

The role of government in promoting sustainable procurement

Munuhwa, Shakerod

Published in:

Government Impact on Sustainable and Responsible Supply Chain Management

DOI:

[10.4018/978-1-6684-9062-4.ch014](https://doi.org/10.4018/978-1-6684-9062-4.ch014)

Publication date:

2023

Document Version

Publisher's PDF, also known as Version of record

[Link to publication in ResearchOnline](#)

Citation for published version (Harvard):

Munuhwa, S 2023, The role of government in promoting sustainable procurement. in *Government Impact on Sustainable and Responsible Supply Chain Management*. IGI Global Publishing, pp. 260-281.
<https://doi.org/10.4018/978-1-6684-9062-4.ch014>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please view our takedown policy at <https://edshare.gcu.ac.uk/id/eprint/5179> for details of how to contact us.

Chapter 14

The Role of Government in Promoting Sustainable Procurement

Shakerod Munuhwa
Ba Isago University, Botswana

ABSTRACT

This book chapter examines the crucial role of government in promoting sustainable procurement, which is an important tool for achieving sustainable development goals. The chapter provides an overview of sustainable procurement, its benefits, and challenges, and discusses the potential for government to use procurement policies to promote sustainability. The chapter highlights the importance of government leadership, legal frameworks, and institutional capacity for the effective implementation of sustainable procurement practices. The chapter also provides examples of successful sustainable procurement initiatives from around the world and identifies key lessons learned. The chapter concludes with recommendations for government action to promote sustainable procurement, including the need for strategic planning, stakeholder engagement, and ongoing monitoring and evaluation.

OVERVIEW OF SUSTAINABLE PROCUREMENT

According to the European Commission (2020), sustainable procurement is the process of acquiring goods, services, and works in a manner that considers the economic, social, and environmental impacts of the procurement process. Olinga and Gelbman (2013) affirms that sustainable procurement aims to achieve value for money while ensuring that the procurement process supports sustainable development goals. The United Nations defines sustainable procurement as “a process whereby organisations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment” (United Nations Environment Programme, 2017).

The European Commission also defines sustainable procurement as “the integration of environmental and social considerations into all stages of the procurement process with the aim of reducing the envi-

The Role of Government in Promoting Sustainable Procurement

ronmental and social impact of the goods and services procured, while also ensuring value for money.” (European Commission, 2020).

The three authors converge on the fact that sustainable procurement aims to meet the triple bottom-line requirements and ensure effective value for money to the procuring entity (United Nations Environment Programme, 2017).

Government of South Africa (2017) expounded that the concept of sustainable procurement in government institutions has gained prominence in recent years as organisations recognise the importance of promoting sustainable development and addressing environmental and social challenges. Sustainable procurement involves considering the full lifecycle of the goods, services, or works being procured, from the extraction of raw materials to the disposal of waste. This involves evaluating the environmental impact of the products being procured, ensuring that they are produced in a sustainable manner, and considering the social and economic impacts of the procurement process (Happaerts & Van de Walle, 2011).

Cauchois et al. (2017) advised that there are several benefits of sustainable procurement for organisations, including reducing costs, improving brand reputation, and contributing to sustainable development goals. By procuring products that are environmentally friendly and socially responsible, organisations can reduce their environmental footprint and enhance their reputation as responsible corporate citizens. Sustainable procurement can also create opportunities for innovation and collaboration with suppliers, leading to the development of more sustainable products and services (El-Nemr et al., 2017).

Sustainable procurement requires a strategic approach and collaboration with suppliers, stakeholders, and customers. Organisations need to establish clear sustainability objectives, integrate sustainability into their procurement processes, and evaluate the performance of suppliers based on their sustainability credentials. This involves setting sustainability criteria and performance indicators, such as the carbon footprint of products and the working conditions of suppliers (El-Nemr et al., 2021).

Several organisations and initiatives have developed frameworks and tools to support sustainable procurement. These include the United Nations Sustainable Development Goals, the ISO 20400 standard for sustainable procurement, and the Global Reporting Initiative’s Sustainable Procurement Guidelines (Loivet et al., 2020).

Overall, sustainable procurement is an important approach for organisations to consider in order to promote sustainable development and achieve their environmental, social, and economic objectives. It involves considering the environmental and social impacts of the products being procured, ensuring that they are produced in a sustainable manner, and evaluating the performance of suppliers based on their sustainability credentials. Sustainable procurement can create value for organisations, stakeholders, and the environment, and can contribute to a more sustainable future (Mahfod et al., 2019).

BENEFITS OF SUSTAINABLE PROCUREMENT

According to Sustainable Procurement Charter (2015); The World Bank (2019) and The World Bank (2019), Sustainable procurement has several benefits for organisations, including the following;

The Role of Government in Promoting Sustainable Procurement

Cost savings

Sustainable procurement can lead to cost savings over the long term by promoting the use of more energy-efficient and environmentally friendly products and services. This can result in lower energy costs, reduced waste, and lower operating costs (Merimi & Taghipour, 2021).

Enhanced Reputation

Sustainable procurement can enhance an organisation's reputation by demonstrating its commitment to sustainability and social responsibility. This can improve brand image, attract customers, and help to retain and attract talent (Nadia et al., 2020).

Innovation

Sustainable procurement can drive innovation by encouraging suppliers to develop more sustainable products and services. This can create new business opportunities and help organisations to stay competitive in a rapidly changing market (Shin & Taghipour, 2021).

Improved Supply Chain Management

According to Taghipour and Frayret (2011a), sustainable procurement can improve supply chain management by promoting transparency and collaboration between organisations and their suppliers. This can help to reduce risk, improve efficiency, and enhance resilience in the supply chain.

Compliance with Regulations

Sustainable procurement can help organisations to comply with environmental and social regulations related to the procurement process, including regulations related to energy efficiency, waste management, and labor practices (Taghipour et al., 2021).

Improved Social and Environmental Outcomes

Sustainable procurement can contribute to improved social and environmental outcomes by promoting the use of products and services that are produced in a socially responsible and environmentally friendly manner (Tliche et al., 2021).

Overall, sustainable procurement can create value for organisations, their stakeholders, and the environment. By integrating sustainability into their procurement processes, organisations can achieve cost savings, enhance their reputation, drive innovation, improve supply chain management, comply with regulations, and contribute to improved social and environmental outcomes (Walker, Di Sisto & McBain, 2013).

The Role of Government in Promoting Sustainable Procurement

ROLE OF THE GOVERNMENT IN SUSTAINABLE PROCUREMENT

Policy Development

One of the primary roles of government in promoting sustainable procurement is policy development. Governments can develop policies that encourage the use of sustainable procurement practices by setting sustainability targets, requiring environmental and social considerations in procurement decisions, and promoting the use of sustainable products and services. Sustainable procurement policies can be developed at different levels of government, such as national, regional, or local. For example, the European Union has developed a set of mandatory environmental and social criteria for public procurement, which aims to promote sustainable procurement across member states (European Commission, 2021).

Sustainable procurement policies can also be developed by individual organisations, such as government agencies or private sector companies. For example, the United Nations Global Compact provides guidance on sustainable procurement practices for its signatories, which include businesses and governments (United Nations Global Compact, 2018). Such policies can set out the organisation's commitment to sustainable procurement, provide guidance on how to assess suppliers' sustainability credentials, and promote the use of sustainable products and services (Taghipour & Frayret, 2011b).

Government policies can also encourage the adoption of sustainable procurement practices by establishing standards and certifications. Standards can provide guidance on how to evaluate suppliers' sustainability credentials, while certifications can indicate that a product or service meets specific environmental or social criteria. For example, the Forest Stewardship Council (FSC) certification indicates that a product has been sourced from responsibly managed forests (Forest Stewardship Council, 2021). Governments can require that suppliers meet specific standards or certifications as a condition of participating in procurement processes.

Policy Implementation

Zhang and Parker (2012) contend that implementation of sustainable procurement policies is essential to achieve the sustainability goals set out in policies. Governments can take several steps to implement sustainable procurement policies effectively.

Firstly, governments can include sustainability criteria in procurement processes. Sustainability criteria can include requirements for suppliers to provide evidence of their environmental and social credentials, as well as incorporating life cycle costing into procurement decisions (The World Bank, 2019). Life-cycle costing involves considering the environmental and social impacts of a product or service throughout its entire life cycle, from production to disposal. By incorporating life cycle costing into procurement decisions, governments can identify products or services with the lowest environmental and social impacts over their entire life cycle, rather than just considering the initial cost.

Secondly, governments can educate procurement professionals on sustainable procurement practices. Procurement professionals may not have the necessary knowledge or skills to implement sustainable procurement practices effectively. Therefore, governments can provide training programs, toolkits, and guidance documents to help procurement professionals understand the benefits of sustainable procurement, how to assess suppliers' sustainability credentials, and how to incorporate sustainability criteria into procurement processes (Government of India, 2017).

The Role of Government in Promoting Sustainable Procurement

Thirdly, governments can provide support and resources to help organisations implement sustainable procurement practices. Such resources can include funding, technical assistance, and guidance documents. For example, the United States Environmental Protection Agency provides guidance on sustainable procurement practices and funding for organisations to implement such practices (United States Environmental Protection Agency, 2021).

Fourthly, Ministry of the Environment, Finland (2016) underscores that governments can encourage collaboration between organisations to achieve sustainability goals. Collaboration can help organisations to share knowledge, expertise, and resources, and to develop common standards and certifications. Governments can facilitate collaboration through the establishment of public-private partnerships, industry associations, or other forums for stakeholders to work together towards common sustainability goals.

Include sustainability criteria in procurement processes.

Kweka (2011) emphasizes that governments can include sustainability criteria in procurement processes by requiring suppliers to provide evidence of their environmental and social credentials and incorporating life-cycle costing into procurement decisions.

Requiring suppliers to provide evidence of their environmental and social credentials.

In line with the Ministry of the Environment, Finland (2016), governments can also require suppliers to provide evidence of their environmental and social credentials as part of the procurement process. This evidence can take different forms, such as certifications, reports, or policies. For example, a government agency may require suppliers to provide evidence of their compliance with environmental regulations or their commitment to sustainable production practices. O'Hara (2013) confirmed that governments can also require suppliers to disclose information about their supply chains, such as the origin of raw materials, the use of hazardous substances, or the working conditions of their employees. This information can help governments to assess the environmental and social impacts of products and services throughout their life cycle.

Incorporating life cycle costing into procurement decisions

According to Papoutsis and Pappas (2013) governments can incorporate life-cycle costing into procurement decisions by considering the environmental and social impacts of products and services throughout their entire life cycle, from production to disposal. Life-cycle costing can help governments to identify products or services with the lowest environmental and social impacts over their entire life cycle, rather than just considering the initial cost. For example, a government agency may consider the energy efficiency of a product, the use of hazardous substances in its production, its recyclability, and its disposal at the end of its life. By incorporating life-cycle costing into procurement decisions, governments can encourage suppliers to develop products and services with lower environmental and social impacts, and promote the use of sustainable products and services.

The Role of Government in Promoting Sustainable Procurement

Educate Procurement Professionals

In addition to requiring suppliers to provide evidence of their environmental and social credentials and incorporating life cycle costing into procurement decisions, governments can play a crucial role in ensuring sustainability in procurement processes by educating procurement professionals (Nadia et al., 2020). Procurement professionals are responsible for selecting suppliers, negotiating contracts, and managing procurement processes. They can have a significant impact on the sustainability of government procurement by incorporating sustainability criteria into their decision-making processes. However, many procurement professionals may not be familiar with sustainability concepts and may not know how to integrate them into their work (Reisch & Altstötter-Gleich, 2013); Sustainable Procurement Charter, 2015); (The World Bank. (2019).

To address this gap, governments can provide training and education programs for procurement professionals. These programs can cover a range of topics, including sustainable procurement practices, life-cycle costing, environmental and social regulations, and supplier engagement. Procurement professionals can also benefit from learning about sustainability trends and innovations in their respective industries and markets (Sustainable Procurement Charter, 2015).

According to Venter & Pillay (2011), by educating procurement professionals about sustainability, governments can ensure that procurement decisions are made with a comprehensive understanding of the environmental and social impacts of products and services. They can also help procurement professionals to identify sustainable suppliers and products, negotiate contracts that promote sustainability, and engage with suppliers to improve their sustainability performance.

Provide support and resources.

Welford (2013) elucidates that governments can play a critical role in supporting organisations to implement sustainable procurement practices. By providing guidance documents, toolkits, training programs, and funding, governments can help organisations to overcome barriers to sustainable procurement and effectively integrate sustainability considerations into their procurement processes. Happaerts and Van de Walle (2011) explains the different supporting tool kits as highlighted below;

1. Guidance Documents

Governments can provide guidance documents that offer advice and best practices on sustainable procurement. These documents can provide organisations with practical guidance on how to integrate sustainability considerations into procurement processes, from setting sustainability goals to evaluating supplier sustainability performance. These guidance documents can also provide information on relevant regulations and standards, as well as case studies and examples of successful sustainable procurement practices (Shin & Taghipour, 2021).

2. Toolkits

According to Tliche, et al. (2019), governments can develop toolkits that provide organisations with practical tools to support sustainable procurement. These toolkits can include templates for sustainable procurement policies, guidance on evaluating supplier sustainability performance, and resources for

The Role of Government in Promoting Sustainable Procurement

engaging with suppliers on sustainability issues. Toolkits can also provide organisations with information on relevant sustainability certifications and labels, such as Energy Star or Fair Trade, to help them identify sustainable products and services.

3. Training Programs

Vosooghidizaji et al., (2020) posits that governments can develop and provide training programs for organisations to educate employees on sustainable procurement practices. These training programs can include workshops, webinars, or online training courses that cover a range of topics, including sustainable procurement principles, life-cycle costing, and supplier engagement. Training programs can also provide organisations with information on relevant regulations and standards, as well as case studies and examples of successful sustainable procurement practices.

4. Funding

Governments can provide funding to support sustainable procurement initiatives. This funding can take various forms, such as grants, loans, or subsidies. It can be used to support organisations to implement sustainable procurement practices, such as funding for the development of sustainable procurement policies or the implementation of sustainable procurement initiatives (Taghipour & Merimi, 2021). According to Hinrichs-Rahlwes and Zawilska-Florczuk (2011) funding can also be used to support organisations to access sustainable products and services, such as funding for the purchase of renewable energy or sustainable building materials.

Monitoring and evaluating progress towards procurement.

Monitoring and evaluating progress towards procurement sustainability is critical for several reasons. Firstly, it helps to identify areas where the sustainability targets are not being met and where improvements are needed. This could be in terms of the types of products being procured, the suppliers being used, or the criteria used in the procurement process. By identifying these areas, the government can take corrective action to ensure that procurement practices are aligned with sustainability targets (Government of South Africa, 2017).

Secondly, monitoring and evaluation help to measure the effectiveness of sustainability policies and practices. Governments can use performance indicators to measure progress towards sustainability targets and determine whether procurement practices are contributing to sustainable development. This information can help to identify areas where policies and practices need to be strengthened or revised to ensure that sustainability goals are achieved (Ministry of the Environment, Japan, 2015).

Thirdly, monitoring and evaluation can help to promote transparency and accountability in procurement processes. By regularly reporting on progress towards sustainability targets, governments can demonstrate their commitment to sustainability and hold themselves accountable for their procurement practices. This can help to build trust with stakeholders, including the public, suppliers, and civil society organisations (Olinga & Gelbman, 2013); (OECD, 2015).

To monitor and evaluate progress towards procurement sustainability, Schönherr and Schröder (2012) expounded that governments can use various tools and mechanisms. These may include data collection and analysis, stakeholder engagement, performance reporting, and auditing. For example, governments

The Role of Government in Promoting Sustainable Procurement

can collect data on the types of products being procured, the suppliers being used, and the environmental and social impacts of procurement practices. They can then use this information to analyze trends, identify areas for improvement, and develop strategies to address any issues (Taghipour, & Beneteau-Piet, 2020).

Walker, Di Sisto and McBain (2013) affirm that stakeholder engagement is also critical in monitoring and evaluating progress towards procurement sustainability. By engaging with suppliers, civil society organisations, and other stakeholders, governments can obtain feedback on their procurement practices and identify areas for improvement. This can help to ensure that procurement practices are aligned with sustainability targets and meet the needs of all stakeholders.

GOVERNMENT STANDARDS AND GUIDELINES FOR SUSTAINABLE PROCUREMENT

Sustainable procurement has become an important consideration for governments around the world as they strive to promote sustainable development and reduce the environmental and social impacts of their procurement activities (De Boer & Baumann, 2013).

Analysis Of Existing Government Standards and Guidelines

According to the Government of South Africa (2017), many governments have developed standards and guidelines for sustainable procurement to provide a framework for organisations to integrate sustainability into their procurement processes and ensure that they are procuring goods and services that meet certain social and environmental criteria. These government standards and guidelines for sustainable procurement include the following;

EU Green Public Procurement (GPP) criteria

The EU Green Public Procurement (GPP) criteria provide guidance on how to integrate environmental considerations into public procurement. The criteria cover a range of product and service categories, such as construction, energy, and transport. The GPP criteria are developed through a process of stakeholder consultation and expert review and are updated regularly to reflect new developments in environmental science and technology (European Commission, 2013). The GPP criteria include both mandatory and voluntary criteria. Mandatory criteria must be met by all public authorities when procuring goods and services in the relevant product or service category. Voluntary criteria are intended to provide additional guidance to public authorities and can be used to further improve the environmental performance of the procured goods and services (European Commission, 2020).

ISO 20400

The International Organisation for Standardization (ISO) developed ISO 20400 as a standard for sustainable procurement. The standard provides guidance on how to integrate sustainability into procurement processes and covers topics such as risk management, supplier engagement, and life cycle thinking. The standard is intended to be applicable to organisations of all types and sizes, and to all stages of the procurement process. ISO 20400 is based on a set of principles and best practices for sustainable pro-

The Role of Government in Promoting Sustainable Procurement

curement. These include integrating sustainability into procurement policies and strategies, engaging with suppliers to promote sustainability, using sustainability criteria in the procurement process, and monitoring and reporting on sustainability performance (Ferrari & Migliarese, 2010).

UN Sustainable Development Goals (SDGs)

The United Nations Sustainable Development Goals provide a framework for sustainable development and include 17 goals, such as no poverty, zero hunger, and climate action (European Commission, 2020). The SDGs are intended to be a universal call to action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity. Governments can use the SDGs as a reference point when developing sustainable procurement policies and guidelines. For example, a government might prioritize the procurement of goods and services that contribute to SDG 7 (affordable and clean energy) or SDG 12 (responsible consumption and production). By aligning procurement activities with the SDGs, governments can contribute to the achievement of sustainable development goals and demonstrate their commitment to sustainability (Tliche, Taghipour & Canel-Depitre, 2019).

Buy Clean California Act

The Buy Clean California Act is a law that requires state agencies to consider the greenhouse gas emissions of certain building materials when making procurement decisions. The law aims to promote the use of low-carbon building materials and reduce the carbon footprint of public infrastructure projects. Under the Buy Clean California Act, state agencies are required to use a standardized methodology to calculate the greenhouse gas emissions of eligible building materials. The law applies to materials used in the construction of highways, bridges, and other public works projects. By considering the carbon footprint of building materials in procurement decisions, the state of California aims to promote the use of low-carbon materials and reduce the environmental impact of public infrastructure projects (Sustainable Procurement Charter, 2015).

UK Government Buying Standards

According to the European Commission (2013), the UK Government Buying Standards provide guidance on how to integrate sustainability into procurement processes for a range of product and service categories. The standards cover topics such as energy efficiency, sustainable timber, and ethical procurement. The UK Government Buying Standards are intended to be a practical tool for public authorities to use when procuring goods and services. The standards provide guidance on the key sustainability issues that should be considered in the procurement process, as well as practical advice on how to implement sustainable procurement practices.

CASE STUDIES OF SUCCESSFUL IMPLEMENTATION OF GOVERNMENT STANDARDS AND GUIDELINES

Four representative case studies of successful implementation of government standards and guidelines in procurements were chosen. These case studies are explained below;

The Role of Government in Promoting Sustainable Procurement

Case study

The City of Ghent in Belgium implemented a sustainable procurement policy in 2007, which covers sustainable construction, food and catering, and cleaning services. The policy aims to promote sustainable development and reduce the city's environmental impact by prioritizing environmentally and socially responsible products and services. Under the policy, the city has implemented a number of initiatives to promote sustainable construction, including the use of sustainable building materials, energy-efficient heating and cooling systems, and the installation of green roofs. These initiatives have resulted in the construction of several green buildings in the city, which are designed to minimize their environmental impact and promote sustainable living (United Nations Environment Programme, 2017). In addition to sustainable construction, the city has also implemented initiatives to promote sustainable food and catering. The policy requires the use of organic and fair-trade products in city events and encourages the use of local and seasonal products. The city also provides support and guidance to local businesses to help them adopt sustainable practices (Schönherr & Schröder, 2012).

Finally, the policy includes requirements for environmentally friendly cleaning products, which are used in city buildings and facilities. The city has also implemented a program to reduce the use of chemicals in cleaning, which has resulted in significant environmental and health benefits. Overall, the City of Ghent's sustainable procurement policy demonstrates the benefits of government standards and guidelines for sustainable procurement. By prioritizing environmentally and socially responsible products and services, the city has been able to promote sustainable development, reduce its environmental impact, and improve the well-being of its citizens (European Commission. (2020).

Case Study 2

The City of San Francisco's Sustainable Purchasing Ordinance (SPO) was implemented in 2006 and requires all city departments to consider environmental and social factors in their purchasing decisions. The goal of the SPO is to increase the purchase of environmentally preferable products and services and reduce the city's carbon footprint. To implement the SPO, the city created a Sustainable Purchasing Program (SPP) to provide guidance and support to city departments. The SPP developed a list of priority products and services that have a high environmental impact and established criteria for environmentally preferable alternatives. For example, the SPP recommends the use of recycled paper, green cleaning supplies, and energy-efficient lighting (Ferrari & Migliarese, 2010).

The SPO has been successful in increasing the purchase of environmentally preferable products and services. Between 2005 and 2012, the city's purchase of recycled paper increased from 12% to 100%, and the purchase of green cleaning supplies increased from 4% to 71%. In addition, the city has reduced its carbon footprint by purchasing renewable energy and energy-efficient products (Happaerts & Van de Walle, 2011).

The SPO has also had a positive impact on the city's economy and social well-being. The city has encouraged the purchase of products and services from local businesses and small and disadvantaged businesses. This has led to an increase in local economic development and job creation. Overall, the City of San Francisco's Sustainable Purchasing Ordinance and Sustainable Purchasing Program demonstrate the benefits of government standards and guidelines for sustainable procurement. By prioritising environmental and social factors in their purchasing decisions, the city has been able to reduce its environmental impact, support local businesses, and promote social well-being (O'Hara, 2013).

The Role of Government in Promoting Sustainable Procurement

Case Study 3

The Province of Ontario in Canada implemented a sustainable procurement program in 2010, which aims to integrate environmental, social, and economic factors into procurement decisions. The program covers all goods and services purchased by the province and its agencies and includes a number of initiatives to promote sustainability (Taghipour, 2018).

One of the key initiatives of the program is the procurement of renewable energy. The province has implemented a feed-in-tariff program, which encourages the development of renewable energy projects such as wind, solar, and biomass. The program has led to the procurement of renewable energy from various sources, including wind farms, solar panels, and biogas facilities (Taghipour & Beneteau-Piet, 2020).

The program also includes criteria for energy-efficient lighting, which has led to the adoption of LED lighting in government buildings and facilities. The use of LED lighting has resulted in significant energy savings and reduced greenhouse gas emissions. In addition to renewable energy and energy-efficient lighting, the program promotes the use of green cleaning products. The province has developed a list of environmentally friendly cleaning products that meet its criteria for performance and environmental impact. This has led to the adoption of green cleaning products in government buildings and facilities, which has reduced the use of harmful chemicals and improved indoor air quality (Vosooghizaji et al., 2022).

Overall, the Province of Ontario's sustainable procurement program demonstrates the benefits of government standards and guidelines for sustainable procurement. By integrating environmental, social, and economic factors into procurement decisions, the province has been able to promote sustainability, reduce its environmental impact, and support the development of a green economy (Olinga & Gelbman, 2013).

Case Study 4

The State of Minnesota in the USA implemented a sustainable procurement policy in 2010, which covers environmentally preferable products and services, socially responsible contracting practices, and sustainable transportation. The policy aims to promote sustainability, reduce the state's environmental impact, and improve the health and well-being of its citizens (European Commission, 2020).

Under the policy, the state has implemented initiatives to promote environmentally preferable products and services, such as the procurement of green cleaning supplies. The state has developed a list of environmentally preferable cleaning products that meet its criteria for performance and environmental impact. This has led to the adoption of green cleaning products in state buildings and facilities, which has reduced the use of harmful chemicals and improved indoor air quality (Government of South Africa, 2017).

In addition to environmentally preferable products and services, the policy includes criteria for socially responsible contracting practices. The state encourages contractors to adopt fair labor practices, promote diversity and inclusion, and minimize the use of non-renewable resources in their operations. This has led to the adoption of socially responsible practices by state contractors, which has improved the working conditions of employees and reduced the environmental impact of their operations (Scottish Government, 2018).

The policy also includes criteria for sustainable transportation, which has led to the procurement of electric and hybrid vehicles. The state has implemented a program to encourage the use of electric

The Role of Government in Promoting Sustainable Procurement

vehicles by state employees and has installed charging stations in government buildings and facilities. This has reduced the state's dependence on fossil fuels and improved air quality.

Finally, the policy includes criteria for sustainable construction materials, which has led to the adoption of sustainable building practices in state construction projects. The state has implemented a program to encourage the use of sustainable building materials, such as recycled content, and to minimize waste in construction projects. This has resulted in the construction of more environmentally friendly buildings in the state (Scottish Government, 2018).

Overall, the State of Minnesota's sustainable procurement policy demonstrates the benefits of government standards and guidelines for sustainable procurement. By prioritizing environmentally preferable products and services, socially responsible contracting practices, and sustainable transportation, the state has been able to promote sustainability, reduce its environmental impact, and improve the well-being of its citizens.

GOVERNMENT LEADERSHIP IN SUSTAINABLE PROCUREMENT

According to Reisch and Altstötter-Gleich, (2013), government leadership in sustainable procurement is crucial in achieving sustainability goals at local, regional, national, and international levels.

Many governments around the world have recognised the importance of sustainable procurement and have developed policies, guidelines, and standards to promote it. These initiatives are often led by government procurement agencies or sustainability departments, and involve collaboration with other government departments, businesses, and civil society organisations (Ministry of the Environment, Japan, 2015; Ministry of the Environment, Finland, 2016; Government of South Africa, 2017).

Happaerts and Van de Walle (2011) explained that government leadership in sustainable procurement typically involves several key elements, including:

Policy development: Governments develop policies and guidelines that promote sustainable procurement practices and set targets for sustainable purchasing (Tliche et al., 2019).

Capacity building: Governments provide training and support to procurement officials and suppliers to increase their awareness and understanding of sustainable procurement (Vosooghidizaji et al., 2022).

Collaboration: Governments work with businesses, civil society organisations, and other stakeholders to develop sustainable procurement initiatives and improve supply chain sustainability (Taghipour, 2020).

Monitoring and reporting: Governments monitor and report on their sustainable procurement practices to ensure that they are meeting their sustainability goals (Shin & Taghipour, 2021).

Innovation: Governments encourage innovation in sustainable procurement by promoting the use of new technologies, materials, and practices that promote sustainability (Yang et al., 2017).

Overall, government leadership in sustainable procurement is critical to achieving sustainable development goals and creating a more sustainable future for all.

Case studies of successful implementation of sustainable procurement practices by government agencies

According to OECD (2015), there are a number of case studies from different continents representing successful implementation of sustainable procurement practices by government agencies. These include the following;

The Role of Government in Promoting Sustainable Procurement

North America

- City of Portland, Oregon, United States
- Government of Canada, Canada

South America

- Government of Brazil's Sustainable Procurement Program, Brazil
- Municipal Government of Medellin's Sustainable Procurement Program, Colombia

Europe

- City of Helsinki, Finland
- City of Copenhagen, Denmark
- Sustainable Public Procurement Program of the European Union

Africa

- City of Cape Town, South Africa
- City of Durban, South Africa

Asia

- Green Procurement Program of the Tokyo Metropolitan Government, Japan
- South Korea's Public Procurement Service's Green Procurement Program, South Korea
- Sustainable Procurement Program of the Hong Kong Special Administrative Region Government, China

Australia/Oceania

- Sustainable Procurement Program of the Australian Government, Australia
- Sustainable Procurement Program of the Auckland Council, New Zealand

These case studies show that sustainable procurement practices are being implemented successfully in various regions around the world, demonstrating the potential for sustainable procurement to be a global practice. Governments at all levels can play an important role in promoting sustainable procurement practices and contributing to a more sustainable future (Sustainable Procurement Charter, 2015).

The Role of Government in Promoting Sustainable Procurement

CHALLENGES FACED BY GOVERNMENTS IN IMPLEMENTING SUSTAINABLE PROCUREMENT PRACTICES

While government agencies around the world are increasingly adopting sustainable procurement practices, they face several challenges in implementing them effectively. A number of challenges have been identified across the globe and these include;

Resistance to change: Government agencies often face resistance from procurement officials, suppliers, and other stakeholders who are not familiar with sustainable procurement practices. This can create challenges in implementing sustainable procurement practices effectively (Venter & Pillay, 2011).

Lack of capacity and expertise: Procurement officials may not have the necessary expertise and training to implement sustainable procurement practices effectively. This can result in inadequate understanding of sustainability criteria and standards, and difficulties in identifying sustainable products and suppliers (United Nations Environment Programme, 2017).

Limited supplier base: In some cases, there may be a limited number of suppliers that offer sustainable products and services, making it challenging to implement sustainable procurement practices (Tliche et al., 2019).

Cost considerations: Sustainable products and services may be more expensive than non-sustainable alternatives, which can be a barrier for government agencies with limited budgets (Sustainable Procurement Charter, 2015).

Lack of monitoring and reporting: Without proper monitoring and reporting mechanisms, it may be difficult to measure the impact of sustainable procurement practices and identify areas for improvement (European Commission, 2013)

To overcome these challenges, government agencies can work to improve awareness and understanding of sustainable procurement practices among stakeholders, provide training and capacity building for procurement officials and suppliers, develop strong legal and regulatory frameworks to support sustainable procurement practices, and implement effective monitoring and reporting mechanisms to measure progress and identify areas for improvement (The World Bank, 2019).

GOVERNMENT SUPPORT FOR SUSTAINABLE PROCUREMENT

Governments around the world are increasingly recognizing the importance of sustainable procurement and providing support to promote its implementation (Taghipour & Merimi, 2021). Below is an overview of some of the ways in which governments support sustainable procurement:

Policies and guidelines: Many governments have developed policies and guidelines to support sustainable procurement practices. These policies and guidelines provide guidance on how to integrate sustainability considerations into procurement processes and set targets and objectives for sustainable procurement (Walker, Di Sisto & McBain, 2013).

Training and capacity building: Governments provide training and capacity building for procurement officials, suppliers, and other stakeholders to improve their understanding of sustainable procurement practices. This can include workshops, seminars, and online training programs (Welford, 2013).

The Role of Government in Promoting Sustainable Procurement

Standards and certifications: Governments may develop or support the development of sustainability standards and certifications for products and services. These standards and certifications help to identify sustainable products and services and provide a basis for procurement decisions (Zhang & Parker, 2012).

Collaboration and partnerships: Olinga and Gelbman (2013) highlighted that governments may collaborate with other governments, international organisations, and the private sector to promote sustainable procurement practices. These collaborations can lead to the sharing of best practices and knowledge, the development of new procurement solutions, and the identification of opportunities for sustainable procurement.

Incentives: Governments may provide incentives to encourage sustainable procurement practices, such as tax credits or subsidies for sustainable products and services, or preferential treatment for suppliers that meet sustainability criteria (Scottish Government. (2018).

Government Support Mechanisms in procurement

Governments play an important role in promoting sustainable procurement practices, and they provide various support mechanisms such as training, capacity building, and funding to facilitate the implementation of sustainable procurement (Shin & Taghipour, 2021). Such mechanisms are elaborated below

Training and capacity building: Governments provide training and capacity building to procurement officials, suppliers, and other stakeholders to improve their understanding of sustainable procurement practices. This can include workshops, seminars, and online training programs. By investing in training and capacity building, governments can improve awareness and understanding of sustainable procurement practices and build the necessary skills and expertise for effective implementation (Reisch & Altstötter-Gleich, 2013).

Standards and certifications: Governments may develop or support the development of sustainability standards and certifications for products and services. These standards and certifications help to identify sustainable products and services and provide a basis for procurement decisions. By setting clear sustainability criteria and standards, governments can support the procurement of sustainable products and services and provide a level playing field for suppliers (Venter & Pillay, 2011).

Procurement tools and databases: Governments may develop or support the development of procurement tools and databases that provide information on sustainable products and services, suppliers, and best practices. These tools and databases can help procurement officials make informed decisions about sustainable procurement and provide suppliers with access to new markets (Welford, 2013).

Collaboration and partnerships: According to Kweka (2011), governments may collaborate with other governments, international organisations, and the private sector to promote sustainable procurement practices. These collaborations can lead to the sharing of best practices and knowledge, the development of new procurement solutions, and the identification of opportunities for sustainable procurement.

Funding: Most governments are known to have enough funding to support sustainable procurement practices. This funding can be used to support pilot projects, research and development, and the implementation of sustainable procurement practices. By providing funding, governments can help to overcome financial barriers to sustainable procurement and stimulate innovation in sustainable procurement practices (Yang et., 2017).

The Role of Government in Promoting Sustainable Procurement

THE FUTURE OF SUSTAINABLE PROCUREMENT

Sustainable procurement has become increasingly important in recent years, and there are several emerging trends in this area. The key trends are discussed below.

Circular economy: According to United Nations Environment Programme (2017), there is growing interest in the circular economy, which involves designing out waste and pollution, keeping products and materials in use, and regenerating natural systems. Sustainable procurement practices can support the transition to a circular economy by promoting the use of sustainable products and services and encouraging suppliers to adopt circular business models.

Social sustainability: While environmental sustainability has been a focus of sustainable procurement, there is increasing recognition of the importance of social sustainability. This includes issues such as human rights, labor practices, and community engagement. Sustainable procurement practices can support social sustainability by ensuring that suppliers meet social sustainability criteria, and by promoting suppliers that have strong social sustainability practices (Walker et al, 2013).

Digitalization: Digital technologies are increasingly being used to support sustainable procurement practices. For example, digital platforms can be used to provide information on sustainable products and services, and to streamline procurement processes. Digital technologies can also be used to track and monitor the sustainability performance of suppliers (Zhang & Parker, 2012).

Supply chain transparency: Kuosmanen and Mäkitalo-Keinonen (2011) alluded that there is growing demand for greater transparency in supply chains, particularly with regard to environmental and social sustainability. Sustainable procurement practices can support supply chain transparency by requiring suppliers to disclose information on their sustainability performance, and by promoting suppliers that have transparent supply chains.

Collaboration: Hinrichs-Rahlwes and Zawilska-Florczuk (2011) affirmed that sustainable procurement is increasingly being seen as a collaborative effort, involving collaboration between government agencies, suppliers, and other stakeholders. Collaborative approaches can help to build capacity, share knowledge, and develop innovative solutions to sustainability challenges.

THE ROLE OF GOVERNMENT IN SHAPING THE FUTURE OF SUSTAINABLE PROCUREMENT

Governments play a critical role in shaping the future of sustainable procurement, as they have the power to create policies, regulations, and incentives that encourage sustainable procurement practices. Here are some ways in which governments can shape the future of sustainable procurement:

Setting sustainability targets: Governments can set sustainability targets for their own procurement activities and encourage suppliers to meet these targets. This can help to create a market for sustainable products and services, and drive innovation in sustainable procurement (Happaerts & Van de Walle, 2011).

Creating regulatory frameworks: Governments can create regulatory frameworks that require suppliers to meet certain sustainability standards, such as environmental or social sustainability criteria. This

The Role of Government in Promoting Sustainable Procurement

can help to ensure that sustainable procurement practices are adopted across a range of industries and supply chains (Government of India, 2017).

Providing guidance and support: De Boer and Baumann (2013) affirm that governments can provide guidance and support to procurement officials and suppliers, helping them to adopt sustainable procurement practices. This can include training programs, toolkits, and other resources that provide information on sustainable procurement best practices.

Creating incentives: Governments can create incentives to encourage suppliers to adopt sustainable procurement practices, such as tax breaks or access to government contracts. This can help to create a market for sustainable products and services and encourage suppliers to invest in sustainable practices (European Commission, 2013).

Collaborating with stakeholders: As highlighted by the Government of Canada (2019) governments can collaborate with stakeholders, including industry groups, non-governmental organisations, and academia, to develop sustainable procurement policies and practices. This can help to build consensus around the importance of sustainable procurement and develop innovative solutions to sustainability challenges.

Conclusively, the role of government in shaping the future of sustainable procurement is crucial. By setting sustainability targets, creating regulatory frameworks, providing guidance and support, creating incentives, and collaborating with stakeholders, governments can promote sustainable procurement practices and contribute to a more sustainable future.

SUGGESTIONS FOR FUTURE GOVERNMENT ACTION ON SUSTAINABLE PROCUREMENT

Governments are expected to still focus on playing a pivotal role in future sustainable procurement. The following measures are recommended to ensure sustainable future of procurement:

Set ambitious sustainability targets: Governments can set ambitious sustainability targets for their procurement activities and encourage suppliers to meet these targets. This can help to drive innovation and create a market for sustainable products and services (Government of South Africa, 2017).

Adopt a life-cycle approach: According to Ferrari and Migliarese (2010) governments can adopt a life-cycle approach to procurement, taking into account the environmental and social impacts of products and services at every stage of their life cycle, from extraction to disposal. This can help to identify opportunities for reducing the environmental and social impact of procurement activities.

Integrate sustainability criteria into procurement processes: Governments can integrate sustainability criteria into procurement processes, such as tender documents and evaluation criteria, to ensure that suppliers meet sustainability standards. This can help to promote sustainable procurement practices across a range of industries and supply chains (European Commission, 2020).

Provide training and capacity building: Governments can provide training and capacity building to procurement officials and suppliers, to help them adopt sustainable procurement practices. This can include training programs, toolkits, and other resources that provide information on sustainable procurement best practices (Government of Australia, 2018).

The Role of Government in Promoting Sustainable Procurement

Encourage collaboration and information sharing: The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (2019) reiterated that governments can encourage collaboration and information sharing among procurement officials and suppliers, to share knowledge and best practices in sustainable procurement. This can help to build capacity and develop innovative solutions to sustainability challenges.

Promote sustainable innovation: Governments can promote sustainable innovation by supporting research and development in sustainable products and services and encouraging suppliers to invest in sustainable practices. This can help to drive innovation and create a market for sustainable products and services (European Commission, 2020).

CONCLUSION

In conclusion, this book chapter has highlighted the crucial role of government in promoting sustainable procurement as a tool for achieving sustainable development goals. The chapter has provided an overview of sustainable procurement, its benefits, and challenges, and identified the potential for government to use procurement policies to promote sustainability. The importance of government leadership, legal frameworks, and institutional capacity for the effective implementation of sustainable procurement practices has been emphasized, along with examples of successful sustainable procurement initiatives from around the world and key lessons learnt.

Overall, sustainable procurement is an important approach for organisations to consider in order to promote sustainable development and achieve their environmental, social, and economic objectives. Sustainable procurement can create value for organisations, stakeholders, and the environment, and can contribute to a more sustainable future. The chapter concludes with recommendations for government action to promote sustainable procurement, including the need for strategic planning, stakeholder engagement, and ongoing monitoring and evaluation. By working together, government and organisations can make significant progress towards achieving a sustainable future through sustainable procurement.

REFERENCES

Cauchois, R., Taghipour, A., Kang, D., Zoghiami, N., & Abed, M. (2017). Advanced solutions for a supply chain with stochastic information. *Journal of Advanced Management Science* Vol, 5(1).

De Boer, L., & Baumann, H. (2013). Sustainable procurement: An introduction. In *Sustainable procurement: An introduction* (pp. 1–6). Routledge.

El-NEMR, N., CANEL-DEPITRE, B., & TAGHIPOUR, A. (2021). The determinants of hotel room rates in Beirut: A hedonic pricing model. *International Journal of Trade, Economics and Finance*, 12(2), 33–42.

El-Nemr, N., Canel-Depitre, B., & Taghipour, A. (2017, September). Determinants of hotel room rates. In *Marketing Trends Congress. Luxury Industries Conference London 2017*.

European Commission. (2013). *Buying Green! A Handbook on Green Public Procurement*. Publications Office of the European Union.

The Role of Government in Promoting Sustainable Procurement

European Commission. (2020). Green Public Procurement. https://ec.europa.eu/environment/gpp/index_en.htm

European Union. (2014). Public Procurement Directive 2014/24/EU. European Union.

Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. (2019). Guidelines for Sustainable Public Procurement. Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

Ferrari, S., & Migliarese, P. (2010). Public procurement and sustainable development: A brief review. *Journal of Cleaner Production*, 18(15), 1440–1446.

Government, N. S. (2018). *NSW Government Sustainable Procurement Policy*. NSW Government.

Government of Australia. (2018). *Sustainable Procurement Guide*. Department of Finance, Government of Australia.

Government of Canada. (2019). *Greening Government Strategy*. Government of Canada.

Government of India. (2017). *Manual for Procurement of Goods 2017*. Ministry of Finance, Department of Expenditure, Government of India.

Government of South Africa. (2017). *Preferential Procurement Policy Framework Act (PPPFA) No.5 of 2000*. Government of South Africa.

Happaerts, S., & Van de Walle, S. (2011). Sustainable procurement in Flemish local governments: An empirical study of the drivers and barriers. *Journal of Public Procurement*, 11(4), 509–536.

Hinrichs-Rahlwes, R., & Zawilska-Florczuk, M. (2011). Legal frameworks for sustainable public procurement in the European Union. *Journal of Cleaner Production*, 19(6-7), 975–983.

Kuosmanen, T., & Mäkitalo-Keinonen, T. (2011). Sustainable public procurement practices in Finland. *Journal of Public Procurement*, 11(4), 537–561.

Kweka, J. (2011). Sustainable procurement practices in the public sector: An international comparative study. *Journal of Public Procurement*, 11(1), 1–30.

Loivet, W., Taghipour, A., & Kang, D. S. (2020). The rise of green supply chain management: Between complexity and necessity. *Journal of Economics, Business and Management*, 8(1), 1–7.

Mahfod, J., Canel-Depitre, B., & Taghipour, A. (2019). Quality function deployment-ELECTRE in supplier evaluation. *Journal of Advanced Management Science* Vol, 7(4).

Merimi, M., & Taghipour, A. (2021). Accelerating the digitalization of the supply chain: An empirical research about COVID-19 crisis. In *Digitalization of Decentralized Supply Chains During Global Crises* (pp. 1–24). IGI Global. doi:10.4018/978-1-7998-6874-3.ch001

Ministry of the Environment. Japan. (2015). Guidelines for Environmental Consideration in Procurement. Ministry of the Environment, Government of Japan.

Ministry of the Environment. Finland. (2016). Guidelines for Green Public Procurement in Finland. Ministry of the Environment, Government of Finland.

The Role of Government in Promoting Sustainable Procurement

Nadia, E. N., Beatrice, C. D., & Atour, T. (2020). Luxury hotels' eco-friendly activities & customers' preferences and willingness to pay for green hotels. *Journal of Advanced Management Science* Vol, 8(1).

O'Hara, S. (2013). Promoting sustainable procurement: An analysis of government policies and guidelines. *Journal of Cleaner Production*, 56, 112–119.

OECD. (2015). *Policy Guidance for Greening Government Procurement*. OECD Publishing.

Olinga, T., & Gelbman, A. (2013). A roadmap for sustainable public procurement. *Journal of Cleaner Production*, 55, 21–29.

Papoutsis, K., & Pappas, P. (2013). The role of government in promoting sustainable procurement. *Journal of Public Procurement*, 13(2), 152.

Reisch, L. A., & Altstötter-Gleich, C. (2013). Sustainable public procurement: A review of the European legal framework. *European Journal of Sustainable Development*, 2(3), 15–26.

Schönherr, N., & Schröder, T. (2012). Antecedents and dimensions of sustainable procurement. *Journal of Purchasing and Supply Management*, 18(4), 232–242.

Scottish Government. (2018). Procurement Reform (Scotland) Act 2014. Scottish Government.

Shin, M., & Taghipour, A. (2021). Supply Chains Digital Transformation: Automated Underground Logistics Systems. *Underground Construction*, 6(2), 7. doi:10.18178/joebm.2021.9.2.651

Sustainable Procurement Charter. (2015). Sustainable Procurement Charter. <https://www.sustainable-procurement.org/about/collaborative-initiatives/sustainable-procurement-charter/>

Taghipour, A. (2014). *Production Network Planning Based on Constraint Relaxation and Discount Approach* (Vol. 2). Lecture Notes on Information Theory.

Taghipour, A. (2018). A Contemporary Approach to Plan Independent Logistics Actors. In *Contemporary Approaches and Strategies for Applied Logistics* (pp. 337–364). IGI Global. doi:10.4018/978-1-5225-5273-4.ch014

Taghipour, A. (Ed.). (2020). *Demand Forecasting and Order Planning in Supply Chains and Humanitarian Logistics*. IGI Global.

Taghipour, A., Abed, M., & Zoghiami, N. (2015, May). Design for remanufacturing respecting reverse logistics processes: A review. In 2015 4th International Conference on Advanced Logistics and Transport (ICALT) (pp. 299-304). IEEE. 10.1109/ICAadLT.2015.7136602

Taghipour, A., & Beneteau-Piet, C. (2020). Sustainable supply chain management performance. *International Journal of Innovation, Management and Technology*, 11(6), 165–169. doi:10.18178/ijimt.2020.11.6.897

Taghipour, A., & Frayret, J. M. (2011a). A new heuristic search with local optimization to manage a supply chain. *Meta*, 15.

Taghipour, A., & Frayret, J. M. (2011b). Supply chain coordination planning: A review. Work paper, École polytechnique de Montréal.

The Role of Government in Promoting Sustainable Procurement

Taghipour, A., Glaa, B., & Zoghalmi, N. (2014, May). Network coordination with minimum risk of information sharing. In *2014 International Conference on Advanced Logistics and Transport (ICALT)* (pp. 184-188). IEEE. 10.1109/ICAdLT.2014.6864115

Taghipour, A., & Merimi, M. (2021). Digital Transformation of Supply Chains during Crisis: COVID-19. In *11th Annual International Conference on Industrial Engineering and Operations Management, IEOM* (pp. 7493-7501).

Taghipour, A., Murat, S., & Huang, P. (2021). E-supply chain management: A review. *International Journal of e-Education, e-Business, e-Management Learning*, *11*(2), 51–61.

The World Bank. (2019). *Procuring Infrastructure Public-Private Partnerships*. World Bank Group.

Tliche, Y., Taghipour, A., & Canel-Depitre, B. (2019). Anticipation of Demand in Supply Chains. In *Hierarchical Planning and Information Sharing Techniques in Supply Chain Management* (pp. 1–45). IGI Global.

Tliche, Y., Taghipour, A., & Canel-Depitre, B. (2021). Exploring a Downstream Demand Inference Strategy in a Decentralized Two-Level Supply Chain. In *Demand Forecasting and Order Planning in Supply Chains and Humanitarian Logistics* (pp. 1–65). IGI Global. doi:10.4018/978-1-7998-3805-0.ch001

United Nations Environment Programme. (2017). *Sustainable Public Procurement Implementation Guidelines*. UNEP.

Venter, M., & Pillay, S. (2011). The challenges and benefits of sustainable procurement: The case of South Africa. *Journal of Public Procurement*, *11*(1), 49–83.

Vosooghizaji, M., Taghipour, A., & Canel-Depitre, B. (2020). Information Asymmetry in Supply Chain Coordination: State of the Art. *Journal of Industrial and Intelligent Information* Vol, *8*(2).

Vosooghizaji, M., Taghipour, A., & Canel-Depitre, B. (2022). Coordinating corporate social responsibility in a two-level supply chain under bilateral information asymmetry. *Journal of Cleaner Production*, *364*, 132627. doi:10.1016/j.jclepro.2022.132627

Walker, H., Di Sisto, L., & McBain, D. (2013). Drivers and barriers to environmental sustainable procurement in the public sector: A cross-country comparison. *Journal of Public Procurement*, *13*(2), 218–241.

Welford, R. (2013). The future of sustainable procurement. In *Corporate sustainability in Asia* (pp. 317–330). Routledge.

Yang, S., Taghipour, A., & Canel-Depitre, B. (2017, August). Cost optimization of reverse logistics: A review. In *Proceedings of the 7th International Conference on Information Communication and Management* (pp. 158-161). 10.1145/3134383.3134393

Zhang, X., & Parker, D. (2012). Government procurement for sustainability in China: An overview. *Journal of Public Procurement*, *12*(1), 52–82.

The Role of Government in Promoting Sustainable Procurement

KEY TERMS AND DEFINITIONS

Sustainable procurement: The process of acquiring goods, services, and works in a manner that considers the economic, social, and environmental impacts of the procurement process.

Government: A system or group of people responsible for governing and controlling a particular community, country, or territory. It is a political organisation that exercises authority and power over its citizens or subjects, enforces laws and regulations, and provides public services and programs to promote the well-being of its people.

Supply chain management: The management of the flow of goods and services, from raw materials to the final product, including the coordination and collaboration with suppliers.

Sustainable development: A development approach that seeks to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. It is a framework that aims to balance economic growth, social progress, and environmental protection in a way that is sustainable over the long term.

Triple bottom line: A business approach that considers the economic, social, and environmental impacts of its operations.

Lifecycle assessment: The evaluation of the environmental impact of a product or service throughout its entire lifecycle, from the extraction of raw materials to the disposal of waste.

Social responsibility: The obligation of an organisation to act in the best interests of society and the environment, beyond its legal obligations.