

A Conceptual Analysis of How Sustainable Public Procurement Practices Influence Value for Money in Developing Economies

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ABSTRACT

Public procurement accounts for a substantial proportion of national expenditure in developing economies, frequently representing between fifteen and thirty per cent of gross domestic product. This concentration of spending positions government purchasing as a powerful lever for shaping markets, advancing social objectives and protecting the natural environment. At the same time, the central accountability standard against which public spending is judged remains value for money, conventionally understood through the economy, efficiency and effectiveness with which resources are converted into outcomes. A persistent tension is assumed to exist between the additional costs associated with sustainable procurement and the cost minimisation that value for money is presumed to demand. This paper interrogates that assumption. Drawing on a structured narrative synthesis of literature published mainly from 2017 onward, the study advances a conceptual analysis of how the three principal dimensions of sustainable public procurement, namely environmental, social and economic practices, influence value for money in the public sector of developing economies. The analysis integrates institutional theory, stakeholder theory, the resource-based view and the triple bottom line to explain the mechanisms through which sustainability considerations reshape, rather than merely inflate, the value calculus. The paper argues that when value for money is reframed around whole life cost and broad public value rather than lowest acquisition price, sustainable procurement practices become complementary to, rather than in competition with, value for money objectives. A conceptual framework and a set of testable propositions are proposed, in which organisational capability mediates the relationship, while leadership commitment, supplier market maturity and regulatory clarity act as boundary conditions that moderate it. The study contributes a coherent theoretical account suited to resource constrained contexts and offers an agenda for empirical validation. Implications for theory, public policy and procurement practice are discussed.

Keywords: sustainable public procurement; value for money; developing economies; whole life costing; public value; triple bottom line; institutional theory; stakeholder theory; public procurement

INTRODUCTION

Government purchasing is one of the most consequential economic activities undertaken by the state. Across the member economies of the Organisation for Economic Co-operation and Development, public procurement represents on average close to thirteen per cent of gross domestic product, while in many developing economies the figure rises to between fifteen and thirty per cent (OECD, 2023; IISD, 2025). The scale of this expenditure means that the manner in which governments buy goods, works and services is not a narrow administrative concern but a determinant of fiscal sustainability, market structure and the achievement of national development priorities. When public buyers choose what to purchase, from whom, and on what terms, they exercise a form of market power that can either reinforce or transform prevailing patterns of production and consumption (UNEP, 2022; Sonnichsen & Clement, 2020).

Two ideas dominate contemporary debate about the purpose of this expenditure. The first is value for money, the long-standing accountability principle that public resources should be deployed so as to secure the optimal combination of cost and quality in meeting a defined need. The second is sustainability, the expectation that procurement should simultaneously advance environmental protection, social inclusion and durable economic



development. Sustainable public procurement, frequently abbreviated as sustainable procurement, is widely defined as the process through which public organisations meet their needs for goods, services and works in a way that achieves value for money on a whole life basis while generating benefits for society and the economy and minimising damage to the environment (Etse et al., 2023; Islam et al., 2017). The definition is significant because it embeds value for money within the concept of sustainability rather than placing the two in opposition.

Despite this integrative definition, a widely held practical assumption persists among public buyers and oversight institutions that sustainability raises costs and therefore erodes value for money. Procurement officers report that sustainable options frequently carry higher acquisition prices, that the evidence required to justify them is burdensome, and that audit regimes anchored in lowest price comparison penalise departure from conventional practice (Etse et al., 2023; Nsiah-Sarfo et al., 2023). In developing economies these pressures are intensified by constrained budgets, thin and immature supplier markets, limited technical capacity and governance environments in which transparency deficits already compromise the realisation of value for money (Omwange & Juma, 2025). The result is a conceptual and practical impasse in which sustainability and value for money are treated as competing rather than reinforcing aims.

This paper addresses that impasse. Its central claim is that the apparent conflict between sustainable procurement and value for money rests on an unduly narrow construction of value for money, one that equates value with the minimisation of upfront price. When value for money is reconstructed around whole life cost, public value and the distribution of benefits and risks across stakeholders and time, the relationship between sustainability and value for money is revealed to be substantially complementary. The objective of the paper is therefore to develop a coherent conceptual account of how sustainable public procurement practices influence value for money in developing economies, and to specify the conditions under which that influence is positive, neutral or negative.

A clear gap in scholarship motivates the inquiry. The literature on sustainable and green public procurement has expanded rapidly, yet it remains dominated by studies conducted in high income economies and is heavily concentrated on the environmental dimension, with the social and economic dimensions and the developing economy context comparatively neglected (Ortega Carrasco et al., 2025; Cheng et al., 2018). Where value for money is discussed, it is frequently invoked rather than theorised, and the precise mechanisms through which sustainability practices act upon its constituent elements are seldom articulated. The empirical work that does address developing economies tends to examine the antecedents of sustainable procurement adoption, such as leadership and institutional pressure, rather than the consequences of adoption for value for money (Nsiah-Sarfo et al., 2023; Etse et al., 2022). There is consequently a need for a theoretically grounded account that specifies how sustainable procurement influences value for money and under what conditions, and that is calibrated to the institutional realities of resource constrained states. This paper responds to that need.

The study pursues four specific objectives. First, it clarifies the constructs of sustainable public procurement and value for money and the relationship presumed to hold between them. Second, it assembles an integrated theoretical foundation capable of explaining the mechanisms linking the two. Third, it analyses how the environmental, social and economic dimensions of sustainable procurement act upon the components of value for money. Fourth, it advances a conceptual framework and a set of propositions that identify the boundary conditions shaping the relationship and that can guide subsequent empirical inquiry.

The contribution of the paper is threefold. Theoretically, it offers a synthesis that moves beyond the dominant treatment of sustainability and value for money as a trade-off, articulating instead a mechanism based account grounded in established organisational theory. Contextually, it foregrounds the institutional realities of developing economies, where the most influential studies of sustainable procurement to date have been comparatively scarce and where the bulk of evidence derives from high income settings (Ortega Carrasco et al., 2025; Qazi & Appolloni, 2022). Practically, it provides procurement leaders, regulators and auditors with a reasoned basis for revising the criteria by which value for money is assessed. The remainder of the paper is organised as follows. Section two describes the methodological approach. Sections three and four conceptualise sustainable public procurement and value for money respectively. Section five sets out the theoretical foundations. Section six situates the analysis within the procurement context of developing economies. Section seven analyses the influence of sustainable procurement practices on value for money. Section eight examines



enabling conditions and barriers. Section nine presents the conceptual framework and propositions. Section ten discusses implications, and sections eleven and twelve address limitations, future research and conclusions.

Methodological Approach

This study is conceptual in character. Its purpose is not to generate new empirical data but to organise, interpret and extend existing knowledge into a coherent theoretical account. Conceptual papers of this kind occupy an important position in the development of a field because they integrate fragmented evidence, expose hidden assumptions and generate propositions that subsequent empirical work can test (Qazi & Appolloni, 2022). Accordingly, no field survey, interview or online data collection was undertaken, and none is required for the contribution claimed.

The analysis proceeds through a structured narrative synthesis. Relevant literature was identified from major scholarly databases and the publications of recognised international institutions, with priority given to peer reviewed articles, systematic reviews and authoritative policy reports. To ensure currency, the synthesis draws principally on sources published from 2017 onward, while a limited number of foundational theoretical works of earlier date are retained because they constitute the conceptual bedrock of the field. Sources were selected for relevance to three intersecting domains, namely sustainable and green public procurement, the conceptualisation and measurement of value for money in the public sector, and procurement governance in developing and emerging economies.

The synthesis was conducted in three stages. In the first stage, the constituent constructs were defined and their established dimensions catalogued. In the second stage, the theoretical literature was examined to identify the mechanisms through which sustainability considerations might plausibly act upon value for money. In the third stage, these mechanisms were assembled into an integrated framework and expressed as propositions. Throughout, the analysis privileges explanatory coherence and theoretical plausibility over exhaustive coverage, consistent with the conventions of conceptual scholarship. The principal limitation of the approach, namely that propositions remain analytically rather than empirically grounded, is acknowledged in section eleven and motivates the proposed research agenda.

Conceptualising Sustainable Public Procurement

Sustainable public procurement extends the conventional procurement function beyond the acquisition of goods and services at acceptable price and quality to encompass the wider consequences of purchasing decisions for the environment, for society and for the long-term health of the economy. The concept matured from earlier and narrower formulations, including green procurement, which attended primarily to environmental impact, and socially responsible procurement, which emphasised labour standards, equity and community benefit (McCrudden, 2004; Preuss, 2009). Contemporary scholarship treats these strands as components of a single integrative construct organised around the triple bottom line of environmental, social and economic value (Elkington, 1997; Cheng et al., 2018).

The environmental dimension

The environmental dimension concerns the reduction of the ecological burden associated with what the public sector buys and uses. It encompasses the specification of energy efficient and resource efficient products, the preference for goods with recycled or renewable content, the minimisation of waste and emissions across the supply chain, and the use of eco-labels and life cycle criteria to discriminate between offers (Testa et al., 2016; Ortega Carrasco et al., 2025). Because public bodies are large and visible consumers, environmental specifications can shift entire markets toward cleaner technologies, an effect frequently described as market transformation (UNEP, 2022).



The social dimension

The social dimension directs procurement toward the realisation of broader societal objectives. It includes the promotion of fair labour conditions and decent work within supply chains, the deliberate inclusion of small and medium enterprises and businesses owned by historically disadvantaged groups, the creation of local employment, and the advancement of health, equity and human rights through purchasing decisions (McCrudden, 2004; Etse et al., 2022). In developing economies, the social dimension carries particular weight because procurement can be deployed to address unemployment, to build the capacity of domestic suppliers and to channel public spending toward marginalised communities.

The economic dimension

The economic dimension addresses the long term financial and developmental consequences of procurement. It includes attention to whole life cost rather than acquisition price alone, the cultivation of competitive and resilient supplier markets, the stimulation of innovation, and the protection of fiscal sustainability (Grandia & Meehan, 2017; Sonnichsen & Clement, 2020). Properly understood, the economic dimension is the bridge between sustainability and value for money, because it insists that the financial appraisal of a purchase extend across its entire useful life and account for externalities that conventional appraisal ignores.

Definitional ambiguity and its consequences

The field is marked by a proliferation of overlapping terminology. Sustainable procurement, green procurement, responsible procurement, ethical procurement and strategic procurement are used variously and sometimes interchangeably, and the boundaries between them are contested (OECD, 2023; Cheng et al., 2018). This ambiguity is not merely semantic. It complicates the comparison of studies, obscures which dimension of sustainability a given practice addresses, and allows organisations to claim sustainability credentials on the basis of partial or symbolic measures. For the purposes of this paper, sustainable public procurement is treated as the encompassing construct, defined by the integration of all three dimensions of the triple bottom line within the procurement process, with green procurement and socially responsible procurement understood as its environmental and social components respectively. Clarity on this point matters for the analysis of value for money, because the influence of procurement on value differs according to which dimension is engaged, and conflation of the terms would obscure those differences.

These three dimensions are interdependent rather than separable. An energy efficient asset reduces environmental impact while also lowering operating cost, and a contract that develops local suppliers advances social inclusion while strengthening the competitiveness of the supplier base. The integrative character of the construct is precisely what permits sustainable procurement to be reconciled with value for money, provided that value for money is itself conceived broadly. The second construct is examined next.

Conceptualising Value for Money in Public Procurement

Value for money is the principle that public resources should be used to obtain the best possible combination of cost and benefit in satisfying a legitimate public need. It is the dominant accountability standard in public financial management and the criterion against which auditors, oversight bodies and citizens evaluate procurement outcomes. The concept is conventionally decomposed into three elements often described as the three Es. Economy refers to the acquisition of the required inputs at the lowest appropriate cost while maintaining quality. Efficiency refers to the relationship between inputs and outputs, that is, the achievement of the maximum output for a given input or the minimum input for a given output. Effectiveness refers to the extent to which the outputs of procurement deliver the intended outcomes and policy objectives.

Two limitations of the conventional formulation are central to the argument of this paper. The first concerns the treatment of cost. In practice, economy is frequently operationalised as lowest acquisition price, with the consequence that the costs incurred over the life of an asset, including energy, maintenance, downtime and disposal, are excluded from the appraisal. This narrow operationalisation systematically disadvantages sustainable options, which often carry higher initial prices but lower lifetime costs. A whole life costing



approach, by contrast, aggregates all costs incurred from acquisition through use to end of life, and in doing so frequently reverses the apparent cost advantage of conventional alternatives (Sonnichsen & Clement, 2020; OECD, 2023).

The second limitation concerns the scope of value. The conventional three Es focus on the efficient conversion of public money into defined outputs, but they are largely silent on the wider value that procurement can create or destroy for society. A growing body of scholarship has therefore argued for the addition of a fourth element, equity, and more broadly for the reframing of value for money in terms of public value, understood as the total worth that procurement generates for citizens across economic, social and environmental dimensions (Grandia & Meehan, 2017; UNEP, 2022). On this expanded view, a purchase that secures a marginally lower price while imposing environmental harm, undermining local suppliers or compromising service quality cannot be said to represent true value for money.

The measurement problem

The difficulty of reconciling sustainability with value for money is in large part a difficulty of measurement. Acquisition price is easy to observe, verify and audit, whereas whole life cost requires forecasts of energy use, maintenance and disposal that are inherently uncertain, and public value requires the valuation of social and environmental outcomes that resist monetisation. Because audit and oversight gravitate toward what can be measured unambiguously, procurement systems exhibit a strong tendency to default to price, even where policy formally endorses whole life value (OECD, 2023; Omwange & Juma, 2025). This measurement asymmetry, rather than any real economic inferiority of sustainable options, is often the source of the perceived conflict between sustainability and value for money. Advances in the measurement of whole life cost and public value, together with the alignment of audit practice, are therefore central to resolving the conflict, a theme taken up in the policy implications below.

The reconceptualization of value for money around whole life cost and public value is the analytical pivot of this paper. If value for money is equated with lowest price, sustainability appears as a cost. If value for money is understood as the optimal lifetime balance of cost, quality and public value, sustainability becomes a means of achieving it. The sections that follow develop the theoretical and substantive case for the latter view.

Theoretical Foundations

Explaining why and how sustainable procurement practices act upon value for money calls for theoretical mechanisms. This study draws on four complementary theories. Each illuminates a distinct aspect of the relationship, and together they furnish an integrated explanation suited to the conditions of developing economies.

Institutional theory

Institutional theory holds that organisations adopt structures and practices not only for reasons of technical efficiency but also to secure legitimacy within their institutional environment (Meyer & Rowan, 1977; DiMaggio & Powell, 1983). Organisations are subject to coercive pressures arising from regulation and law, normative pressures arising from professional standards and education, and mimetic pressures arising from the imitation of peers regarded as successful. Applied to procurement, the theory explains why public bodies adopt sustainability practices in response to legislation, donor conditionality, professional norms and the example of comparable institutions (Kauppi, 2013; Nsiah-Sarfo et al., 2023). It also cautions that adoption may be ceremonial, where organisations signal conformity without substantive implementation, a phenomenon of particular relevance in settings where enforcement is weak. Institutional theory thus accounts for both the diffusion of sustainable procurement and the gap that frequently separates policy from practice.

Stakeholder theory

Stakeholder theory proposes that organisations create value not solely for owners but for the wider set of parties affected by their activities, including employees, suppliers, communities and future generations (Freeman,

1984). In the public sector the stakeholder constituency is especially broad, comprising citizens, oversight bodies, the supplier market and society at large. The theory reframes value for money as the balancing of legitimate stakeholder claims rather than the narrow minimisation of cost to the purchasing entity. It thereby supports the expansion of value for money toward public value and provides a normative justification for incorporating social and environmental considerations into procurement decisions (Etse et al., 2022).

The resource-based view

The resource-based view explains performance differences between organisations by reference to the resources and capabilities they control, particularly those that are valuable, rare, difficult to imitate and well organised (Barney, 1991). Sustainable procurement can be understood as a capability that an organisation develops over time, encompassing technical knowledge of whole life costing, the ability to specify sustainability criteria, supplier development competence and information systems that support evaluation. Where this capability is well developed it enables an organisation to extract superior value from its expenditure; where it is absent, sustainability obligations are experienced as cost and risk (Nangpiire et al., 2024). The resource-based view therefore predicts that the influence of sustainable procurement on value for money will be conditioned by organisational capacity, a prediction of direct relevance to capacity constrained developing economies.

The triple bottom line

The triple bottom line provides the organising logic of sustainability itself, asserting that organisational performance should be assessed across economic, social and environmental dimensions rather than financial results alone (Elkington, 1997). In the procurement context the triple bottom line supplies the structure within which the three dimensions of sustainable procurement are defined and the standard against which expanded value for money is measured. It connects the analysis to the wider agenda of the Sustainable Development Goals, to which public procurement is increasingly recognised as a significant contributor (UNEP, 2022; IISD, 2025).

The four theories together yield a layered explanation. Institutional theory accounts for the adoption of sustainable procurement and the risk of ceremonial compliance. Stakeholder theory justifies the broadening of value for money toward public value. The resource-based view identifies organisational capability as the mechanism that converts sustainability obligations into value, and explains why outcomes vary across organisations. The triple bottom line supplies the measurement architecture. This integrated foundation underpins the substantive analysis that follows.

The four theories operate at different levels of analysis, and their integration forms part of the contribution of this paper. Institutional theory operates principally at the level of the organisational field, explaining pressures that originate outside the individual organisation. Stakeholder theory operates at the level of the organisation and its relationships, specifying whose interests value for money should serve. The resource-based view operates at the level of the individual organisation, locating the source of variation in internal capability. The triple bottom line operates at the level of measurement, defining the dimensions of performance. Because the relationship between sustainable procurement and value for money is shaped simultaneously by external pressure, stakeholder claims, internal capability and the architecture of measurement, no single theory is sufficient, and their combination yields an explanation more complete than any one alone could provide.

Public Procurement in Developing Economies

The relationship between sustainable procurement and value for money cannot be analysed in the abstract, because it is shaped decisively by context. Developing economies present a distinctive procurement environment that both heightens the potential of sustainable procurement and complicates its realisation. Three features of that environment are salient.

The first is the sheer fiscal weight of procurement. Where government spending on goods, works and services approaches a third of national output, the efficiency and integrity of procurement are first order determinants of development outcomes (IISD, 2025). Small improvements in value for money translate into substantial fiscal



savings, and the strategic use of procurement to develop domestic industry and employment carries correspondingly large potential returns.

The second is the governance environment. Many developing economies contend with transparency deficits, weak enforcement of procurement regulation and vulnerability to collusion and corruption, all of which erode value for money before sustainability is even considered (Omwange & Juma, 2025). In this setting the transparency and accountability mechanisms associated with modern procurement, including electronic procurement systems and structured supplier evaluation, contribute to value for money directly by reducing leakage, in addition to whatever sustainability benefits they confer.

The third is capacity. Sustainable procurement is knowledge intensive. It requires officers who can construct whole life cost models, define defensible sustainability criteria and evaluate complex offers, as well as supplier markets capable of meeting sustainability requirements. In many developing economies these capabilities are thinly distributed, supplier markets are immature, and the additional administrative effort that sustainability demands competes with limited resources (Nsiah-Sarfo et al., 2023; Nangpiire et al., 2024). The consequence is that the same practices that raise value for money in well-resourced settings may, absent supporting capacity, impose net costs. This conditionality is fundamental to the framework developed below and explains why uncritical transfer of high-income procurement models to developing economies frequently disappoints.

A further contextual consideration is the influence of external actors. In many developing economies a significant share of public procurement is financed by development partners and multilateral lenders, whose procurement guidelines frequently incorporate sustainability and value for money requirements.

This dependence introduces a powerful coercive and normative pressure toward sustainable procurement, consistent with institutional theory, but it also risks producing compliance that is oriented toward donor expectations rather than toward domestically defined public value (Nsiah-Sarfo et al., 2023; UNEP, 2022). The challenge for developing economies is therefore to internalise sustainable procurement as an instrument of their own development priorities rather than as an externally imposed condition, so that the value generated accrues to domestic stakeholders and is sustained beyond the life of particular donor programmes.

The category of developing economies is, however, far from homogeneous, and the relationship between sustainable procurement and value for money is conditioned by differences among these countries in regulatory maturity, governance quality, market depth and administrative capacity. Kenya, for example, operates a codified procurement regime under the Public Procurement and Asset Disposal Act and has invested in electronic procurement, yet continues to contend with transparency challenges in implementation (Omwange & Juma, 2025). Ghana has advanced sustainable and electronic procurement within a strengthening institutional framework, although adoption remains uneven across public bodies and is shaped by institutional pressure and leadership (Nsiah-Sarfo et al., 2023; Nangpiire et al., 2024).

Other states present markedly different conditions, ranging from comparatively mature regimes such as South Africa, with its longstanding preferential procurement policy, to settings where electronic procurement and supplier markets remain nascent (OECD, 2023; UNEP, 2022). These differences mean that a practice which yields value in one country may impose net cost in another, and that the framework advanced here must be applied with attention to the specific institutional configuration of each economy rather than to developing economies as an undifferentiated whole.

How Sustainable Procurement Practices Influence Value for Money

This section constitutes the analytical core of the paper. It examines how each principal category of sustainable procurement practice acts upon value for money, understood in its expanded sense as the optimal lifetime balance of cost, quality and public value. The analysis is organised around six practice clusters, namely whole life costing, environmental specification, social and local supplier development, electronic and transparent procurement, supplier relationship and innovation management, and the management of risk and resilience.



Whole life costing and the reframing of cost

Whole life costing is the practice with the most direct bearing on value for money, because it alters the very measure by which value is judged. By aggregating acquisition, operation, maintenance and disposal costs across the life of an asset, whole life costing exposes the frequent discrepancy between low initial price and high lifetime cost. Energy efficient buildings, vehicles and equipment typically carry higher purchase prices but deliver lower operating and maintenance costs that more than offset the premium over the asset life (Sonnichsen & Clement, 2020; Testa et al., 2016). Where procurement evaluation incorporates whole life cost, sustainable options are frequently revealed to represent superior economy, and the apparent conflict between sustainability and value for money dissolves. Whole life costing thus reconciles the economy element of value for money with environmental sustainability. The qualification is that whole life costing is analytically demanding and depends on reliable cost data and skilled officers, conditions not uniformly present in developing economies.

Environmental specification and operational efficiency

Environmental specification, including requirements for energy efficiency, durability, recyclability and reduced emissions, influences value for money principally through the efficiency and effectiveness elements. Durable and efficient goods reduce the frequency of replacement and the consumption of energy and consumables, improving the ratio of outputs to inputs over time. Reduced environmental harm also lowers the implicit costs that society bears, costs that an expanded conception of value for money internalises (UNEP, 2022; Ortega Carrasco et al., 2025). At the market level, sustained environmental specification by large public buyers stimulates the supply of cleaner products and, through increased competition and scale, can lower their prices over time, a dynamic that improves value for money for all subsequent purchasers (Cheng et al., 2018). The principal risk to value for money arises where environmental criteria are poorly designed, where they restrict competition unnecessarily or where the supplier market cannot yet meet them at reasonable cost.

Social and local supplier development

Social practices, including the inclusion of small and medium enterprises and the development of local suppliers, bear on value for money chiefly through effectiveness and equity, and over time through economy. In the short term, reserving opportunities for local or disadvantaged suppliers may raise prices where those suppliers are less efficient than established competitors. In the medium term, however, supplier development broadens and deepens the competitive base, and a more competitive supplier market is the most durable guarantor of value for money (Grandia & Meehan, 2017; Etse et al., 2022). Social practices also generate public value in the form of employment, income and capability that conventional appraisal omits but that an expanded conception of value for money captures. The balance between short term cost and longer-term value is a central judgement in the design of socially oriented procurement, and the framework below treats supplier market maturity as a key moderator.

Electronic and transparent procurement

Electronic procurement and the transparency mechanisms associated with sustainable procurement exert a strong and largely unambiguous positive influence on value for money in developing economies. By standardising processes, widening supplier access, creating audit trails and reducing the discretion in which corruption thrives, these mechanisms reduce the leakage that is among the most serious threats to value for money in such settings (Omwange & Juma, 2025; OECD, 2023). The efficiency gains from digitisation, including lower transaction costs and shorter procurement cycles, reinforce the integrity gains. Because this cluster of practices improves value for money directly and with comparatively modest demands on technical capacity once systems are established, it represents the most accessible entry point for developing economies seeking to align sustainability and value for money.

Supplier relationship management and innovation

Longer term and collaborative relationships with suppliers, together with procurement designed to elicit innovation, influence value for money through efficiency and effectiveness. Collaborative relationships reduce

transaction costs, improve quality and reliability, and create the conditions in which suppliers invest in sustainable capability. Procurement that specifies outcomes rather than prescriptive inputs invites suppliers to propose innovative and often more sustainable solutions that deliver superior value (Grandia & Meehan, 2017; Qazi & Appolloni, 2022). These practices depend on the procuring organisation possessing the capability to manage relationships and to evaluate innovative offers, returning the analysis once more to organisational capacity as a decisive condition.

Risk, resilience and continuity of supply

A dimension of value for money that conventional appraisal frequently neglects is the management of risk across the life of a contract. Sustainable procurement practices contribute to value for money by reducing exposure to a range of risks, including the volatility of energy and commodity prices, regulatory penalties associated with environmental non-compliance, reputational damage arising from poor labour conditions in the supply chain, and disruption arising from the failure of a single dominant supplier. Practices that improve resource efficiency reduce sensitivity to price volatility, while supplier development and the diversification of the supplier base improve the resilience and continuity of supply (Qazi & Appolloni, 2022; Sonnichsen & Clement, 2020). The protection of continuity is itself a substantial source of value, since the cost of interrupted public services greatly exceeds any marginal saving secured at the point of purchase. Recent global disruptions have sharpened appreciation of this point and have strengthened the case for treating resilience as an explicit element of value for money rather than an externality. As with the other clusters, the realisation of these benefits depends on the organisation possessing the capability to identify and price risk, reinforcing the centrality of capacity to the overall argument.

The six clusters reveal a consistent pattern. The influence of sustainable procurement on value for money is positive and frequently strong when value for money is measured over the life of the purchase and across its full public value, and when the procuring organisation and the supplier market possess sufficient capacity. The influence is weak or negative when value for money is reduced to acquisition price, when criteria are poorly designed, or when capacity is lacking. The relationship is therefore neither uniformly positive nor a simple trade off, but a conditional one whose direction depends on identifiable factors. These conditions are examined next.

Enabling Conditions and Barriers

The conditional character of the relationship between sustainable procurement and value for money makes the identification of enabling conditions and barriers central to the analysis. The literature points to four principal conditions that determine whether sustainable procurement enhances or diminishes value for money.

Leadership commitment is the first. Sustainable procurement requires sustained political and managerial support to overcome the inertia of established practice and to authorise the longer evaluation horizons that whole life costing demands. Where leadership commitment is absent, sustainability obligations are met ceremonially and value is not realised (Etse et al., 2022; Nsiah-Sarfo et al., 2023).

Organisational capacity is the second, and follows directly from the resource-based view. The technical skill to construct cost models, design criteria and evaluate offers is the mechanism that converts sustainability obligations into value. Investment in training and in information systems is therefore a precondition for positive outcomes (Nangpiire et al., 2024).

Supplier market maturity is the third. Sustainable procurement can deliver value only if suppliers are able to meet sustainability requirements at reasonable cost. In immature markets, demanding criteria restrict competition and raise prices, while supplier development and graduated requirements can build capacity over time (Ortega Carrasco et al., 2025; Qazi & Appolloni, 2022).

Regulatory and policy clarity is the fourth. Procurement officers operate within rules enforced by audit, and where those rules privilege lowest price and treat departure as irregular, officers are deterred from pursuing whole life value even when it is demonstrably superior. Coherent legislation that explicitly authorises and

requires the consideration of whole life cost and sustainability criteria is therefore essential, as is the alignment of audit practice with that legislation (OECD, 2023; Omwange & Juma, 2025).

Each of these conditions functions as a moderator of the relationship between sustainable procurement and value for money. They are also interdependent, since leadership commitment drives investment in capacity, regulatory clarity emboldens officers, and supplier development matures the market. Their joint presence transforms sustainable procurement into a source of value, while their absence converts it into a source of cost. The framework presented next formalises these relationships.

These conditions interact rather than operating in isolation, and their interaction can be either virtuous or vicious. A virtuous configuration arises where committed leadership invests in officer capability, regulatory clarity protects officers who pursue whole life value, and supplier development matures the market, so that each condition reinforces the others and sustainable procurement steadily becomes a reliable source of value.

A vicious configuration arises where indifferent leadership starves the function of capacity, ambiguous rules expose officers to audit risk, and an immature supplier market makes sustainable options expensive, so that each deficiency compounds the others and sustainability is entrenched as a cost. The practical implication is that piecemeal intervention on a single condition is likely to disappoint, because the binding constraint may lie elsewhere. Reform that addresses the conditions as an interdependent system is more likely to shift an organisation from the vicious to the virtuous configuration (Etse et al., 2022; Nsiah-Sarfo et al., 2023).

Alongside these enabling conditions, several practical barriers recur across developing economies and warrant explicit attention, since they determine whether sustainable procurement is implemented in substance or only in form. The first is limited procurement expertise, since whole life costing, the design of defensible sustainability criteria and the evaluation of complex offers demand technical skills that are thinly distributed and frequently concentrated in a few central agencies (Nangpiire et al., 2024).

The second is budget constraint, since the higher acquisition prices of some sustainable options, even where they are offset over the life of an asset, strain annual budgets that are appraised on a cash and single year basis rather than on a whole life basis (Sonnichsen & Clement, 2020). The third is supplier readiness, since immature supplier markets may be unable to meet sustainability requirements at competitive cost, so that demanding criteria restrict competition and raise prices until supplier development has matured the market (Ortega Carrasco et al., 2025; Qazi & Appolloni, 2022).

The fourth is regulatory inconsistency, since fragmented or contradictory rules, and audit regimes that continue to privilege lowest price, expose officers to risk when they pursue whole life value and deter the behaviour that sustainable procurement requires (OECD, 2023; Omwange & Juma, 2025). These barriers are the practical obverse of the enabling conditions, and addressing them is a precondition for the value generating potential of sustainable procurement to be realised.

Proposed Conceptual Framework and Propositions

The preceding analysis is consolidated into a conceptual framework that specifies the relationship between sustainable public procurement practices and value for money, together with the conditions that govern its direction and strength. In the framework, the three dimensions of sustainable procurement, expressed through the six practice clusters analysed in section seven, constitute the independent construct.

Value for money, expanded to encompass economy on a whole life basis, efficiency, effectiveness and equity, constitutes the dependent construct. Organisational capability mediates the relationship, since it is the mechanism through which practices are translated into value. Leadership commitment, supplier market maturity and regulatory clarity moderate the relationship, strengthening it where present and weakening it where absent. The institutional environment provides the backdrop that drives adoption and conditions the risk of ceremonial compliance.

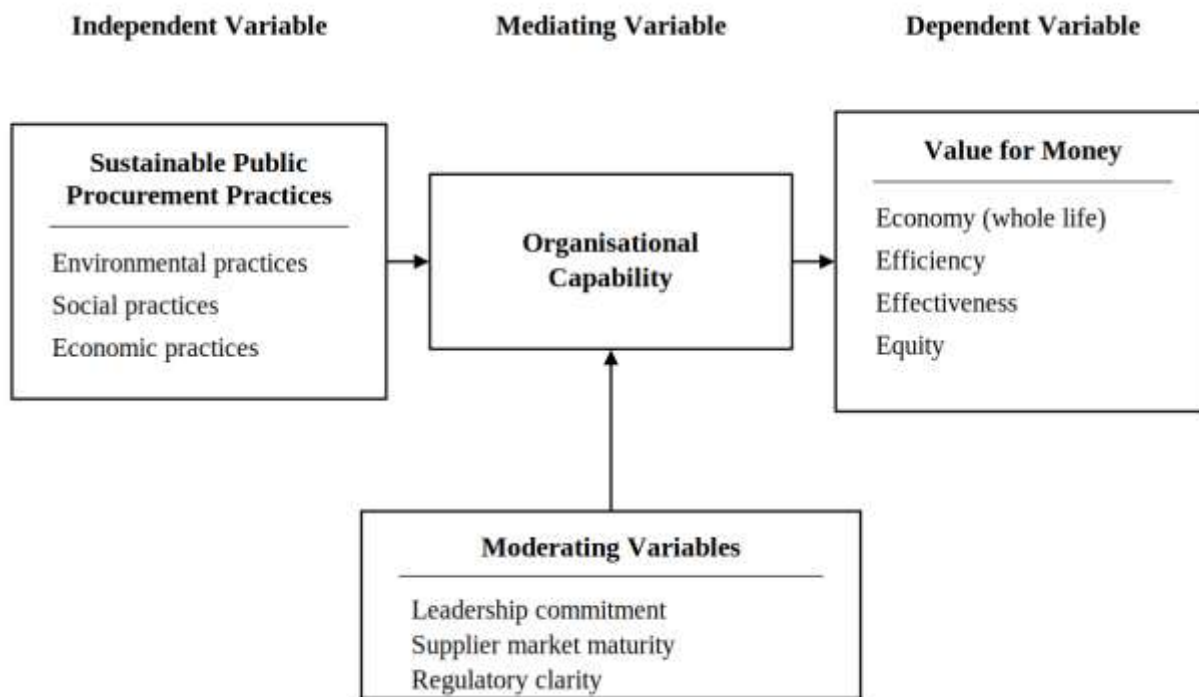


Figure 1. Conceptual framework linking sustainable public procurement practices and value for money

The framework can be summarised as a causal chain. Institutional pressures prompt the adoption of sustainable procurement practices. Those practices, operating through organisational capability, influence value for money. The strength and direction of that influence depend on leadership commitment, supplier market maturity and regulatory clarity. Where the moderating conditions are favourable, the net influence on value for money is positive; where they are unfavourable, it may be neutral or negative. The framework thus reconciles the integrative definition of sustainable procurement with the practical experience of cost, by locating the difference between the two in identifiable and addressable conditions.

From the framework the following propositions are derived for empirical examination.

Proposition 1. When value for money is assessed on a whole life cost basis rather than on acquisition price, sustainable public procurement practices are positively associated with value for money in public organisations in developing economies.

Proposition 2. Organisational procurement capability mediates the relationship between sustainable public procurement practices and value for money, such that the positive influence of sustainable practices increases with the level of organisational capability.

Proposition 3. Leadership commitment to sustainability moderates the relationship between sustainable public procurement practices and value for money, strengthening the positive association where commitment is high.

Proposition 4. Supplier market maturity moderates the relationship, such that the value for money benefits of sustainable practices is greater where the supplier market is more developed and capable of meeting sustainability requirements at competitive cost.

Proposition 5. Regulatory and policy clarity that explicitly authorises whole life cost and sustainability considerations moderates the relationship, strengthening the positive association between sustainable practices and value for money.



Proposition 6. Electronic and transparent procurement practices exert a direct positive influence on value for money in developing economies by reducing leakage and transaction costs, independent of the moderating conditions affecting other sustainable practices.

These propositions are advanced as analytically grounded conjectures rather than as established findings. They are intended to render the framework testable and to structure the empirical agenda set out below.

Distinctiveness of the framework

The framework differs from prevailing treatments of the subject in three respects. First, it inverts the customary framing. Whereas much of the practitioner and policy discourse begins from the premise that sustainability competes with value for money and asks how the resulting cost might be justified, the framework begins from a corrected definition of value for money and asks under what conditions sustainability contributes to it. Second, it is explicitly conditional. Rather than asserting a uniform positive or negative relationship, it specifies a mediator and a set of moderators that determine the direction and strength of the relationship, thereby accommodating the conflicting findings of the empirical literature within a single coherent structure. Conflicting results, on this account, reflect differences in the underlying conditions rather than a fundamental indeterminacy in the relationship. Third, it is contextually grounded. The selection of mediator and moderators is informed by the specific realities of developing economies, where capacity constraints, immature supplier markets and governance deficits are not peripheral complications but central determinants of outcomes. The framework is therefore offered not as a universal law but as a context sensitive explanatory structure, and its propositions invite testing across the diverse settings that the category of developing economies encompasses.

Implications

Implications for theory

The framework contributes to theory by reframing the relationship between sustainability and value for money from a trade off into a conditional and frequently complementary relationship, and by specifying the mechanism, namely organisational capability, and the conditions that govern it. It demonstrates the analytical purchase of integrating institutional theory, stakeholder theory, the resource-based view and the triple bottom line, each of which illuminates a distinct facet of the relationship. By foregrounding the conditions of developing economies, it also extends a literature that has been dominated by high income settings and cautions against the uncritical transfer of procurement models across very different institutional environments.

Implications for policy

For policymakers, the analysis indicates that the realisation of value through sustainable procurement depends less on the existence of sustainability policy than on the alignment of the wider procurement system with it. Legislation should explicitly require whole life cost appraisal and authorise sustainability criteria, audit practice should be aligned so that officers are not penalised for pursuing whole life value, and investment in procurement capacity and in electronic procurement systems should be treated as foundational rather than optional. Supplier development programmes should accompany demanding sustainability requirements so that the supplier market can mature alongside the policy.

A further policy implication concerns the sequencing and pacing of reform. Because the value generating potential of sustainable procurement is conditional on capacity and market maturity, the simultaneous imposition of demanding sustainability requirements across all categories of spending is likely to overwhelm both procuring organisations and suppliers, producing higher costs and ceremonial compliance. A graduated approach, in which requirements are introduced first in categories where the supplier market is ready and capacity is strongest, and then extended as capability grows, is more likely to preserve value for money throughout the transition. Policy should also distinguish between the practices that deliver value with modest demands on capacity, such as electronic and transparent procurement, and those that are more capacity intensive, such as comprehensive whole life costing, and should support each accordingly.



Implications for practice

For procurement leaders, the analysis offers a sequenced approach. Electronic and transparent procurement, which improves value for money directly and with modest demands on capacity, provides a natural starting point. Whole life costing should be embedded in evaluation so that the true economy of sustainable options is visible. Sustainability criteria should be designed to be ambitious yet attainable by the existing supplier market, and supplier development should be used to raise capability over time. Throughout, investment in the technical skill of procurement officers is the decisive determinant of whether sustainability is experienced as value or as cost.

Limitations and Future Research

As a conceptual study, this paper is subject to the inherent limitation that its framework and propositions are analytically derived and have not been empirically tested. The narrative synthesis on which it rests, while structured and current, does not claim the exhaustive coverage of a full systematic review. The treatment of developing economies as a category also abstracts from substantial heterogeneity among such economies, and the framework should be applied with sensitivity to particular institutional contexts.

Three further limitations follow from the conceptual and synthesis-based character of the study and set the priorities for future work. First, the framework and its propositions are analytically derived and have not been empirically tested, so the direction and strength of the proposed relationships remain to be established through primary research. The most immediate priority is therefore empirical validation, through surveys of procurement agencies analysed with structural equation modelling, through case studies of individual organisations, and through quantitative analysis of procurement outcome data, in order to test the mediating role of organisational capability and the moderating roles identified here. Second, the reliance on a structured narrative synthesis, rather than a fully systematic review with predefined inclusion protocols, introduces a risk of selection bias in the evidence drawn upon, and future work would benefit from a systematic review or meta synthesis with transparent and reproducible selection criteria. Third, the treatment of developing economies, although qualified in section six, necessarily abstracts from substantial heterogeneity among such countries, and comparative, country specific studies that hold the framework constant while varying the institutional setting would clarify the conditions under which sustainable procurement delivers value.

These limitations define a clear research agenda. The propositions invite empirical testing through survey-based studies employing structural equation modelling to examine the mediating role of capability and the moderating roles of leadership, supplier maturity and regulatory clarity. Comparative case studies across organisations and countries would illuminate the conditions under which sustainable procurement delivers value, and longitudinal studies would capture the market transformation and supplier development effects that unfold over time. Sector specific investigation, for example in construction, health and education, would refine the framework, and the development of validated instruments for measuring expanded value for money would advance the field as a whole.

CONCLUSION

This paper set out to analyse how sustainable public procurement practices influence value for money in developing economies, and to resolve the apparent conflict between the two. Its central conclusion is that the conflict is largely an artefact of a narrow conception of value for money that equates value with lowest acquisition price. When value for money is reconstructed around whole life cost and public value, sustainable procurement practices are revealed to be, under identifiable conditions, a means of achieving value rather than an obstacle to it.

The analysis has shown that the influence of sustainable procurement on value for money operates through six practice clusters and is mediated by organisational capability and moderated by leadership commitment, supplier market maturity and regulatory clarity. It has integrated institutional theory, stakeholder theory, the resource-based view and the triple bottom line into a coherent explanation, and it has expressed that explanation as a



conceptual framework and six testable propositions. For the public sector of developing economies, where procurement commands so large a share of national resources, the practical significance of the argument is considerable. By aligning the measurement of value with the realities of whole life cost and public value, and by investing in the conditions that convert sustainability into value, governments can pursue environmental protection, social inclusion and durable economic development without sacrificing the value for money that public accountability demands. The framework offered here is intended to guide both that practical endeavour and the empirical scholarship needed to refine it.

REFERENCES

1. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
2. Cheng, W., Appolloni, A., D'Amato, A., & Zhu, Q. (2018). Green public procurement, missing concepts and future trends: A critical review. *Journal of Cleaner Production*, 176, 770-784. <https://doi.org/10.1016/j.jclepro.2017.12.027>
3. DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48(2), 147-160. <https://doi.org/10.2307/2095101>
4. Elkington, J. (1997). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone Publishing.
5. Etse, D., McMurray, A., & Muenjohn, N. (2022). The effect of regulation on sustainable procurement: Organisational leadership and culture as mediators. *Journal of Business Ethics*, 177(2), 305-325. <https://doi.org/10.1007/s10551-020-04752-6>
6. Etse, D., McMurray, A., & Muenjohn, N. (2023). Sustainable procurement practice: The effect of procurement officers' perceptions. *Journal of Business Ethics*, 184(2), 525-548. <https://doi.org/10.1007/s10551-022-05150-w>
7. Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Pitman.
8. Grandia, J., & Meehan, J. (2017). Public procurement as a policy tool: Using procurement to reach desired outcomes in society. *International Journal of Public Sector Management*, 30(4), 302-309. <https://doi.org/10.1108/IJPSM-03-2017-0066>
9. International Institute for Sustainable Development. (2025). *How public procurement can help drive sustainable development*. IISD.
10. Islam, M. M., Murad, M. W., McMurray, A. J., & Abalala, T. S. (2017). Aspects of sustainable procurement practices by public and private organisations in Saudi Arabia: An empirical study. *International Journal of Sustainable Development and World Ecology*, 24(4), 289-303. <https://doi.org/10.1080/13504509.2016.1209794>
11. Kauppi, K. (2013). Extending the use of institutional theory in operations and supply chain management research: Review and research suggestions. *International Journal of Operations and Production Management*, 33(10), 1318-1345. <https://doi.org/10.1108/IJOPM-10-2011-0364>
12. McCrudden, C. (2004). Using public procurement to achieve social outcomes. *Natural Resources Forum*, 28(4), 257-267. <https://doi.org/10.1111/j.1477-8947.2004.00099.x>
13. Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), 340-363. <https://doi.org/10.1086/226550>
14. Nangpiire, C., Gyebi, F. O., & Nasse, T. (2024). Sustainable procurement practices and organisational performance of small and medium enterprises in Ghana. *International Journal of Economics and Financial Issues*, 14(1), 95-106.
15. Nsiah-Sarfo, D. J., Ofori, D., & Agyapong, D. (2023). Sustainable procurement implementation among public sector organisations in Ghana: The role of institutional isomorphism and sustainable leadership. *Cleaner Logistics and Supply Chain*, 8, 100118. <https://doi.org/10.1016/j.clscn.2023.100118>
16. Organisation for Economic Co-operation and Development. (2023). *Government at a glance 2023: Public procurement*. OECD Publishing.
17. Omwange, G. O., & Juma, D. (2025). Sustainable procurement practices and performance of state corporations in Kisii County, Kenya. *International Journal of Supply Chain and Logistics*, 9(6), 1-19.



18. Ortega Carrasco, P., Iannone, F., Ferron Vilchez, V., & Testa, F. (2025). Green public procurement as an effective way for sustainable development: A systematic literature review and bibliometric analysis. *Sustainable Development*, 33(2), 2364-2391. <https://doi.org/10.1002/sd.3234>
19. Preuss, L. (2009). Addressing sustainable development through public procurement: The case of local government. *Supply Chain Management: An International Journal*, 14(3), 213-223. <https://doi.org/10.1108/13598540910954557>
20. Qazi, A. A., & Appolloni, A. (2022). A systematic review on barriers and enablers toward circular procurement management. *Sustainable Production and Consumption*, 33, 343-359. <https://doi.org/10.1016/j.spc.2022.07.013>
21. Sonnichsen, S. D., & Clement, J. (2020). Review of green and sustainable public procurement: Towards circular public procurement. *Journal of Cleaner Production*, 245, 118901. <https://doi.org/10.1016/j.jclepro.2019.118901>
22. Testa, F., Annunziata, E., Iraldo, F., & Frey, M. (2016). Drawbacks and opportunities of green public procurement: An effective tool for sustainable production. *Journal of Cleaner Production*, 112, 1893-1900. <https://doi.org/10.1016/j.jclepro.2014.09.092>
23. United Nations Environment Programme. (2022). Global review of sustainable public procurement. UNEP.