THE EU GREEN PUBLIC ROCUREMENT AS A POLICY TOOL TO IMPLEMENT THE CIRCULAR ECONOMY

ЗЕЛЕНІ ДЕРЖАВНІ ЗАКУПІВЛІ ЄВРОСОЮЗУ ЯК ІНСТРУМЕНТ ПОЛІТИКИ ДЛЯ ВПРОВАДЖЕННЯ ЕКОНОМІКИ ЗАМКНУТОГО ЦИКЛУ

Illia Vlialko

Associate Professor, Chair of Comparative and European Law, Educational and Scientific Institute of International Relations, Taras Shevchenko National University of Kyiv, e-mail: vlyalkoillia@knu.ua
ORCID ID: https://orcid.org/0000-0002-3958-9540

Ілля Влялько

Кандидат юридичних наук, доцент кафедри порівняльного та європейського права Навчально-наукового інституту міжнародних відносин Київського національного університету імені Тараса Шевченка, e-mail: vlyalkoillia@knu.ua

ORCID ID: https://orcid.org/0000-0002-3958-9540

Abstract. The transition to a circular economy is essential for environmental sustainability and serves as a strategic approach for achieving long-term economic stability, social equity, and resilience. Green public procurement (GPP) is closely intertwined with the concept of the circular economy, and both play a pivotal role in influencing sustainable development. The EU provides guidelines for GPP that align with circular economy principles, encouraging public authorities to opt for products and services with lower environmental impacts and higher resource efficiency. GPP establishes high environmental performance standards, reduces waste, enhances resource efficiency, and promotes the reuse and recycling of materials. The implementation of GPP offers benefits for the environment, economic growth, and social well-being, but challenges such as consistent application, market readiness, and higher initial costs persist. The research indicates that GPP can make a significant contribution to sustainability objectives and emphasizes the necessity of supportive policies to promote broader adoption of GPP practices. By aligning policy initiatives with sustainable procurement practices, the EU member states aim to foster a more robust, resource-efficient, and environmentally conscious economy. Such a comprehensive approach not only addresses environmental issues but also fuels economic and social progress.

Key words: circular economy (CE), Green Public Procurement (GPP), EU, sustainable development.

Анотація. Перехід до економіки замкнутого циклу (циркулярної економіки) має важливе значення для сталого розвитку екології та є стратегічним підходом як для досягнення довгострокової економічної стабільності, так і соціальної справедливості та стійкості. Зелені публічні (або державні) закупівлі (GPP) тісно пов'язані з концепцією циркулярної економіки і відіграють ключову роль у впливі на сталий розвиток. Євросоюз розробляє рекомендації для GPP, які відповідають принципам циклічної економіки, заохочуючи державні органи обирати товари та послуги з меншим негативним впливом на навколишнє середовище та з вищою ефективністю використання ресурсів. GPP встановлює високі стандарти екологічної ефективності, зменшує обсяг відходів, підвищує ефективність використання ресурсів і сприяє повторному використанню та переробці матеріалів. Впровадження GPP забезпечує переваги для навколишнього середовища, для економічного зростання та соціального добробуту, але залишаються такі виклики як: послідовність впровадження заходів, готовність ринку до їх сприйняття, вищі початкові витрати. Дане дослідження вказує на те, що GPP можуть зробити значний внесок у досягнення цілей сталого розвитку, і наголошує на необхідності підтримки політики сприяння ширшому впровадженню практики

GPP. Поєднуючи політичні ініціативи з практикою таких публічних закупівель, державичлени ЄС прагнуть сприяти розвитку більш надійної, ресурсоефективної та екологічної економіки. Такий комплексний підхід не лише вирішує екологічні проблеми, а також сприяє економічному та соціальному прогресу.

Ключові слова: циркулярна економіка (CE), зелені публічні закупівлі (GPP), зелені державні закупівлі Євросоюзу, сталий розвиток.

Introduction. The shift to a circular economy is essential for environmental sustainability, economic prosperity, and social fairness. This shift also brings about regulatory and competitive advantages, as well as global resource equity. Key policy instruments for implementing a circular economy include Circular Economy Action Plans, Extended Producer Responsibility (EPR), Ecodesign Requirements, Recycling and Waste Management Regulations, and Green Public Procurement (GPP). These instruments aim to minimize waste, improve resource efficiency, and promote sustainable production and consumption patterns.

Green public procurement is a critical element in the implementation of a circular economy. It spurs the demand for sustainable products, establishes standards, reduces resource consumption and waste, encourages innovation, and showcases successful circular economy initiatives. The role of green public procurement is vital in advancing a circular economy by using the purchasing power of governments to drive the demand for sustainable products, foster innovation, minimize environmental impacts, and set a precedent for private sector practices.

Aim of the article. Although the concept of Green Public Procurement (GPP) has evolved over time through various policy frameworks and initiatives rather than being originated by a single individual or entity, GPP has emerged as a powerful mechanism for promoting the principles of a circular economy and harnessing the purchasing power of the public sector to drive systemic change.

The European Union has been instrumental in formalizing and promoting GPP, particularly through its directives and communications. Therefore, it is crucial to continuously research the latest developments in the field of GPP to support informed decision-making and facilitate the transition to a circular economy to achieve a more sustainable and resilient future.

Research Results. The European Commission's Communication "Public Procurement for a Better Environment" defined Green Public Procurement 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." (Publications Office of the European Union, 2008). The document also presented one of the earliest comprehensive frameworks for Green Public Procurement, outlining principles and guidelines for integrating environmental considerations into public procurement processes. This paved the way for subsequent developments and widespread adoption of GPP practices.

Green public procurement plays a pivotal role in the implementation of a circular economy due to several compelling reasons. GPP drives demand for sustainable products, creating economies of scale. Moreover, it sets standards, aligns with sustainability policies, and promotes widespread adoption (World Bank Group, 2021). GPP also contributes to reducing resource consumption and waste, thus minimizing environmental impact. Furthermore, GPP incentivizes innovation, supports green industries, and creates economic opportunities and jobs (Borms et al., 2023). In addition, GPP promotes health and well-being, while also raising awareness about sustainability. Moreover, GPP aids in meeting legal requirements and prepares for future regulations. GPP, with its focus on long-term cost savings and consideration of the entire lifecycle of products, is widely regarded as one of the premier tools for implementing a circular economy. (Publications Office of the European Union, 2020).

With the public sector's substantial share in total spending, which accounts for over 14% of the EU's GDP, prioritizing sustainable products and services through Green Public Procurement can significantly influence markets, driving demand for circular products and prompting market shifts towards sustainability (Böttge, Kumpar Zidanič and Tzamalikou, 2023). Furthermore, GPP can establish high environmental performance standards, pushing suppliers to adopt circular economy

principles to compete for government contracts (Gómez-Ramos and Rico Gonzalez, 2023). Through careful product selection, GPP aids in reducing waste, enhancing resource efficiency, and promoting the reuse and recycling of materials (Dumitrica, Grigorescu and Davidescu, 2023). Additionally, GPP functions as an incentive for innovation, fostering the development of new technologies and business models that support a circular economy (Grimbert and Zabala-Iturriagagoitia, 2024). As governments lead by example, showcasing successful circular economy initiatives and practices, the private sector and the wider community can follow suit (Manta and Mansi, 2024), (Chiappinelli and Seres, 2024). The combined impact of these factors underlines the potency of Green Public Procurement as a mechanism for advancing the principles of a circular economy, leveraging public sector purchasing power to drive systemic change.

The integration of the Green Deal and Green Public Procurement concepts is of utmost importance for the advancement of a circular economy. The European Green Deal represents a comprehensive strategy with the objective of achieving climate neutrality for the European Union (EU) by 2050. It encompasses a wide array of policy initiatives, such as climate action, pollution reduction, biodiversity protection, sustainable agriculture promotion, energy efficiency support, and circular economy implementation (Publications Office of the European Union, 2019).

One of the key objectives of the Green Deal is to revise EU product policy to include measures that promote the norm of sustainable products. This involves extending product lifetimes, enhancing recyclability, and reducing the use of hazardous chemicals (European Commission, 2024). Furthermore, as part of the Green Deal, the Circular Economy Action Plan (CEAP) encompasses actions aimed at boosting sustainable product design, strengthening the market for secondary raw materials, and reducing waste (Publications Office of the European Union, 2020).

GPP serves as a vital policy tool for promoting sustainable consumption and production. It involves public authorities procuring goods, services, and works with reduced environmental impact throughout their life cycle. GPP is instrumental in advancing a circular economy by establishing environmental criteria, promoting innovation, and influencing the market. The EU provides guidelines for GPP that align with circular economy principles, encouraging public authorities to opt for products and services with lower environmental impacts and higher resource efficiency (European Commission, 2024).

While GPP offers evident benefits for environmental protection, economic growth, and social well-being, challenges in its implementation persist. These include ensuring consistent application of GPP across different regions and sectors, the readiness of the market in terms of the availability of green products and services that meet public procurement standards, and the initial higher costs of green products, despite their potential for long-term savings. For example, the Environmental Protection Agency (EPA) Report in Ireland (The Environmental Protection Agency, 2024a) reveals that despite some progress, the use of green public procurement (GPP) in Ireland is still limited. In 2022, only 34% of government contracts included green criteria, although this was an improvement from 10% in 2021. The implementation of Green Public Procurement in the Swiss clothing sector (Orset, 2024) and GPP practices in organic food policies in Swedish and Spanish institutions (Lindström, Lundberg and Marklund, 2022; Gómez-Ramos and Rico Gonzalez, 2023) demonstrate the increasing interest in applying GPP in various sectors of the economy. Additionally, studies on GPP in the Greek energy sector (Kilintzis et al., 2023) and EU energy efficiency policies (Gonzalez-Torres et al., 2023), as well as GPP in Polish social welfare centers (Szydłowski, 2023), highlight both the spread and the obstacles in the application of GPP.

The progress of GPP implementation in the Swiss clothing sector demonstrates the significant positive impact of regulatory changes on the adoption and effectiveness of green public procurement practices (Orset, 2024). The Swiss case shows how legal frameworks can drive market transformation towards environmental sustainability, despite encountering challenges such as resistance from certain suppliers, the need for ongoing training of procurement officials, and the complexity of verifying compliance with green criteria (Orset, 2024).

The growing recognition of the environmental and health benefits associated with organic food has elevated Green Public Procurement as a crucial instrument for advancing sustainability objectives within the public sector. Studies conducted in Sweden (Lindström, Lundberg and Marklund, 2022) and Spain (Gómez-Ramos and Rico Gonzalez, 2023) emphasize the potential of GPP in driving the

adoption of organic food policies and fostering sustainable food systems. Nonetheless, the consistent implementation of GPP may face obstacles such as cost considerations, restricted supply chains, and a dearth of expertise in sustainable procurement practices. Strategic measures that involve policy reinforcement, engagement with stakeholders, capacity building, and awareness-raising can facilitate successful implementation. Organic food policies within organizations play a pivotal role in promoting sustainable food systems, endorsing organic farming, lessening environmental footprints, and encouraging healthier dietary choices. Therefore, strategic planning, regulatory backing, and stakeholder engagement are crucial for successful implementation, notwithstanding financial and market challenges (Gómez-Ramos and Rico Gonzalez, 2023), (Lindström, Lundberg and Marklund, 2022).

The current EU policy, as outlined by the European Commission in 2019 (Publications Office of the European Union, 2019) and 2024 (European Commission, 2024), aims to encourage member-states to transition towards renewable energy and sustainable energy practices. The concept of Green Public Procurement holds significant potential for driving this energy transition, particularly in regions with a historical dependence on fossil fuels, such as Western Macedonia (Kilintzis et al., 2023). Although challenges to effective GPP implementation persist – such as a lack of technical expertise among procurement officials, limited availability of green products and services in the local market, budget constraints, and higher initial costs of green technologies – the positive impacts on carbon reduction, renewable energy adoption, and economic diversification underscore the potential of GPP as a tool for achieving sustainable development and environmental goals.(Kilintzis *et al.*, 2023).

Both national and EU policies have been instrumental in promoting sustainable procurement, especially in sectors related to energy, construction, and transportation, by incorporating environmental criteria into procurement processes. The energy efficiency policies implemented by the EU have resulted in notable energy savings, economic advantages, and environmental enhancements over the last four decades. Despite persistent challenges, the ongoing adaptation and reinforcement of these policies are essential for the progression of sustainability and the realization of the EU's climate targets. (Gonzalez-Torres *et al.*, 2023).

Enhancing policy frameworks to provide clearer guidelines and stronger incentives for GPP, prioritizing training and capacity-building programs, stimulating the local market for green products and services to support local businesses and start-ups, and integrating GPP into long-term regional development plans are essential steps towards effective GPP implementation in the public sector. This approach has the potential to contribute to a reduction in carbon emissions, lower energy costs, economic diversification, and long-term environmental sustainability (Kilintzis *et al.*, 2023).

Implementing the agenda of promoting environmental sustainability through public procurement can also be applied to the provision of social services. For instance, the study on Polish social welfare centres highlights the positive impact of green public procurement on sustainable development within the Łódź Province (Szydłowski, 2023). Despite challenges such as budget constraints, lack of expertise in green procurement, and limited availability of green products, the study demonstrates that GPP can result in significant environmental and social benefits. These benefits include increased energy efficiency, reduced emissions, waste reduction, long-term cost savings, commitment to environmental stewardship, and improved health and well-being of residents due to the use of non-toxic and sustainable materials. The research underlines the importance of continued support and capacity-building efforts to enhance the adoption and effectiveness of GPP practices (Szydłowski, 2023).

It is also crucial to emphasize the equal distribution of resources and the need to prioritize GPP across various sectors, as demonstrated in a study examining the impact of the pandemic on GPP implementation in 27 European countries. Based on data from the Tenders Electronic Daily database (2016-2022), the research reveals a decline in GPP practices during the pandemic, particularly as COVID-19 cases rose. The study underscores how the immediate emphasis on public health and economic stability led to a decreased priority for environmental considerations in public procurement processes (Rosell, 2023).

As of the latest developments, the "Green Public Procurement Strategy and Action Plan 2024-2027" (Department of Public Expenditure, NDP Delivery and Reform, 2024), recently approved by

the Irish government, aims to advance green procurement practices across the public sector. This initiative, titled "Buying Greener," builds upon and modernizes previous policies to incorporate recent developments in climate, energy, sustainability, and procurement. The yearly public sector purchasing by the Government of Ireland accounts for 10% to 12% of the country's GDP, representing a significant portion of economic activity and demand (Department of Public Expenditure, NDP Delivery and Reform, 2024). This gives the public sector substantial leverage to promote the provision of more resource-efficient, environmentally friendly goods, services, and works within the marketplace.

The initiative aims to facilitate the shift to a sustainable economy, integrate green criteria into procurement processes, cultivate knowledge and expertise, create market conditions for innovation, and establish sectoral targets. A dedicated task force will oversee the plan's progress, aligning with broader government policies to infuse sustainability into public procurement and contribute to the transition to a circular economy. Additionally, specific targets have been established for key sectors such as construction, food procurement, energy-related products, and transportation (Department of Public Expenditure, NDP Delivery and Reform, 2024).

For example, starting in 2025, a percentage of construction materials must be made from recycled materials, and new food service contracts must address the reduction of food waste. This comprehensive plan harmonizes with broader government policies, such as the Climate Action Plan (The Environmental Protection Agency, 2024) and the Circular Economy Programme (The Environmental Protection Agency, 2023), underscoring Ireland's dedication to integrating sustainability into public procurement and advancing the transition to a circular economy.

Despite the current voluntary nature of Green Public Procurement in the EU there has been a shift in scholarly research towards exploring the potential advantages of transitioning it to a mandatory framework. The research posits that enforcing obligatory GPP standards within certain sectors could yield significant environmental advantages and advance sustainability in public procurement practices throughout the EU. Furthermore, the study advocates for the implementation of mandatory GPP and proposes that legislative reforms within the EU should be pursued to facilitate this transformative initiative (Böttge, Kumpar Zidanič and Tzamalikou, 2023).

It is important to understand the current research landscape in the domain of GPP to identify trends, gaps, and future directions. Several insightful research (Galán-Valdivieso et al., 2024), (Rejeb et al., 2023), (Rejeb et al., 2024), revealed a remarkable interest in GPP, with a noticeable increase in publications in open-access and traditional journals over the past several decades. Prominent research themes encompass sustainable and green procurement, e-procurement, procurement performance, regulations, and innovation. There is a growing need for interdisciplinary investigations and a concerted focus on the social implications of GPP. Future research should delve into the role of public procurement in advancing broader societal objectives and examine the effects of emerging technologies, underscoring the significance of GPP in driving sustainable development and shaping policy formulation. A call for more collaborative and interdisciplinary research efforts stressing the political and social significance of GPP, highlighting its role in advancing sustainable development and informing policy development can aid researchers, policymakers and practitioners in crafting effective GPP strategies (Galán-Valdivieso et al., 2024), (Rejeb et al., 2023), (Rejeb et al., 2024).

Conclusions. The rise of the circular economy is a direct response to escalating environmental concerns, diminishing resources, and emerging economic opportunities. It strives to pave the way for a more sustainable and robust future by fundamentally reimagining our production, consumption, and waste disposal approach.

The integration of circular economy principles into international and national legislation reflects a growing acknowledgement of the necessity for sustainable resource management and waste reduction. This transition not only addresses environmental concerns but also unlocks new economic prospects and drives innovation in sustainable practices. Green public procurement is intricately entwined with the circular economy and both play pivotal roles in influencing sustainable development. By incorporating circular economy principles into public procurement, government bodies can set a leading example and act as catalysts for broader systemic shifts towards sustainability.

The strategic integration of GPP to promote circular economy principles empowers public authorities to lead by example, catalyze market transformations, and make substantial contributions to sustainable development goals. The European Green Deal and Green Public Procurement are vital components in propelling the circular economy forward.

The increasing body of research indicates a rising interest in the adoption and use of GPP across various sectors of the EU economy, as well as several barriers and constraints that need to be overcome to ensure comprehensive and effective implementation. Green public procurement has the potential to significantly contribute to sustainability objectives, offering environmental and socioeconomic benefits. Therefore, it is crucial to develop supportive policies and incentives to address the higher costs associated with green public procurement and encourage wider adoption of GPP practices.

References

- 1. Borms, L. *et al.* (2023) 'The working future: An analysis of skills needed by circular startups', *Journal of cleaner production*, 409(Journal Article), p. 137261. Available at: https://doi.org/10.1016/j.jclepro.2023.137261.
- 2. Böttge, I., Kumpar Zidanič, H. and Tzamalikou, A. (2023) 'From Green Vision to Legal Obligation: The Case for Making Green Public Procurement Mandatory', *Croatian Yearbook of European Law & Policy*, 19(1), pp. 249–280. Available at: https://doi.org/10.3935/cyelp.19.2023.519.
- 3. Chiappinelli, O. and Seres, G. (2024) 'Optimal discounts in green public procurement', *Economics letters*, 238(Journal Article). Available at: https://doi.org/10.1016/j.econlet.2024.111705.
- 4. Department of Public Expenditure, NDP Delivery and Reform (2024) 'Buying Greener: Green Public Procurement Strategy and Action Plan 2024-2027'. Government of Ireland. Available at: https://www.gov.ie/en/publication/7b1f8-green-public-procurement-strategy-and-action-plan-2024-2027/.
- 5. Dumitrica, C.-D., Grigorescu, A. and Davidescu, A.A. (2023) 'Circular economy a push and pull mechanism Recycling starts before purchasing', *Journal of cleaner production*, 430(Journal Article), p. 139363. Available at: https://doi.org/10.1016/j.jclepro.2023.139363.
- 6. European Commission (2024) 'Delivering the European Green Deal. On the path to a climate-neutral Europe by 2050'. Available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/delivering-european-green-deal_en.
- 7. Galán-Valdivieso, F. *et al.* (2024) 'Green Public Procurement in open access and traditional journals: a comparative bibliometric analysis', *Journal of public procurement*, 24(1), pp. 91–113. Available at: https://doi.org/10.1108/JOPP-09-2023-0064.
- 8. Gómez-Ramos, A. and Rico Gonzalez, M. (2023) 'The contribution of green public food procurement to sustainability: evidence from two case studies in Spain', *Agroecology and sustainable food systems*, 47(8), pp. 1158–1185. Available at: https://doi.org/10.1080/21683565.2023.2223555.
- 9. Gonzalez-Torres, M. *et al.* (2023) 'Review of EU product energy efficiency policies: What have we achieved in 40 years?', *Journal of cleaner production*, 421(Journal Article), p. 138442. Available at: https://doi.org/10.1016/j.jclepro.2023.138442.
- 10. Grimbert, S.F. and Zabala-Iturriagagoitia, J.M. (2024) 'Closing the loop without reinventing the wheel: public procurement for innovation promoting a circular economy', *Science & public policy* [Preprint], (Journal Article). Available at: https://doi.org/10.1093/scipol/scad084.
- 11. Kilintzis, P. *et al.* (2023) 'The role of Green Public Procurements in energy transition: The case of Western Macedonia', *Journal of Innovation and Entrepreneurship*, 12(1), pp. 1–27. Available at: https://doi.org/10.1186/s13731-023-00354-4.
- 12. Lindström, H., Lundberg, S. and Marklund, P.-O. (2022) 'Green public procurement: An empirical analysis of the uptake of organic food policy', *Journal of purchasing and supply management*, 28(3), p. 100752. Available at: https://doi.org/10.1016/j.pursup.2022.100752.
- 13. Manta, O. and Mansi, E. (2024) 'The Impact of Globalization on Innovative Public Procurement: Challenges and Opportunities', *Administrative sciences*, 14(4), p. 80. Available at: https://doi.org/10.3390/admsci14040080.

- 14. Orset, H. (2024) 'Green public procurement of clothing: Evidence from Swiss tendering during a major legal change', *Journal of cleaner production*, 449(Journal Article). Available at: https://doi.org/10.1016/j.jclepro.2024.141685.
- 15. Publications Office of the European Union (2008) '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'. Brussels. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:52008DC0400.
- 16. Publications Office of the European Union (2019) 'Communication From The Commission To The European Parliament, The European Council, The Council, The European Economic And Social Committee And The Committee Of The Regions: The European Green Deal'. Brussels. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM%3A2019%3A640%3AFIN.
- 17. Publications Office of the European Union (2020) 'Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: A new Circular Economy Action Plan for a cleaner and more competitive Europe'. Brussels. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN.
- 18. Rejeb, A. *et al.* (2023) 'The landscape of public procurement research: a bibliometric analysis and topic modelling based on Scopus', *Journal of public procurement*, 23(2), pp. 145–178. Available at: https://doi.org/10.1108/JOPP-06-2022-0031.
- 19. Rejeb, A. *et al.* (2024) 'Uncovering the Green Procurement Knowledge Structure: a Systematic Citation Network Analysis', *Circular economy and sustainability (Online)*, 4(1), pp. 287–316. Available at: https://doi.org/10.1007/s43615-023-00287-w.
- 20. Rosell, J. (2023) 'Did governments neglect the environment during the COVID-19 pandemic? An empirical analysis of green public procurement', *Economic analysis and policy*, 80(Journal Article), pp. 835–849. Available at: https://doi.org/10.1016/j.eap.2023.09.027.
- 21. Szydłowski, C. (2023) 'Green public procurement and sustainable development: the case of social welfare centres from the Łódź Province in Poland', *Władza sądzenia*, (25), pp. 52–68. Available at: https://doi.org/10.18778/2300-1690.25.04.
- 22. The Environmental Protection Agency (2023) 'Circular Economy Programme. Annual Report for 2022: The Driving Force for Ireland's Move to a Circular Economy'. Government of Ireland. Available at: https://www.epa.ie/publications/circular-economy/resources/CEP_Annual-Report_2022.pdf.
- 23. The Environmental Protection Agency (2024) 'Strategic Environmental Assessment Action Plan 2021 2025. Progress Update March 2024'. Government of Ireland. Available at: https://www.epa.ie/publications/monitoring--assessment/assessment/strategic-environmental-assessment/SEAActionPlan2021_2025_FINAL.pdf.

World Bank Group (2021) 'A Global Procurement Partnership for Sustainable Development: An International Stocktaking of Developments in Public Procurement'. Available at:

https://www.worldbank.org/en/events/2022/01/06/a-global-procurement-partnership-for-sustainable-development-an-international-stocktaking-of-developments-in-public-proc.