GPP Policy and Practice



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1 Executive Summary

This report compiled as two of the deliverables (D2.2 and D2.3) of the research project titled 'Identification of Effective State of the Art Green Public Procurement Policy and Practice for the Irish Public Sector (GAPS)' which is funded by Environmental Protection Agency (EPA). The project lead is University of Galway partnering with South East Energy Agency, Ireland (SEEA) and Climate Action Region Office, Ireland (CARO). This report examines policy practices concerning green public procurement in both Ireland and the European Union. It is enriched by the comprehensive review of case studies and exemplary good practices, both locally and internationally. Additionally, the report offers potential policy recommendations derived from an analysis of 21 case studies.

2 Introduction

The concept of Green Public Procurement (GPP) has emerged as a powerful tool for promoting environmental sustainability and driving the transition to a greener economy. With public procurement accounting for a significant portion of national and regional budgets across the globe, the adoption of environmentally-friendly purchasing practices by public authorities holds immense potential to mitigate environmental impacts, conserve natural resources, and spur innovation in green technologies. As governments and organisations in the European Union (EU) region increasingly recognise the urgency of addressing climate change and advancing sustainability goals, GPP has gained prominence as a strategic approach to aligning procurement practices with broader environmental objectives.

This report explores Green Public Procurement (GPP) policies and practices in Ireland, with an overview of the broader EU context. GPP is a process where public authorities actively consider the environmental impact of their purchases throughout the life cycle of goods, services, and works. This report aims to provide a comprehensive understanding of GPP initiatives in Ireland, their alignment with EU policies, and their potential impact on environmental sustainability. This is achieved through a review of existing literatures, case studies, and best practices across the Ireland, EU and internationally. The report will analyse the evolution of GPP regulations and initiatives at both the EU and national levels, with a specific focus on Ireland's implementation within the broader EU framework.

3 GPP policies

3.1 National GPP policy framework and practices

Both the EU and Ireland have adopted legislative frameworks to promote GPP, including directives, regulations, and national procurement policies. While EU directives provide overarching guidelines, Ireland has developed its national GPP strategy and action plans to align with EU objectives. There are five main strands in the National Public Procurement Policy framework, which are:

- Legislation (National regulations transporting EU Directives).
- Government Policy (Circulars).
- Capital Works Management Framework (CWMF) for public works.
- General Procurement Guidelines for Goods and Services.
- Guidelines, templates, and documentations issued by Office of Government Procurement (OGP).

Ireland has made notable strides in integrating environmental considerations into public procurement processes. The Office of Government Procurement (OGP) oversees GPP implementation in Ireland, aligning with EU directives and national sustainability goals.

3.1.1 National Climate Action Plan

The recent climate action plan 2024¹ clearly highlights the importance of green public procurement for a circular economy and mitigating the climate change. Under the section for public sector, the following key takeaways were described:

By 2030

- Reduce greenhouse gas (GHG) emissions from the public sector by 51%.
- Achieve a 50% improvement in energy efficiency in the public sector.

By 2050

- Achieve the buildings and retrofitting targets laid out in the Public Sector Climate Action Mandate.
- Implement and review the Public Sector Climate Action Mandate annually.

Figure 1: Key actions in climate action plan for public sector.

According to the action plan, the public sector has to play a crucial role in achieving the Climate Action Plan. The public sector's climate action policy has evolved through successive Climate Action Plans since 2019. This progression has entailed the enactment of two public sector Climate Action Mandates and the release of a dedicated Public Sector Climate Action Strategy. It is imperative for the public sector to assume strategic responsibility for climate action, expediting the necessary changes. As we strive forward, it is crucial to assimilate lessons learned, adapt methodologies, confront the magnitude of change, and take swift action.

 $\underline{https://www.gov.ie/pdf/?file=https://assets.gov.ie/284675/70922dc5-1480-4c2e-830e-295afd0b5356.pdf\#page=nulled to the following and the following the fo$

¹ Government of Ireland, "Climate Action Plan 2024." Accessed: Jan. 05, 2024. [Online]. Available:

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In 2022, emissions from public services decreased by 2.2% compared to 2021, primarily due to a reduction in natural gas and oil usage within the public services sector². Emissions from public sector buildings are encompassed within the emissions ceiling of the Commercial Built Environment sector.

Key performance indicators (KPIs) for public sector

Figure 2 below shows the main KPIs that need to be fulfilled by the public bodies by 2025 and 2030.

By 2025

- Review the Public Sector Climate Action Mandate annually and update Climate Action.
- Roadmaps in line with the updated mandate.
- Procure only zero-emissions vehicles unless the vehicle is exempt under the European Communities (Clean and Energy-Efficient Road Transport Vehicles) (Amendment) Regulations (S.I. 381 of 2021)
- Act towards achieving our buildings and retrofitting targets

By 2030

- Reduce GHG emissions from the sector by 51%.
- Improve energy efficiency in the public sector by 50%.

Figure 2: KPIs for public sector by 2025 and 2030

Action plan further includes the decarbonisation targets, climate action mandates, climate action roadmaps, and financing and funding plans and targets associated with that can be referred to get more information.

Apart from the climate action plan, the first action plan for GPP was published in 2012. Since then, Ireland has committed to include green criteria in procurement to mitigate climate change and to build sustainable development within the country. In response to the government's initiative to reassess Green Tenders, the Department of the Environment, Climate, and Communications (DECC), serving as the primary governmental body for Ireland's Green Public Procurement (GPP) policy, is releasing a fresh GPP strategy and action plan for the 2024-2027 timeframe. The development of this plan aligns with the commitments outlined in the Climate Action Plan 2023.

² EPA Greenhouse gas emissions Commercial & public services: https://www.epa.ie/our-services/monitoring--assessment/climate-change/ghg/commercial-and-public-services/

3.2 Legal Obligations and practices

Different public bodies have to follow the legal obligations and practices that has been set out with EU legislation. Table 1 shows the current requirements for public bodies³.

Table 1: Current requirement for public bodies in Ireland on GPP

Торіс	Instrument	Requirement	Applied public body
Planning	Circular 20/2019 (DPER/OGP)	Corporate Procurement Plan must state where GPP criteria will be used in upcoming procurements	Departments
Reporting	Circular 20/2019 (DPER/OGP)	From 2020 onwards, annual reports must detail the number and value of contracts including GPP criteria.	Departments – to be extended to other public bodies
Application of GPP criteria	Climate action plan/program for government	All procurement using public funds must include green criteria by 2023.	All public bodies and any other organisation spending public funds
Application of GPP criteria	Energy Efficient Public Procurement Regulations S.I.s 151/2011, 26/2014 and 646/2016)	Public bodies may only procure equipment or vehicles which are included on the Triple E Register or which meet the relevant energy-efficiency criteria.	All public bodies

3.2.1 OGP's criteria search tool

In 2022, OGP launched a green criterion search tool to support green public procurement. This tool can be used to select the required green criteria for specific products and services. There are 10 sectors categorised in the tool at present and another sector for furniture is being developed. The following sectors are currently included in the search tool,

- 1. Energy related products
- 2. Food and catering services
- 3. Heating equipment
- 4. ICT products and services

https://www.epa.ie/publications/circular-economy/resources/GPP-Guidance-for-the-Irish-Public-Sector.pdf

³ EPA green public procurement- Guidance for the public sector:

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- 5. Indoor cleaning services
- 6. Indoor and outdoor lighting
- 7. Office building design, construction and management
- 8. Paper products and printing services
- 9. Textile products and services
- 10. Road transport vehicles and services
- 11. Furniture (Under development)

This tool makes it easier to public procurers in terms of time and it will reduce the errors that might be occurring during the tender document preparation process.

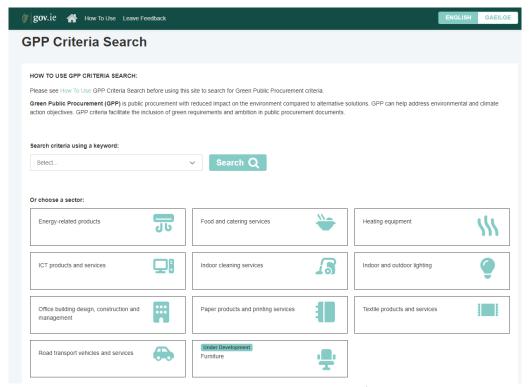


Figure 3: Interface of OGP search tool⁴

3.2.2 Role of EPA in Green Public Procurement

Environmental Protection Agency (EPA)⁵ is an independent public body established under Environmental Protection Agency Act 1992. Its main responsibilities are to protect improve and restore environment through regulations, scientific knowledge and working with others. In terms of GPP, EPA is doing a significant work on promoting GPP and supporting the public procurers in different means. Here are some of duties covered by EPA in this respect,

1. **Providing guidance:** EPA offers guidance and support to public authorities on integrating environmental considerations into procurement processes, including developing GPP policies and criteria.

⁴ Website: https://gppcriteria.gov.ie/

⁵ EPA website: https://www.epa.ie/

- 2. Capacity building: EPA conducts training sessions, workshops, and other capacity-building activities to enhance the knowledge and skills of procurement professionals in implementing GPP practices.
- 3. Developing GPP criteria: EPA collaborates with relevant stakeholders to develop specific environmental criteria and requirements for goods, services, and works procured by public authorities, ensuring alignment with national and EU environmental objectives. At present, EPA has published green criteria for 10 different sectors, which are the same sectors as in the OGP green criterion search tool:
 - I. Energy related products criteria
 - II. Foods and catering criteria
 - III. Heating criteria
 - IV. ICT criteria
 - V. Indoor cleaning criteria
 - VI. Lighting criteria
 - VII. Office building criteria
 - VIII. Paper and printing criteria
 - IX. Textile criteria
 - X. Transport criteria
- **4. Monitoring compliance**: EPA monitors public authorities' compliance with GPP policies and requirements, including assessing procurement documents to ensure environmental criteria are included and evaluating contractor performance against GPP standards.
- **5. Research and innovation:** EPA conducts research on GPP trends, innovations, and technologies to inform policy development and support the adoption of sustainable procurement practices by public authorities.
- **6. Collaboration:** EPA collaborates with other government agencies, industry associations, and non-governmental organisations to promote GPP initiatives, share resources, and foster a collaborative approach to sustainable procurement.

3.3 EU GPP policies and legislation

The EU has adopted several directives and regulations to promote GPP, including Directive 2014/24/EU⁶ on public procurement and Directive 2014/25/EU⁷ on procurement by entities operating in the water, energy, transport, and postal services sectors.

Over the years, the EU has made significant progress in mainstreaming GPP across member states. Achievements include increased awareness and uptake of GPP, the development of GPP criteria for various product groups, and the establishment of national GPP support networks.

⁶ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC [2014] OJ L94/65

⁷ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC [2014] OJ L94/243

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3.3.1 EU frameworks and strategies

There are considerable frameworks, programs and tools developed by EU to promote green public procurement within the member states. Programs and frameworks setup by EU for green procurement is summarised below.

1. Action Plan for Consuming Sustainable Production and Sustainable Industrial Policy - (COM / 2008/397)⁸

The action plan for GPP is a significant initiative aimed at promoting sustainability in public purchasing processes across the EU. Here are some important points highlighted in the action plan:

The action plan provides a clear definition of green public procurement and offers comprehensive guidelines for public authorities on integrating environmental criteria into procurement practices. These guidelines serve as a roadmap for incorporating sustainability considerations into the procurement decision-making process. Also, it establishes a robust policy framework for driving GPP initiatives at both the EU and member state levels. This framework includes directives, regulations, and recommendations to support the implementation of green procurement practices across various sectors and procurement categories.

The action plan emphasises the development of specific GPP criteria tailored to different product categories and services. These criteria outline environmental performance requirements, such as energy efficiency, resource conservation, and emissions reduction, which public authorities should consider when selecting suppliers and awarding contracts.

2. Public procurement for a better environment - COM /2008/ 4009

This policy underscores the critical role of public procurement in driving environmental sustainability by leveraging the purchasing power of public authorities to support the transition towards a greener economy. It emphasises the significance of integrating environmental considerations into public procurement processes. It provides guidance and recommendations for public authorities to prioritise environmentally-friendly products and services when awarding contracts, thereby stimulating demand for sustainable goods and fostering innovation in green technologies.

Moreover, "Public Procurement for a Better Environment" promotes collaboration and knowledge-sharing among public authorities, suppliers, and stakeholders to drive GPP uptake. It encourages capacity building initiatives, awareness-raising campaigns, and the dissemination of best practices to support the adoption of sustainable procurement practices at all levels.

⁸ COM (2008) 397: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan (SEC(2008) 2110) (SEC(2008) 2111)

⁹ COM (2008) 400: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Public Procurement for better environment. {SEC (2008) 2124}

3. Commission staff working document accompanying document - COM (2008) 400 (SEC (2008) 2126)¹⁰

This is a supplementary document that provides detailed guidance and support for the implementation of the EU policy on green public procurement (GPP), as outlined in the main document COM (2008) 400. This staff working document serves as a practical toolkit for public authorities, procurers, and stakeholders involved in GPP initiatives, offering comprehensive information and resources to facilitate the integration of environmental criteria into procurement processes.

One of the significant aspects of this document is its role in clarifying and elaborating on the principles and objectives set forth in the main policy document. It provides additional context, examples, and case studies to illustrate best practices and demonstrate the practical application of GPP principles in various procurement contexts.

4. The European Green Deal¹¹ - COM (2019) 640

"The European Green Deal" is a landmark policy initiative by the European Commission aimed at transforming the European Union (EU) into a more sustainable and climate-neutral economy. This comprehensive strategy outlines a roadmap for achieving ambitious environmental objectives across various sectors, including green public procurement (GPP), to address the challenges of climate change, environmental degradation, and biodiversity loss.

The policy emphasises the importance of collaboration and coordination among EU member states, public authorities, businesses, and civil society to facilitate the implementation of green public procurement initiatives. By fostering partnerships and knowledge-sharing, the European Green Deal aims to create a supportive environment for GPP adoption and accelerate the transition to a circular, low-carbon economy.

5. Europe 2020: A strategy for smart, sustainable and inclusive growth - (COM (2010) 2020)12

This policy is a comprehensive EU policy framework aimed at guiding the Union's economic and social development over the decade from 2010 to 2020. This strategy sets out ambitious goals and targets across various policy areas, including green public procurement (GPP), to promote smart, sustainable, and inclusive growth.

One of the key aspects of this policy is its emphasis on sustainability as a core pillar of economic growth. Within the framework of Europe 2020, green public procurement is recognised as a strategic tool for advancing environmental sustainability objectives while driving economic competitiveness and innovation. By integrating environmental criteria into public procurement processes, the policy seeks to stimulate demand for eco-friendly products and services, encourage resource efficiency, and promote the transition to a low-carbon economy.

¹⁰ COM (2008) 400: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on Public Procurement for better environment. {SEC (2008) 2126}

 $^{^{11}}$ COM(2019) 640 final: Communication from the commission on The European Green Deal. [2019]

¹² COM (2010) 2020: Communication from the Commission Europe 2020. A strategy for smart, sustainable and inclusive growth. [2010]

One of the central pillars of the European Green Deal is the promotion of sustainable consumption and production practices, with GPP playing a pivotal role in driving this transition. The policy recognises the significant impact of public procurement on resource use, carbon emissions, and environmental sustainability, and seeks to leverage public purchasing power to drive demand for sustainable goods and services.

3.3.2 EU tools and resources for GPP

1. EU Green Public Procurement Helpdesk

The EU Green Public Procurement (GPP) Helpdesk serves as a valuable resource and support mechanism for public authorities, procurers, and stakeholders seeking guidance and assistance in implementing green procurement practices across the European Union (EU). Established as part of the EU's broader efforts to promote sustainability and environmental stewardship, the GPP Helpdesk offers a range of services aimed at facilitating the adoption of eco-friendly purchasing decisions and practices.

2. GPP criteria and requirements

EU common GPP criteria requirement tool is its extensive database of GPP criteria and requirements covering a wide range of product categories and services. These criteria are developed based on scientific evidence, best practices, and stakeholder input, and are designed to address key environmental impacts and sustainability considerations throughout the procurement process. By providing clear and consistent guidance on environmental performance requirements, the tool enables procurers to make informed decisions that prioritise eco-friendly products and services.

In addition to providing access to GPP criteria, the tool also offers guidance on how to integrate environmental considerations into procurement specifications and tender documents. It offers practical tips, examples, and templates for drafting green procurement requirements, as well as information on relevant standards, labels, and certification schemes that can support GPP implementation.

3. GPP training toolkit

This toolkit is its curated collection of 7 training modules covering various aspects of green public procurement. Market engagement, Legal aspects of GPP, needs assessment, and operational module including 11 sub modules are some of key modules in this toolkit. These modules are designed to address different levels of expertise and focus areas, ranging from basic concepts of GPP and policy frameworks to advanced topics such as lifecycle costing and market engagement strategies. Each module includes informative presentations, case studies, exercises, and interactive tools to engage learners and facilitate understanding of GPP principles and practices.

4. Good practice Library

This good practice library has bank of GPP case studies and good practices from EU countries that brings a wide range of knowledge and know-how for the different stakeholders. These case studies highlight innovative approaches, strategies, and outcomes of GPP projects, providing valuable

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insights and practical lessons learned for procurers looking to replicate or adapt similar initiatives in their own contexts.

5. Life Cycle Cost (LCC) calculation tools

The European commission (EC) has developed series of sector specific LCC calculation tools that can be used by the public procurers in line with Article 68 of Directive 2014/24/EU¹³ and Article 83(2) of Directive 2014/25/EU¹⁴. EC has developed LCC calculators for 5 main sectors: computers and monitors, imaging equipment, indoor lighting, outdoor lighting, and vending machines. All these calculators consist of user guides that make it easy to use by the public procurers.

3.3.3 Other EU databases

ODYSSEE-MURE¹⁵ is one of the databases that aims to provide short analysis on energy efficiency evaluation in EU. Policy briefs are available in four main sectors; cross cutting, transport, building and industry.

Under cross cutting different policy implementations here are key policy briefs mentioned in the MURE database:

- 1. Energy efficiency targets set by Greece to reduce the energy consumption by 30% in 2030. The national plan includes improving energy efficiency in buildings, transportation, and industry. Greece has made some progress toward its goals, but more effort is needed.
- 2. Auctions on energy efficiency (EE) and renewable energy sources in EU. This policy brief discusses the experience of renewable energy auctions and how it can inform the design of energy efficiency auctions. Auctions are a market-based instrument used to achieve energy efficiency targets. They are used because they encourage competition among bidders, which can drive down the cost of energy efficiency. However, EE auctions have also been shown to have low levels of competition. This can be caused by a number of factors, including outside funding opportunities for bidders.
- 3. Energy efficiency funds in EU: One way to finance energy efficiency efforts is through Energy Efficiency Funds (EEF). These funds are typically established at the national level. They provide financial support for energy efficiency measures in various sectors. The German Energy Efficiency Fund (EEF) is an example of such a fund. The EEF was created in 2011 and closed at the end of 2018. It funded various energy efficiency policies and programs. An evaluation of the EEF found that it had a positive impact on reducing greenhouse gas emissions and energy demand.
- 4. Swedish taxes on energy and carbon dioxide: This policy brief discuss how these taxes influence energy efficiency. The tax on energy and emissions of carbon dioxide is the foundation of Swedish energy efficiency policy. The tax rate is set by the amount of carbon dioxide emitted per unit of

¹³ Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC [2014] OJ L94/65

¹⁴ Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on procurement by entities operating in the water, energy, transport and postal services sectors and repealing Directive 2004/17/EC [2014] OJ L94/243

¹⁵ Odyssee-mure: https://www.odyssee-mure.eu/publications/policy-brief/

fuel. There are lower tax rates in northern Sweden, and some industries are exempt from the tax. The revenue from these taxes is more than 5% of the central government budget revenue.

5. Overall trends in energy efficiency in the EU: An examination of the impact of policy measures on energy consumption. The EU has implemented several policy measures to improve energy efficiency, including regulations for buildings and appliances. The impact of these measures can be seen in the slowing down of the increase in primary energy consumption. However, statistics shows the pace of improvement in energy efficiency has slowed down in recent years.

Additionally, these are other policy briefs in this data base including, Energy suffuciency indicators and policies, overall trends in energy efficiency in EU, the role of Energy Efficiency Measures for a Green Economic Recovery after the COVID-19 Pandemic.

The other main category in the MURE database is 'industry' and follwing are the summary of key policy briefs descibes under the sector,

- 1. Energy efficiency towards SMEs: It discusses the importance of SME energy efficiency and the benefits of implementing such measures. The article also details existing EU policy frameworks and support programs, particularly the particularly the 2008 Small Business Act, the 2016 'Startup and Scale-up Initiative', the 'Competitiveness of Enterprises and Small and Medium-sized Enterprises' (COSME) Programme, and SME support actions funded under the Horizon 2020 programme and the European Structural Investment Funds that have been implemented to encourage SMEs to improve energy efficiency. Different measures implement in EU level to promote efficiency in SMEs. Financial measures are the most popular type of policy measure. These measures provide subsidy-based incentives to SMEs for investments in efficient and renewable technologies, along with energy audits and training activities for energy managers. policy measures include information and training measures, standards/information measures, and co-operative measures.
- 2. Are energy audits, obligatory measures and support schemes successfully driving energy efficiency gains?: In this brief it discusses the implementation of Article 8 of the Energy Efficiency Directive (EED). This article looks at what obligations and support schemes are being used to encourage energy efficiency (EE). Many countries have implemented mandatory audits for large companies. Some countries offer tax incentives for companies that implement energy efficiency measures. Other countries offer grants to help companies pay for these improvements. Some say that these audits and incentives are effective. Others say that more data is needed to know for sure.

These are good practical examples and finding included in the MURE database which can be adopted to the GPP implementation in Ireland by making required policy changes.

The third category mentioned in the database is buildings. Here are some of the policy briefs mentioned under the section,

1. Good practices in measuring and monitoring energy poverty in the EU: It discusses what energy poverty is and the challenges of defining and measuring it. The article also details causes and consequences of energy poverty. Some of the important points are that energy poverty is linked to income, housing quality, and energy prices. It can lead to health problems and social exclusion.

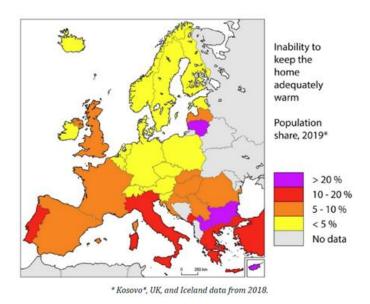


Figure 4: Energy poverty in Europe¹⁶.

- 2. Energy renovation of buildings in Spain and the EU: This article outlines the policy importance of building retrofitting for energy efficiency in Spain. It discusses how retrofitting existing buildings can significantly reduce energy consumption and contribute to Spain's energy and climate goals. The policy brief emphasises the role of effective policies and incentives in promoting building retrofitting, including financial support, regulatory frameworks, and technical assistance. It also highlights the potential economic, social, and environmental benefits of widespread building retrofitting initiatives, such as job creation, improved indoor comfort, and reduced greenhouse gas emissions.
- 3. Energy poverty in the EU: It emphasises the significance of addressing energy poverty as a key social and environmental issue. The EU policies and measures highlighted include initiatives aimed at improving energy efficiency, enhancing access to energy, and implementing social support mechanisms. These policies focus on reducing energy bills for vulnerable households, promoting energy efficiency improvements, and providing financial assistance to those in need. Additionally, the brief discusses the importance of coordinated efforts among EU member states to effectively tackle energy poverty and ensure a fair energy transition for all citizens.

Additionally, there are other policy briefs addressing topics such as incentives and energy poverty in the EU, fuel poverty and energy efficiency, energy efficiency trends in building in the EU. (refer to the MURE database)

Transportation is the last main section mentioned on the MURE database website, and the following are key policy articles in this section,

¹⁶ S. Bouzarovski, H. Thomson, and M. Cornelis, "Confronting Energy Poverty in Europe: A Research and Policy Agenda," Energies, vol. 14, no. 4, Art. no. 4, Jan. 2021, doi: 10.3390/en14040858

1. Energy efficiency trends in transportation in EU countries: It emphasises the importance of improving transport efficiency to reduce energy consumption and emissions in the European Union (EU).

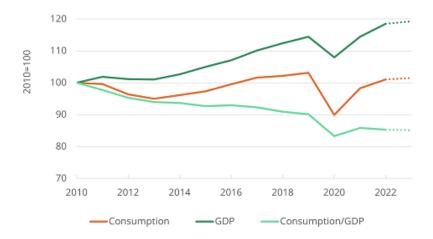


Figure 5: Transport energy consumption and GDP in EU.¹⁷

The policy brief explores various factors influencing transport efficiency, including technological advancements, regulatory measures, and shifts in consumer behaviour. Additionally, it identifies key challenges and opportunities for policymakers in promoting sustainable transport practices. Overall, the brief provides insights into the current state of transport efficiency in the EU and offers recommendations for enhancing efficiency measures in the future.

- 2. Evaluation of transport energy efficiency policies: It emphasises the importance of rigorous evaluation to assess the outcomes and identify areas for improvement in transport policies. The policy brief examines a range of policy measures, including regulatory frameworks, financial incentives, and infrastructure development, aiming to enhance transport efficiency and sustainability. Through comprehensive evaluation, policymakers can gain valuable insights into the performance of different policy interventions. The brief outlines methodologies and indicators used to evaluate transport policies, emphasising the need for data-driven analysis and stakeholder engagement. By assessing factors such as energy consumption, emissions reduction, and economic efficiency, policymakers can make informed decisions to optimise policy outcomes.
- 3. Externalities and efficient pricing: It delves into the importance of appropriately pricing road usage to promote efficiency, sustainability, and equitable distribution of costs. The policy brief discusses various pricing mechanisms, such as tolls, congestion charges, and distance-based fees, highlighting their potential benefits in reducing traffic congestion, curbing emissions, and funding infrastructure maintenance. Efficient pricing in road transport is seen as a key policy tool to internalise externalities associated with road usage, such as pollution and congestion, and to incentivise more sustainable transportation choices. The brief emphasises the need for well-designed pricing schemes that consider factors like geographical context, socioeconomic impacts, and technological advancements.

Apart from above policy briefs there are other policy briefs mentioned in the database including reducing CO_2 emissions of vehicles, a hard problem, eco driving initiatives, etc. under the transportation sector.

¹⁷ Bruno Lapillonne, Estelle Payan and Zineb Raji, "Energy efficiency trends in transport in EU countries," Jan. 2024.

These policy brief including the key policy frameworks and measures will lay the groundwork for adjusting the available policies to smoothly uplift the GPP implementation.

4 Case studies and best practices

Numerous case studies from the European Union illustrate successful implementations of tailored policies aimed at promoting Green Public Procurement (GPP). This section will delve into these case studies, highlighting best practices and real-world examples to offer valuable insights and ease their integration within the Irish context. By examining these successful experiences, stakeholders in Ireland can gain practical guidance and inspiration to effectively implement GPP initiatives suited to their specific circumstances and requirements.

In search of finding the case studies and best practices, 21 case studies was identified within the EU and outside of EU. Summary of the case studies/good practices as follows,

Table 2: Summary of the good practices reviewed.

#	Category	Description/context	Country	Enabler/solution	Year
1	Policy	GPP action plan for Zemgale region.	Latvia	Initiated working group on GPP regulation amendment.	
2	Policy	Action Plan for Lombardy Region green purchases.	Italy	Good GPP practice driven by policy.	
3	Policy	Sardinia's Regional Action Plan for GPP.	Italy	Development of new policy framework.	
4	Policy	Action plan for province of Antwerp	Belgium	Identify needs and roles, develop a helpdesk and knowledge centre (sessions and training).	
5	Policy	Sustainable Procurement Plan 2021-2024 from the Province of Zeeland	Netherland	d Government procurements align with the SDGs.	
6	Policy	Promoting responsible purchasing in Nantes	France	Set out 11 actions targeting the public policy.	
7	Legal	Action plan for Andalusia	Spain	Introducing a guide to incorporate green criteria in all phases of procurement.	
8	Policy	Ireland's Green Government Initiative	Ireland	Government's decisions in reducing waste from public departments.	
9	Policy	Ireland makes sustainable furniture purchasing work	Ireland	Policy decision to include GPP within the department.	
10	Policy	Procurement of Green stationery and paper	UK	Stablishing sustainability policy and strategies backed by political support.	
11	Policy	Sustainability Strategy plan 2013 – 2016	Denmark	Collaboration between environmental and procurement offices.	
12	Policy	Strategy and approach to SPP in the Municipality of Copenhagen	Denmark	Political support.	2016

13 Policy 14 Policy	Incorporation of gender equality clauses in the contracts Lithuania's central purchasing body introduces GPP	Spain Lithuania	Provincial regulations, political support. EU GPP criteria.	2022
14 Policy	contracts Lithuania's central purchasing body introduces GPP	Lithuania		2017
14 Policy	Lithuania's central purchasing body introduces GPP	Lithuania	EU GPP criteria.	2017
14 Policy	purchasing body introduces GPP	Lithuania	EU GPP criteria.	2017
	GPP			
	Crooning public			
15 Policy	Greening public	Spain	Established GPP as standard	2017
	procurement in the Basque		practice.	
	Country			
16 Legal	An ambitious national law	France	Anti-waste and circular economy law	2020
17 Policy	Procurement policy notes	Malta	Procurement policy notes to address 2	
	(PPN)		the gaps in legislation	
18 Legal	Legal framework for GPP	Japan	Making GPP mandatory for public	
			authorities.	
19 Legal	Implementing legal	Korea	Produce annual guidelines, monitor	
	framework for GPP		the GPP process.	
20 Policy	Systematic approach to GPP	Japan	Establishing eco labelling scheme	2013
21 Legal	'Buy clean' act program	USA	Converting Buy Clean California act	2017
			to a law.	

Out of these 21 case studies based on the information available and the year of the policy implementation 5 case studies were described further in the next section to get an overview of how these policies developed and implemented.

4.1 Case study 1 - Action Plan for Lombardy Region green purchases (2020)¹⁸

Background:

The Action Plan for Lombardy Region green purchases, drafted in May 2020, serves as a strategic roadmap for promoting sustainable practices within public offices and advancing the principles of Green Public Procurement (GPP) in the Lombardy region.

Development of the Policy:

The policy development process begins with aligning the regional objectives with European-level strategies and regulations, such as the 2030 Agenda for Sustainable Development and the Procurement Code. By integrating national legislation and standards, Lombardy ensures coherence with broader sustainability goals.

Implementation of the Policy:

The implementation of the Green Public Procurement (GPP) policy in Lombardy Region is a structured process outlined in the Action Plan for green purchases. The policy development involves several key steps:

- Identification of Objectives: The Action Plan identifies specific objectives aimed at promoting sustainable production and consumption, facilitating a transition to a low carbon economy, and improving the overall sustainability of the region. These objectives serve as guiding principles for the policy development process.
- **Stakeholder Engagement:** The development of the GPP policy involves stakeholder engagement and consultation. The Plan includes mechanisms for involving a diverse range of

¹⁸ Pier Attilio Superti, "Action Plan for Lombardy Region green purchases," Lombardy, 2020. Accessed: [Online]. Available: https://projects2014-2020.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/file_1590556410.pdf

- actors, including public administrations, companies, and citizens, in shaping and implementing green procurement practices.
- Governance Structure: A governance structure is established to oversee the implementation
 of the Action Plan. This includes the appointment of individuals to manage the Plan, such as a
 Scientific Advisory Committee and an Inter-departmental Working Group, who are responsible
 for monitoring, communication, and promotion of the Plan.
- Implementation and Monitoring: The policy development process includes mechanisms for implementation and monitoring of progress. This involves setting up monitoring systems, such as the Regional Observatory of public contracts and the Sintel platform, to track the impact of green procurement practices.
- Training and Awareness: The development of the GPP policy includes provisions for training
 and awareness-raising activities. These initiatives aim to build knowledge and skills related to
 sustainable procurement practices among public administrations, companies, and other
 stakeholders.

Future Ambitions:

The Plan emphasises the ongoing implementation of GPP practices to reduce the environmental and social impact of goods, services, and works acquired by public administrations. This includes selecting the best performing and innovative suppliers, promoting environmental innovation, and rationalising purchasing processes to save costs throughout the life cycle. Also, the plan aims to promote the correct application of Minimum Environmental Criteria (MEC) in procurement processes. By incorporating MEC into purchasing decisions, Lombardy seeks to drive the adoption of environmentally sustainable products and services.

Lessons Learned:

- The Plan highlights the importance of stakeholder involvement in shaping and implementing green procurement practices.
- The need for knowledge transfer activities to prepare and facilitate the adaptation of skills related to green procurement practices. By sharing best practices and building awareness, Lombardy aims to enhance the capacity of public offices and stakeholders to implement sustainable purchasing.
- By implementing monitoring systems and reporting mechanisms, Lombardy aims to track progress, identify areas for improvement, and enhance the sustainability of public spending.

4.2 Case study 2 - Sardinia's Regional Action Plan for GPP (2015)19

Background:

Sardinia is an island region forming part of Italy, situated in the Mediterranean Sea, with a population of just over 1.6 million people. The region's interest in GPP began in 2007, leading to the launch of the Action Plan in 2009. The plan aimed to streamline regional needs, identify GPP criteria for products and services, and raise awareness among procurement staff in regional and local authorities.

https://circabc.europa.eu/ui/group/44278090-3fae-4515-bcc2-44fd57c1d0d1/library/0fe050c9-6482-4c9c-9891-9bbbef9dbb84/details

¹⁹ Luisa Mulas, Sardinia's Regional Action Plan for GPP. 2015. Accessed: Jan. 15, 2024. [Online]. Available:

Development of the Policy:

The development of the Regional Action Plan for Green Public Procurement in Sardinia involved a structured approach to promote and implement green public procurement practices in the region. The plan was initially launched for the period 2009-2013 and later extended to cover 2014 as well. The key steps involved in developing this action plan include.

- Setting Goals: The plan outlined specific goals for the regional government, focusing on initiating GPP activities (Eg. Including minimum requirements for all tenders to use green criteria in tenders)
- **Promote and support GPP**: Encouraging to use renewable energy while reducing the expenses by increasing the energy efficiency. Also spreading the practice of GPP among all public entities within the region.

Implementation of the Policy:

The implementation of the Regional Action Plan for Green Public Procurement in Sardinia involved a series of strategic actions and initiatives to promote and embed green public procurement practices in the region. The key steps taken to implement this policy action include:

- **Establishment of help desk**: GPP information and technical support desks were set up in each of the eight provincial administrations in Sardinia. These desks played a crucial role in promoting and implementing the Action Plan by providing free support to municipalities, local businesses, and provincial administrations.
- Training Workshops: Training were organised throughout the region to educate public procurers on GPP procedures, prepare GPP policies and strategies, and cover topics such as relevant legislation, market analysis, and environmental management systems.
- Creation of Interdepartmental Working Groups: Working groups were established in the regional administration to focus on specific topics such as buildings, sustainable tourism, and canteens. These groups facilitated the exchange of information and experiences, leading to the development of guidelines and networks for sustainable practices.
- Production of Tools and Guidelines: Various tools and guidelines were created to support the implementation of GPP, including information brochures, technical glossaries, practical manuals, and templates for Council Resolutions and Service Orders. These resources aimed to assist public authorities and their suppliers in adopting GPP policies and practices.

Results:

Prior to the implementation of the Action Plan, only the regional government was carrying out GPP in Sardinia. However, as a result of the plan, all eight provincial governments in Sardinia carried out at least one green tender over three years, and 67% of regional public bodies published one green tender.

Despite some municipalities not fully participating, 23% of Sardinian municipalities published 178 green tenders as a result of the Action Plan. Additionally, provincial governments published a total of 76 green tenders during the same period.

Range of Goods and Services: Sardinian authorities published green tenders for various goods and services, including IT products, paper, furniture, cleaning services, waste management,

event organisation, and school canteen services. Notably, over 50 tenders were conducted for sustainable canteen services, with significant contract values.

Lessons Learned:

- Feedback from public authorities highlighted the value of the technical support provided by the regional support desks. This support was crucial in assisting authorities in understanding and implementing GPP practices.
- Reasons for some public authorities not adopting GPP policies included the perception that GPP was not compulsory, lack of understanding of GPP processes, reluctance to commit, and concerns about increased costs for green.
- The success of implementing GPP policies and practices requires time, support tools, and targeted actions to drive behavioural changes among public authorities and stakeholders.
- While the action plan led to significant improvements, such as increased participation in GPP activities, continuous training and information provision are essential to ensure the sustained uptake of GPP practices by public authorities in the long term.

4.3 Case study 3 – Action plan for province of Antwerp (2019)²⁰

Background:

The background of the GPP4Growth Action Plan implementation in the province of Antwerp is rooted in the need to address barriers to the use of Green Public Procurement (GPP) in public authorities across Europe. These barriers include a lack of knowledge and common green criteria, which lead to increased administrative burden. The Action Plan aims to overcome these challenges by developing a coordinated and integrated approach to support local authorities. Additionally, the plan emphasises capacity building and unburdening procurers as essential steps to promote the use of GPP.

Development of the Policy:

The Association of Flemish Cities and Municipalities (VVSG) developed a coordinated and integrated approach to support local authorities in professional, sustainable, and innovative public procurement. This approach included developing a Knowledge Center on Public Procurement for Local Authorities, focusing on GPP as an essential element of professional procurement. This policy action was developed under the EU program GPP4Growth.

Implementation of the Policy:

There were three main actions included in the policy plan as follow

1. Development of a Coordinated and Integrated Approach to Support Local Authorities: This action involves the Association of Flemish Cities and Municipalities (VVSG) developing a coordinated and integrated approach to support local authorities in organising more professional, sustainable, and innovative public procurement. It includes analysing the needs of local authorities, developing a knowledge center on Public

²⁰ Liesbeth Taverniers and Dienst Duurzaam Milieu, "Action plan concerning the Flemish Public Procurement Plan (FPPP) 2016-2020," Nov. 2019.

Procurement for Local Authorities, and submitting a subsidy application to the Government of Flanders.

2. Setting up an Online System for Sharing Green Tender Documents:

This action focuses on establishing an online system for sharing green tender documents. The purpose is to facilitate the procurement process and make it easier for local authorities to access and utilise environmentally friendly purchasing documents

3. Updating Guides for Sustainable Procurement:

Another key action involves updating Guides for Sustainable Procurement to incorporate circular criteria and make them easily available for local authorities. This initiative aims to provide guidance on sustainable procurement practices, including circular economy principles, to support local authorities in making environmentally friendly purchasing decisions.

Lessons Learned:

The outsourcing of support to local authorities in organising sustainable public procurement through a multi-year agreement between the government of Flanders and the Association of Flemish Cities and Municipalities (VVSG) demonstrates the importance of establishing coordinated support mechanisms to assist local authorities in implementing GPP practices effectively.

4.4 Case study 4 – Sustainable Procurement Plan 2021-2024 from the Province of Zeeland²¹

Background:

The Province of Zeeland is the most western province of the Netherlands with around 386,000 inhabitants. The province of Zeeland has a good record sustainable procurement (SP) since 2012. The first sustainable action plan was set in 2017 and were able to achieve the set targets above expectations level. Taken into account the success of the previous SP plan a new plan with higher targets were set for the period of 2021 – 2024.

The Province of Zeeland set ambitious goals related to specific Sustainable Development Goals (SDGs), such as SDG 7, SDG 13, and SDG 17, with corresponding requirements to ensure access to sustainable energy, integrate climate change measures, and strengthen partnerships for sustainable development.

Development of the Policy:

The Province of Zeeland has opted to integrate the Sustainable Development Goals (SDGs) as a cornerstone principle within the SP Plan 2021-2024.

²¹ Martin Scherpenisse, "Sustainable Procurement Plan 2021-2024," Jun. 2022. Accessed: Feb. 05, 2024. [Online]. Available: https://circabc.europa.eu/ui/group/44278090-3fae-4515-bcc2-44fd57c1d0d1/library/dee12bd0-7e7a-4b72-81d1-b9f8abd79af1/details

Identify SDG opportunities and risks

- Organize dialogues with differnet stakeholders.
- Identified procurement categories aligned with SDGs, including products with known labor issues.
- Developed risk and opportunity matrices.
- Matrices to be regularly updated.

Optimise supply chain

- Building new business models, reducing intermediaries, and increasing transparency.
- Focus on sustainable public procurement with small orders (up to €50,000) in the plan.
- Enhancing the use of local reclaimed materials.

Collaboration

- Increasing cooperation among various stakeholders.
- Three change makers (CM) appointed to drive change.
- CM trained by experts and exchange knowledge.
- CM s will manage and monitor the impact on the dashboard.

Three levels for procurment projects

Level 1 (fundamental level)

Socially responsible tender requirements to be set quickly and easily.

Level 2 (Significant level)

Stricter requirements are formulated, challenging the market to deliver higher sustainability performance through award criteria.

Level 3 (Ambitious level)

Goes beyond level 2 in ambition. It entails the development of a SDG strategy document, offering new solutions and innovation.

Updating the action plan

- SDG dialogues occur annually, involving internal and external stakeholders.
- Annual surveys are conducted to assess learning and development needs for sustainable procurement.
- Annual reports are submitted to the board of provincial executives to provide updates on sustainable procurement efforts.

Implementation of Approach:

- SDG Purchasing Compass Method: The Province of Zeeland has adopted the SDG Purchasing Compass method as a practical tool to guide professional buyers in aligning procurement activities with the Sustainable Development Goals (SDGs). This method helps in understanding how procurement can contribute to the SDGs, defining ambitions, selecting SDG targets and indicators, reporting on expected impact, and measuring realised impacts.
- **Geographic Information System Mapping:** The SDG Purchasing Compass method utilises geographic information system mapping to provide information on the area of relevance for the procurement project. This mapping helps in identifying local opportunities and assessing the impact of procurement activities on specific geographic regions.
- Project Pilot Testing: The implementation of the SDG compass method started in 2021 with
 pilot testing conducted on three projects to assess how the information from the compass
 could support dialogues. One of the pilot projects, the "Kapellebrug" procurement project,
 focused on the renovation of a road in the south part of the Province of Zeeland near the
 Belgian border. This project aimed to increase safety for cars, pedestrians, and cyclists while
 contributing to sustainability and climate adaptation.

- Standardised Metrics Development: The Province of Zeeland is developing standardised metrics to calculate avoided carbon emissions and avoided virgin materials based on available standards and norms. These metrics will be discussed with European stakeholders to ensure alignment with international sustainability standards and practices.
- **Communication and Reporting:** The Province emphasises the importance of reporting on expected impact and communicating the SDG impact on the platform. By sharing information on the progress made in socially responsible procurement, the province aims to enhance transparency and accountability in its sustainable procurement practices.

Results:

- The approach aims to contribute to the Sustainable Development Goals (SDGs) and their corresponding targets.
- It is recognised as innovative and received the Procura+ Awards 2021 for Procurement initiative of the year.
- While there's no standard guideline for assessing positive impacts, avoided CO₂ emissions from zero-emission measures are calculated.
- The Sustainable Procurement platform, in collaboration with the Province of Zeeland, is developing standardised metrics for calculating avoided carbon emissions and virgin materials based on existing standards and norms.

Lessons Learned:

- There is a recognition of the need to re-organise the procurement process and enhance collaboration across internal departments. The SDG Purchasing Compass method is identified as a valuable tool to address these needs and streamline procurement activities.
- Individuals involved in the procurement process are proud to show and share that they are contributing to the SDGs.
- It's important to work in collaboration with different stakeholders to accelerate the achievement of the SDGs and fosters a collective approach towards sustainable development.

4.5 Case study 5 – Promoting responsible purchasing in Nantes, France. (2017)²²

Background:

Nantes Métropole, located in Western France, has seen a shift of responsibilities to the metropolitan level over the past 25 years. To enhance efficiency, teams from both the City of Nantes and Nantes Metropolis have been merged, including in public procurement, resulting in a combined procurement budget of approximately €430 million per year. Collaboration with local economic networks, especially SMEs, has been prioritised to ensure acceptance and develop user-friendly tools. Nantes Metropolis actively shares best practices on responsible procurement regionally, nationally, and across Europe. Additionally, Nantes has leveraged new national legislation to strengthen its commitment to sustainable public procurement, aligning

²² Patricia Dupré-Cormerais, Promoting responsible purchasing in Nantes. 2017. Accessed: Feb. 07, 2024. [Online]. Available: https://circabc.europa.eu/ui/group/44278090-3fae-4515-bcc2-44fd57c1d0d1/library/34d26e75-4ed1-44cc-aa8c-5d7b0e337958/details

with laws on Social and Solidarity Economy and Energy Transition for Green Growth to promote the National Plan for SPP and make policies accessible to economic actors.

Development of approach:

Focused on 2 key aspects of responsible procurement.

- 1. Encouraging responsible development of businesses and actors, aligned with public policy.
- 2. Acting as responsible buyers by leading in Corporate Social Responsibility (CSR) and setting standards for providers.

Early environmental actions in procurement including,

- 1. Introducing organic food in school restaurants, reaching 12% by 2016.
- 2. Ensuring all significant wood purchases met Forest Stewardship Council (FSC) standards by 2016.
- 3. Adopting eco-friendly cleaning products and recycled/FSC-certified paper.
- 4. Progressively replacing plant protection products with natural alternatives.

Collaboration

Since 2010, Nantes has collaborated with stakeholders to develop CSR criteria for procurement, promoting overall performance of responsible companies.

Adaptation of Responsible Purchasing Promotion Scheme (RPPS)

The RPPS outlines past achievements, ongoing efforts, and future plans, promoting coherence and support within the local area.

Integration

Public policy on energy and environmental transition has been integrated into procurement, leading to 11 cross-cutting actions across three categories: new business models, social aspects, and environmental aspects.

These actions set strategic and operational targets for incorporating policy goals into procurement, with performance targets to be met by 2020. Examples include promoting circular economy, energy transition, and organic products with a focus on short supply chains.

Implementation of the Policy:

Following process chart shows how the council implement this sustainable approach to their procurement process.

RPPS

The Responsible Purchasing Promotion Scheme (RPPS) aims to develop, implement, and monitor actions in public procurement.

Staff allocation

Resources for the RPPS include one full-time staff member for sustainable/responsible procurement, one for environmental clauses, and five for social clauses.

Political level awareness

All relevant elected members of the Metropolitan Council of Nantes Metropolis are informed about upcoming investments to collectively decide on preferred environmental and social clauses. They also evaluate the RPPS impact regularly

Collaboration with ambassadors

At the technical level, the public procurement team collaborates with CSR ambassadors in each directorate to integrate social and environmental clauses into purchasing and evaluate offer quality.

Forming committees

The CSR committee, responsible for setting, improving, reviewing, and assessing RPPS guidelines. Specific targets like energy or social inclusion are monitored by project officers, coordinated by the public procurement department.

Results:

Nantes has committed to Sustainable Public Procurement (SPP) for 15 years, leading to improvements in various sectors. They prioritise eco-friendly supplies and high-energy performance products, while implementing contract clauses to reduce CO_2 emissions. Measures like exclusively procuring recycled paper have significantly decreased non-recycled paper usage. Additionally, 90% of governmental officials' cotton clothing comes from organic and fair trade sources. Social clauses integrate inclusivity into contracts, and progress towards RPPS targets will be assessed, with tools being developed to measure impacts like CO_2 or energy savings.

Lessons Learned:

To effectively implement responsible procurement, it's crucial to prioritise, define boundaries, and establish action frameworks based on feasibility and measurability. Leveraging the initiatives of those already engaged in sustainable procurement can catalyse broader efforts. However, internal organisation and resource allocation can impede implementation, necessitating alignment between strategy ambition and available resources. Annual impact measurement enables tracking progress and making necessary adjustments. Defining requirements and criteria in procurement policy is pivotal, requiring dedicated resources and effective verification tools for successful implementation.

5 Conclusion

This report has examined policy practices in Ireland within the broader context of the European Union. The report emphasises key entities in Ireland that assist procurers by providing guidance on green public procurement, offering tools for criteria search, and facilitating reporting and monitoring of the procurement process. Additionally, it illustrates the support provided by the EU in integrating green criteria into procurement processes, furnishing sustainable criteria for various sectors, life cycle assessment (LCA) tools, as well as case studies and best practices to enhance procurers' expertise and resource accessibility.

5.1 Key lessons learned

Table 3 shows summary of lessons learned from the above 5 good practices. By thoroughly examining case studies and exemplary practices, valuable insights have been gained into effective strategies for implementing policies. These insights provide valuable guidance for Ireland's policymakers, offering them tangible examples of successful approaches that can be adapted and integrated into the country's policy framework. By considering the lessons learned from these successful practices, policymakers can make informed decisions aimed at enhancing the incorporation of green criteria into public procurement processes. This not only fosters sustainability, but also promotes the alignment of procurement practices with environmental objectives and standards.

Table 3: Summary of lessons learned from reviewed case studies.

#	Country	Lessons learned			
1	Ireland	 Engaging with the market before finalising the tender document is crucial. 			
		 LCA need to be consider during the evaluation phase. 			
		 Changing the waste charge for fixed charge to waste generation-based charge. 			
2	Latvia	Including GPP from the legislation level.			
		 Increase the awareness among the public procurers about the environmental 			
		impacts associated with procurement.			
		 Utilisation of EU funds to implement green public procurement in low-income municipalities. 			
3	Italy	 Implementing communication and awareness among the territory and disseminate green purchasing and good practices. Establishment of monitoring system to verify the effectiveness of GPP plan. 			
		 Giving required trainings for the officials to build up the capacity to include green criteria to traditional procurements. 			
		 Technical support desks were established in 8 provincial administrations. 			
		 Formation of interdepartmental working groups on specific topics under the action plan. 			
		 Introduction of tools and guidelines like product information brochures, technical glossaries, practical manuals etc. to support GPP. 			
4	Belgium	 Development of coordinated and integrated approach to support local authorities in providing knowledge and resources on GPP. 			
		 Setting up an online system for sharing green tenders. 			
		 Updating guides for sustainable procurement, using circular criteria where possible and useful. 			
		 Tender documents need to include contract performance clauses that describe the follow up process even beyond contract duration. 			

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5	Netherland	 Aligning SDGs to the regional procurement plan. Re organise the procurement process and improve the collaboration across the departments. Working together to achieve the SDG targets.
6	Denmark	 Cross departments working together to execute the policy development. Getting the political support is essential. Capacity building of the public staff working in the procurement sector. Sense of local ownership need to be given to the procurers and working to with a responsibly towards GPP. It is important to have a cooperation between the procurement personal and an environmental expert to finalise the tender document. Events like 'meet the buyer' will launch to have a market dialogue between supplier and buyer.
7	Spain	 Important of strong political commitment. And integrating political process with actual practice. Legitimised the process and continue it regardless of the political circumstances. Establishing system to monitor and measure the results of the policy practice. Identified and provide basic necessary resources to introduce environmental aspects to the procurement process. Continuous communication with the market.
8	France	 Setting out strategic direction and operational targets for incorporating policy goals to procurement. It is essential to identify priorities, define a perimeter and create a framework of actions which take into account two criteria - feasibility and measurability. Continuous monitoring track the progress of the policy implementation and identify the adjustments that need to be done. It's required to identify the dedicated resources and the appropriate verification tools for the GPP. Collaboration with internal stakeholders and representatives from H & S section to validate the products. It is important to conduct a preliminary market engagement to identify the availability of potential bidders.
9	Lithuania	 Use online catalogues for purchasing purposes. It is significant to include LCC to the evaluation process.
10	Malta	Make it available online of all the procurement policy notes.Provide guidance on best practice for public sector procurement.
11	Japan	 Setting up institutionalised legal framework for GPP. Systematic approach to green procurement by making it mandatory by sign a law. Availability of information regarding eco labelled products and raising awareness of them. Track and monitor the inclusion of green criteria to the procurements.
12	Korea	 Merging of two policies, Korea Eco-label and Green Recycled Mark together to set the green procurement standards. Government scales up the GPP to make a competitive green product market. GPP need to work abreast with eco-innovations policies to stimulate the market. Green procurement needs to be harmonised with other procurement regulations like social impact and 'ecological efficient.

13 USA

- Making the policy practice usable for all levels of government.
- Administrators need to hand in hand with industry, labour, environmental organisations through out the development to identify the barriers and ways to eliminate them.
- Stimulating the market to participate in the policy practice by giving financial incentives to generate EPDs.
- Adequate systematic education and training is important across the awarding agencies.

By thoroughly examining case studies and exemplary practices, valuable insights have been gained into effective strategies for implementing policies. These insights provide valuable guidance for Ireland's policymakers, offering them tangible examples of successful approaches that can be adapted and integrated into the country's policy framework. By considering the lessons learned from these successful practices, policymakers can make informed decisions aimed at enhancing the incorporation of green criteria into public procurement processes. This not only fosters sustainability but also promotes the alignment of procurement practices with environmental objectives and standards.

5.2 Policy recommendations

In conclusion, the comprehensive analysis of green public procurement (GPP) policy practices, supported by case studies, reveals several pivotal insights crucial for advancing sustainable procurement strategies. The desktop review shows approaches and successful interventions that can serve as valuable templates for policy formulation and implementation. Drawing from these observations, the following policy recommendations emerge as particularly pertinent and actionable, offering strategic pathways to enhance the effectiveness and impact of green procurement initiatives:

1. Alignment of the local authorities' policies with broader context.

The significance of harmonising local policies with the global agenda outlined in the Sustainable Development Goals (SDGs) framework. Case study #5 highlights how integrating SDGs into local procurement policies serves as a fundamental pillar for successful green public procurement (GPP) implementation. This alignment not only ensures coherence with international sustainability objectives but also provides a clear roadmap for local governments to prioritise and address key areas such as climate action, responsible consumption, and sustainable infrastructure development. By anchoring GPP initiatives within the broader context of SDGs, policymakers can catalyse GPP process across the different levels of the public administrations and amplify the positive impact of procurement activities on social, economic, and environmental sustainability goals.

2. Getting political support for GPP.

The significance of aligning public procurement with political priorities becomes apparent through successful case studies. These instances illustrate how GPP initiatives can function as potent instruments for advancing political agendas concerning sustainability, climate action, and economic development. Among the 21 case studies discussed herein, three specifically underscore the importance of political intervention in integrating GPP into national procurement strategies. Case study no. 10, 12, and 13 (refer Table 1) clearly emphasise the necessity of harmonising the political process with practical implementation, underscoring the need for robust political commitment.

3. Merging of different sustainability aspects together.

It is now imperative to integrate environmental, social, and economic considerations into procurement simultaneously to streamline the process for procurers. A case study from Korea (Case study #9) has illustrated the significance of aligning these procurement regulations together to enhance efficiency in the process.

4. Integrating ICT to the procurement process.

Policies need to be formulated to incorporate IT to the procurement process. Catalogues, training programs, eco label product list, etc. are some of possible platforms that make the procurement easy. Case studies²³ are available that shows examples on how to utilise a separate E procurement platform to facilitate the interaction between the suppliers and procurement team during the whole procurement process.

5. Stimulating the market towards GPP via financial incentives.

Lessons learned from the USA case study shows the important of developing policies to give financial incentives to companies with low capital to generate EPDs and support them to participate in the GPP process. While enhancing the quality and capacity within the public authorities it's important to support the market, especially small companies to bring this change within their organisation.

6. Empowering the public authority staff.

The case studies (from Italy and USA, refer Table 3) examined consistently highlight the importance of equipping procurement professionals with the requisite skills and knowledge to navigate green tender processes, integrate green criteria into procurement specifications, and evaluate environmental impacts. To address this need, the establishment of training programs emerges as a vital strategy. These programs can offer specialised education and practical guidance on various aspects of green procurement, including sustainability criteria identification, lifecycle assessment methodologies, and sustainable supplier engagement strategies. Additionally, the establishment of technical help desks can provide ongoing support and expert guidance to procurement practitioners, enabling them to address challenges, clarify uncertainties, and access relevant resources. By investing in capacity-building initiatives, policymakers can empower public procurers to effectively leverage procurement as a strategic tool for advancing sustainability objectives and driving positive environmental outcomes.

7. Collaboration and joint procurement

Collaboration emerges as a key factor in driving successful GPP outcomes. Case studies showcase the benefits of engaging stakeholders across sectors and fostering partnerships to enhance procurement processes and outcomes. Policies to make joint procurement are one of best examples for making the GPP practicable and it will help to incorporate expertise from different disciplinaries, also joint procurement will help to create a good competition in the market in terms of bidding price as joint procurement will procure a bulk at once.

²³ Cynthia van der Roest, Circular Procurement of Furniture for the City of Wageningen. 2017. Accessed: Feb. 13, 2024. [Online]. Available: https://circabc.europa.eu/ui/group/44278090-3fae-4515-bcc2-44fd57c1d0d1/library/60950743-bc98-4b3f-ba37-efb019eeae96/details

8. Making GPP mandatory.

A case study has shown the importance of making GPP mandatory for public authorities (case study #18). This case study underscores the necessity of formalising GPP requirements through policy directives and regulations. By making GPP mandatory, policymakers can ensure consistent adherence to sustainability criteria across public procurement processes, driving systemic change and fostering a culture of environmental responsibility within government agencies. Moreover, the implementation of such policy decisions must occur not only at the central authority level but also at the local level, where procurement decisions are often decentralised. It is crucial to engage public staff at all levels of government in the GPP process, emphasising the importance of sustainability considerations in procurement decision-making.

Overall, these case studies provide valuable insights and actionable strategies for policymakers, practitioners, and stakeholders seeking to advance green procurement practices and contribute to sustainable development goals.

6 Appendix

Table 4 below shows the sources for all the case studies/good practices described in this report.

Table 4: References list of case studies

#	Topics	Country	Contact person/Source
1	GPP action plan for Zemgale region.	Latvia	Arturs Pencura Link
2	Action Plan for Lombardy Region green purchases.	Italy	Monica Peggion Link
3	Sardinia's Regional Action Plan for GPP.	Italy	Luisa Mulas Link
4	Action plan for province of Antwerp	Belgium	<u>Liesbeth Taverniers Link</u>
5	Sustainable Procurement Plan 2021-2024 from the Province of Zeeland	Netherland	Martin Scherpenisse Link
6	Promoting responsible purchasing in Nantes	France	Patricia Dupré Link
7	Action plan for Andalusia	Spain	María del Carmen Link
8	Ireland's Green Government Initiative	Ireland	Irene Cadogan Link
9	Ireland makes sustainable furniture purchasing work	Ireland	Robert Guihen Link
10	Procurement of Green stationery and paper	UK	Rebecca Boulton Link
11	Sustainability Strategy plan 2013 – 2016	Denmark	Steffen Thomsen Link
12	Strategy and approach to SPP in the Municipality of Copenhagen	Denmark	Maria Pagel Fray Link

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13	Incorporation of gender equality clauses in the contracts	Spain	Ana Agirre Saez de Eguilaz Link
14	Lithuania's central purchasing body introduces GPP	Lithuania	Arunas Zuskit Link
15	Greening public procurement in the Basque Country	Spain	Girane Ibarra Link
16	An ambitious national law	France	Link
17	Procurement policy notes (PPN)	Malta	Stefan Schaa Link
18	Legal framework for GPP	Japan	Link
19	Implementing legal framework for GPP	Korea	Link
20	Systematic approach to GPP	Japan	Link
21	'Buy clean' act program	USA	Link

For more information visit GAPS website: https://www.universityofgalway.ie/structures/projects/gaps/

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