environmental Policy Analysis 2003).

55. See European Resources Efficiency Platform, *Manifesto and Policy Recommendations 7* (EREP 2014).

56. See Sofia Lundberg, Per–Olov Marklund and Runar Brännlund, *Assessment of Green Public Procurement as a Policy Tool: Cost–Efficiency and Competition Considerations 25* (Center for Regional Science at Umeå University 2009).

57. See Khi V. Thai, *Public Procurement Reexamined*, 1 *Journal of Public Procurement* 9, 50 (2001).

58. Which is composed of management, regulations, authorizations, operational functioning, feedback. See *id.* at 18.

59. See *id.* at 33.

legal frameworks and its effects in GPP⁶⁰. The United Nations Environment Programme of 2013 can drastically adjust this point of view, adding new researches on the theme of GPP and SPP: in particular where the European Union is concerned⁶¹.

3.4. *The United Nations Environment Programme (UNEP) and Its Importance for the EU*

At a global level, only 36 percent of public authorities implemented LCC into procurement, and price-only based award accounts for 43 percent of tenders, BPA for 34 percent, and SPP/GPP for 7 percent, whilst the implement of eco-labels use for verification of claims that products meet criteria and, just for a reference to create new criteria, are accounting for 26 percent and, 34 percent respectively, with a GPP monitoring practice of only 49 percent of the Countries members of UNEP⁶².

According to the survey conducted by UNEP on GPP global wide, the GPP further implementation for the next years is expected to cover 84 percent of countries (including EU countries): this suggests that in the next years there will be more sustainable policies implemented⁶³.

60. See Christopher McCrudden, *Using Public Procurement to Achieve Social Outcomes*, 28 *United Nations Natural Resources Forum* 257 (Blackwell 2004); Gustavo Piga and Tunde Tatrai, *Public Procurement Policy* at 175 (Routledge 2015); Lundberg, Marklund and Brännlund, *Assessment of Green Public Procurement* at 8–11 (cited in note 56); Roger Perman, Yue Ma, Michael Common, David Maddison and James McGilvray, *Natural Resource and Environmental Economics* 206 (Pearson Education 3rd ed. 2003); and, as for EU Courts, see *C-513/99 Concordia Bus Finland* (cited in note 32) (promoting interaction between economic and legal policies); and with relevance for Nordic Countries: Bjørn Bauer, Jens Christensen, Karen Christensen, Tue Dyekjær-Hansen and Ida Bode, *Benefits of Green Public Procurement* at 23–24, 34–35, 37–39 (Nordic Council of Ministers, Copenhagen, TemaNord 2009).

61. See Anastasia O'Rourke, Charlotte Leire, Trevor Bowden, Farid Yaker and Carlos Andrés Enmanuel, *Sustainable Public Procurement: a Global Review Final Report* (UNEP 2013), survey conducted between September 5 and October 5, 2012, on 273 respondents.

62. See *id.* at 34–46.

63. See *id.* at 39.

3.5. New Surveys on GPP: Obstacles and Effective Policies

Several brief surveys approach GPP with a problem–solution focus⁶⁴. Data collected from different agencies and tendering contracts during different periods suggest possible obstacles to GPP, which can be grouped into three main areas: economical, juridical and organizational. Indeed, a wide perception concerns the higher cost of environmentally friendly procurements, which are seen as a major issue for almost the half of the public contracting agencies in the EU, steadily followed by those who claim environmental knowledge and its development criteria are not spread well enough.

Organizational problems that have to be faced are a greater strategic focus, organizational policies and the need for an increased effort in GPP management. SMEs tend to respond better to relational «peer-to-peer» approaches rather than to bureaucratic ones. The need of an advocacy on GPP, for which it is thought a closer work with intermediaries (such as trade associations) "can help communicate concerns in an aggregate and impactful way"⁶⁵.

The last issue being constantly addressed is the lack of relevant tools of information⁶⁶, through the publishing of the so-called "Best GPP practice" and "New GPP Criteria", specific for each kind of product the contracting authority is willing to acquire. Moreover, to streamline procedures for procurement and invoicing of goods, it is being developed throughout EU countries an e-procurement system, which has been made mandatory according to article 11 of directive 2014/55/EU on *electronic invoicing in public procurement*, which states that "Member States shall adopt, publish and apply the laws,

64. See van Asselt, *Green government procurement and the WTO* at 35–36 (cited in note 54); Andrea Renda, Jacques Pelkmans, Christian Egenhofer, Lorna Schrefler, Giacomo Luchetta, Can Selçuki, Jesus Ballesteros and Anne–Claire Zirnhelt, *The Uptake of Green Public Procurement in the EU* 27 4344 (Centre for European Policy Studies and Council of Europe 2012).

65. Westminster Sustainable Business Forum, *Round Table: "Sustainable Procurement and SMEs" – Discussion Summary* (July 7th, 2015).

66. See Bouwer, et al., *Green Public Procurement in Europe* (cited in note 53); also, even the UNEP 2013 research (cited in note 61) states that a major barrier for GPP/SPP is the perception of higher prices of sustainable products.

regulations and administrative provisions necessary to comply with this Directive at the latest by 27 November 2018⁶⁷.

To the above-mentioned issues it should be added the need for a specific training course on GPP for the procurement contracting authorities and the bureaucratic cost of the participation for the bidders, as well as the need for an incentive for eco-technology R&D, claimed by SMEs, to ensure better products.

3.6. GPP in Nordic Countries: A Good Praxis Example

Other than OECD works, there is a complementary research on GPP conduct by PricewaterhouseCoopers among Nordic EU countries over 1105 tenders for the EU⁶⁸. The study states the reasons why administrations choose going green, the availability of green alternatives, leading with 43 percent, and the environmental impact of the purchase accounting for 40 percent.

A useful cutting costs solution is seen in the implementation of the "Joint Procurement", a practice widespread in Nordic countries and the UK, consisting in the combined action of two or more authorities, generally for the publishing of one tender on behalf of all of the

67. European Commission, *Rollout of e-procurement in the EU*, available at <http://ec.europa.eu/DocsRoom/documents/16332/attachments/1/translations> (last visited April 26, 2020), and European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Single Market Act II Together for new growth* (2012) COM/2012/0573; European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – A Strategy for e-procurement* (2012) COM/2012/0179; European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – End-to-end e-procurement to modernize public administration*, (2013) COM/2013/0453; Multi-Stakeholder Expert Group on e-procurement, *Regulatory Aspects and Interpretation, Reports*, available at <http://ec.europa.eu/DocsRoom/documents/20842> (last visited April 26, 2020).

68. PricewaterhouseCoopers, Significant and Ecofys, *Collection of statistical information on Green Public Procurement in the EU Report on data collection results* (European commission 2009) (based on Austria, Denmark, Finland, Germany, The Netherlands, Sweden, United Kingdom).

participating authorities⁶⁹. GPP is an administrative solution available within the administration's *command and control* power. Thus, it can convert the market share where it has that discretion into a greener and sustainable one, albeit it cannot influence directly the other competitors and enact an environmental-safe production or pollution control: this kind of actions require the intervention of the legislative branch⁷⁰. However, what the public contractor can do is acting as a pro-active market agent and, as such, it can, therefore, influence all the bidders who wish to conclude, in a better green praxis, contracts with the public administration⁷¹.

In this order of things, the provisions of an LCC-BPA over the lowest price award allow GPP to establish a real green market practice, where at least LCC (if not a full MEAT-BPQR) is used, while the calculation method and the data to be provided by suppliers are set out in the tender documents. Specific rules regarding methods for assigning costs to environmental externalities also apply and aim to ensure that these methods are fair and transparent. Data⁷² show that before the commencement of directives 2014/24/EU and 2014/25/EU environmental life cycle cost and aspects were taken into consideration in just one-third of total tenders⁷³, whilst price was a constant component in the totality of contracts, along with the quality of products, accounting for the quasi-totality; and delivery aspects, which came in relevance in more than a half of tenders.

In other surveys, if taking into consideration also Austria, Germany, Netherlands and UK, LCC based evaluations were minimal before the entry into force of the new directives, LCC-BPA and BPA were

69. See ICLEI, *Green Public Procurement (GPP) Training Toolkit* (cited in note 50) (as an example the Eco-Procurement Service of the federal state of Vorarlberg in Austria could save about 60 percent of costs).

70. Indeed, Ecolabel is a way to allow GPP influencing that, but not directly. O'Rourke, Leire, Bowden, Yaker, Enmanuel, *Sustainable Public Procurement* (cited in note 61) sees the National Legislation as a major driver for 91 percent of UNEP countries' GPP policy development (cited in note 61).

71. See Perman, et al., *Natural Resource and Environmental Economics* at 206 (cited in note 60);

72. Experimental material on 180 tender calls in Denmark, Finland and Sweden, in 2005.

73. Corrected to 36.6 percent if considering only tenders in which at least one environmental aspect was used.

close to 40–50 percent⁷⁴. Nonetheless, Nordic countries appeared ever since to be a step further in GPP/SPP policies⁷⁵: the previous directives 2004/17/EC and 2004/18/EC (along with several other elements) caused an increment of around 15 percent for tenders taking into consideration the environmental criteria and awarded using at least one of them⁷⁶. Furthermore, a 2012 report on GPP for the EU27 claims that above 55 percent of public authorities' tenders take into consideration at least one of the environmental criteria, whilst one out of four takes into account all of the environmental criteria⁷⁷. This leads to believe that the new directives are going to have an even bigger impact on the implementation of GPP criteria in tenders.

3.7. Regional GPP v. National GPP

It has to be noted that the major uptake of GPP/SPP is within Regional and local government, with almost two-thirds of the tenders considering at least one of the GPP criteria. This trend is even more acute in another survey on the Nordic States plus Austria and the UK (except for Germany and the Netherlands), with an average for the aforementioned of more than two-thirds (72 percent local authorities outperforming a 67 percent of central ones)⁷⁸. Data show that the 50 percent GPP target set by COM 2008 was not reached before the introduction of the new 2014 EU directives, with Portugal, Ireland, Poland, the Czech Republic, Finland, Slovenia, Hungary, Romania, Bulgaria, Greece, Latvia and Estonia having a GPP uptake of less than 20 percent. The need of another major innovation in GPP was

74. PricewaterhouseCoopers, Significant and Ecofys, *Collection of statistical information* (cited in note 68).

75. See Bouwer, de Jong, Jonk, Szuppinger, Lusser, Berman, Bersani, Nissinen, Parikka, *Green Public Procurement in Europe* (cited in note 53); Henna Hauta-Heikkilä, Päivi Kippo-Edlund, Heikki Miettinen and Ari Nissinen, *Measuring the environmental soundness of public procurement in Nordic countries* (Nordic Council of Ministers 2005); Katriina Parikka-Alhola, Ari Nissinen and Hannu Rita, *Environmental criteria in the public purchases above the EU threshold values by three Nordic countries: 2003 and 2005*, 68 *Ecological Economics* 6.

76. See *id.*

77. See Renda, et al., *The Uptake of Green Public Procurement* (cited in note 64).

78. See PricewaterhouseCoopers, Significant and Ecofys, *Collection of statistical information* (cited in note 68).

represented in the *Europe 2020 Flagship Initiative Innovation Union*⁷⁹: the target of this initiative is innovation into procurement especially triggered in the area of green public procurement, as well as the creation of a single public procurement market within the EU.

Current surveys and researches state that three-quarters of SMEs do not bid for government work⁸⁰. SMEs participate directly or as joint bidders or subcontractors in 45 percent of the aggregate contract value above EU thresholds, nonetheless, they are underrepresented as their effective weight in public procurement – which should be 58 percent when considering the one they have within the general economy – is below that threshold. This means that SMEs' participation in implementing the new directives is not spread enough⁸¹.

A particular directive, 2009/81/EC, was enacted to grant defense procurement, services and goods to supply its demand: unlike civil procurement, the former has regulated subcontracting ever since it was enacted. Article 20 states: "Contracting authorities/entities may lay down special conditions [] concern subcontracting [] following Articles 21, 22 and 23, or take environmental or social considerations into account"⁸².

There is a margin for GPP in defense procurement as well: the directive has been enacted close to the Europe Eco–design Framework directive 2009/125/EC concerning energy, which is usually a major need for the EU defense procurement⁸³. In this regard, article

79. European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Europe 2020 Flagship Initiative Innovation Union* §3.2 at 15 *Creating a single innovation market*, (2010) COM/2010/583 and European Commission, *Communication from the Commission – Europe 2020: A strategy for smart, sustainable and inclusive growth*, (2010) COM/2010/2020.

80. See Research and Library Services, *Research Paper 119/08 Public Procurement and SMEs* (Northern Ireland Assembly 2008), updated by Research and Library Services, *Briefing Note 84/09 Public procurement and SMEs – an update* (Northern Ireland Assembly 2008).

81. See Scorecard Working Party, *Evaluating SME experiences of government procurement*, (FreshMinds 2008), available at <http://www.fsb.org.uk/LegacySitePath/policy/images/12615%20fsb%20procurement.pdf> (last visited April 26, 2020). SMEs' access to public procurement markets and aggregation of demand in the EU.

82. Article 20 of directive 2009/81/EC (cited in note 23).

83. See Dinesh H. C. Rempling, *Climate, Environmental and Energy Security – From Strategy to Action, Report from Workshop Series*, 6, 7 and 13 June 2013 (European

6 subsection 1 of directive 2012/27/EU on *Energy Efficiency* states that "Member States shall ensure that central governments purchase only products, services and buildings with high energy–efficiency performance, insofar as that is consistent with cost–effectiveness, economic feasibility, wider sustainability, technical suitability, as well as sufficient competition, as referred to in Annex III"⁸⁴.

Nonetheless, it is important to remember that, even if in the last years, it gained major importance concerning its role on reducing footprint and environmental impact, defense procurement is granted a major freedom of choice in awarding contracts especially as described under article 6(2) of the same directive: "The obligation referred to in paragraph 1 shall apply to the contracts of the armed forces only to the extent that its application does not cause any conflict with the nature and primary aim of the activities of the armed forces".

From another standpoint, the regulation of subcontracting aims at creating opportunities for SMEs. Article 21 and articles 50–54 of directive 2009/81/EC provide a quite detailed regulation on subcontracting compared with the new directives which regulate subcontracting more than before⁸⁵. Moreover, the new directives regulate the conflict of application between the defense directive and the civil procurement one, at article 5 *Mixed procurement covering the same activity*, and article 6, other than articles 25–27⁸⁶. Summarizing, the defense procurement is a "sensitive" matter, subject to special regulations: article 346 TFEU or directive 2009/81/EC, which are explicitly deemed to prevail (for their extent into the contract's subject–matter) over the general civil procurement one's⁸⁷.

Defence Agency 2013), available at <https://www.eda.europa.eu/docs/default-source/documents/military-green-2013-report.pdf> (last visited April 26, 2020).

84. Directive 2012/27/EU on *energy efficiency, amending directives 2009/125/EC and 2010/30/EU and repealing directives 2004/8/EC and 2006/32/EC*, L315 OJ (2012).

85. Article 88 of directive 2014/25/EU (cited in note 23); article 71 of directive 2014/24/EU (cited in note 23); article 42 of directive 2014/23/EU (cited in note 21).

86. Directive 2014/25/EU (cited in note 23).

87. European Commission, *Commission Staff Working Document Evaluation of Directive 2009/81/EC on public procurement in the fields of defence and security – Accompanying the document: Report from the Commission to the European Parliament and the Council on the implementation of directive 2009/81/EC on public procurement in the fields of defence and security, to comply with Article 73(2) of that directive* (2016) SWD/2016/0407, referring to article 15 of directive 2014/24/EU (cited in note 23),

Directive 2014/25/EU sub recital 13 states that "the applicable rules should be determined concerning the main subject of the contract where the different parts which constitute the contract are objectively not separable". Whilst sub recital 15⁸⁸: "contracting entities should not be prevented from choosing to apply this Directive to certain mixed contracts instead of applying Directive 2009/81/EC". This is of particular importance because, in case of mixed contracts under new GPP Directives, the new MEAT criteria could eventually be applied, whilst, if the contract falls under the defense Directive⁸⁹, lowest price or old MEAT (BPQR) shall be the award criterion.

3.8. *The Holistic Approach of Article 11 TFEU: Integrated Economic Governance*

According to the economic theory point of view, *Integrated Economical Governance* consists of the efficiency/effectiveness of how to achieve greater environmental effectiveness through cost-effective policy integration. The debate is currently open on how it is possible to embed ecological concerns right into traditionally non-environmental sector operational context, and re-organizing governance processes and structures⁹⁰.

Institutional structures focus their attention on the issues of sustainability and show it up through instruments within the decision-making process that promote continuous attention to ecological concerns. To double-check the uptake and the effectiveness of these ecological principles within this new kind of economical governance an ongoing monitoring ecological performance is needed⁹¹.

Swedish experience has shown a sectoral responsibility, such as splitting tasks into secondary and minor objectives, to ensure that the

and article 24 of directive 2014/25/EU (cited in note 23); see also European Commission Press Release, *New Directive on defense and security procurement enter into force* (2009).

88. Recital 13 of directive 2014/24/EU (cited in note 23).

89. Article 47 of directive 2009/81/EC (cited in note 23).

90. See Lennart Lundqvist, *Sweden and ecological governance: Straddling the fence* at 120–124 (Manchester University Press 2013).

91. See William Maher Lafferty and Eivind Hovden, *Environmental policy integration: towards an analytical framework*, 12 *Environmental Politics* 1, 15 (2003).

authorities will perform the tasks demanded by the ecological concerns thus embedded. However, this sectoral responsibility appears very premature for an application to EU GPP contracting authorities concerning environmental criteria or Ecolabels principles. At the same time, it is not to be excluded that, with the reaching of the 50 percent tender's green policy⁹² auspicated by the *EU 2020 Initiative Innovation and Single Market Action Initiatives*, it could be implemented as well.

4. Conclusion

According to the researches and data examined, the EU is a world top performer in GPP/SPP policies, with a 53 percent average GPP criteria awarding against a rough less 36 percent average in UNEP Countries. The monitoring and data transparency in the EU are widespread and acknowledged.

What is to be expected is a major effort in implementing the 50 percent GPP goal, though; the challenge is whether the new directives of 2014 and the ones on ICT (e-procurement) can help to achieve that goal in the next years. It is also of notable importance to check the actual relevance of the kind of instruments implemented: perhaps further surveys and researches on the effectiveness of the proposed instruments are needed.

To reach the policy target, forces involved in GPP/SPP must work together proficiently, and it is important to have a constructive dialogue between EU, governments, administrations, and suppliers: in particular, data show that streamlining SME bureaucratic procedures could potentially implement their positive participation into tender procedures, thus concretely implementing article 31 of the 2014/24/EU. Likewise, on the opposite side, unified e-procurement market and joint procurement for reducing costs and subcontracting appear as an administration-friendly reasonable solution.

92. See Robert Kaukewitsch, *Webinar GPP in the Health Care Sector* (European Commission, Environment Directorate-General 2014), available at http://ec.europa.eu/environment/gpp/webinars_en.htm (last visited April 26, 2020).

Due to the multi-faceted peculiarity of GPP issues, solutions are not expected to come only by a single legislative, economical or contracting authority initiative, but they will have to take in consideration more comprehensive solutions, such as better training of procurement officers, innovation partnership between contracting authority and bidders, and several soft law instruments to ensure the abiding of the standards and good practices in all of the institutions and SMEs participating. Not neglecting the regional and local dimension over the national GPP one, where SMEs hardly can participate, and boosting the R&D for SMEs and their participation through subcontracting may be an efficient solution for SMEs inclusion.

In conclusion, environmental principles are currently becoming a constant in EU policies and GPP, along with the need of inclusion for social aspects. Perhaps, it is too early for speaking about a holistic society, even though the approach made by article 11 TFEU is a big step forward in this sense. At this time, environmental concerns are changing the way of perceiving and pursuing the EU market economy towards a more sustainable one: green policy is permeating Institutions and governance functioning processes.