

Advancing Sustainable Public Procurement (SPP) in the Infrastructure Sector in Bangladesh

Policy Brief



1 EXECUTIVE SUMMARY

The commitment of Bangladesh to sustainable development is evident from their adoption of the *Sustainable Public Procurement (SPP) Policy 2023*, which provides a framework for integrating sustainability criteria into public procurement. The infrastructure sector¹ plays an important role in the country's developmental journey. Bangladesh is among the most vulnerable countries worldwide to climate change as well as to induced extreme weather events resulting in frequent flooding and infrastructure destruction. Successful implementation of SPP is pivotal for attaining the Nationally Determined Contributions (NDC) and Sustainable Development Goals (SDGs) for Bangladesh, specifically for building high-quality, climate-resilient infrastructure.

This Policy Brief assesses the opportunities to leverage the SPP policy within the infrastructure sector, and identifies key recommendations for policymakers and development partners to support sustainable and resilient infrastructure development via a national SPP policy. The Brief also identifies innovative strategies to further enhance the currently planned implementation of SPP in Bangladesh.

1 For purposes of this policy brief, 'infrastructure' refers to building and construction activities.

2 INTRODUCTION

Bangladesh has made significant progress in infrastructure development over the past decade, with major investments in transportation, energy, and urban development. Projects like the Padma Bridge, Dhaka Metro Rail, and Karnaphuli Tunnel symbolise the country's commitment to provide quality infrastructure for citizen needs. However, these developments have not always accounted for the environmental or social impacts of construction, operation, and maintenance despite the inclusion of an Environmental, Health and Safety (EHS) framework in donor-funded projects. It is, therefore, critical that EHS concerns are adequately understood during planning stage of infrastructure project cycle and accounted for in procurement strategies.

The infrastructure sector in Bangladesh, particularly the building and construction sector, presents a case study for the integration of SPP principles given the scale of expenditure and the impact on society and the environment. Given the government's heavy investment in infrastructure projects like road networks, bridges, and public buildings, incorporating SPP principles could lead to significant environmental and social benefits.

SPP Policy 2023 provides a structured framework for integrating sustainability into the procurement process, focusing on life-cycle costing, resource efficiency, climate resilience, and social inclusion. The policy promotes the use of environmentally friendly materials and technologies that minimise ecological impact and encourage resource efficiency. By focusing on optimising costs over the whole life cycle, and quality or fit-for-purpose to meet customer expectations, the sector can achieve greater sustainability outcomes while ensuring better value for money.

However, despite the existence of the policy, the practical implementation of SPP across the infrastructure sector could be limited due to a variety of implementation challenges, such as lack of awareness and market readiness, and also because the SPP policy was adopted only in 2023. This policy brief will highlight key sectors where SPP can be effectively applied and will provide strategies to align Bangladesh's infrastructure investments with the SDGs.

3 WAY FORWARD TO OPERATIONALISE SPP IN INFRASTRUCTURE DEVELOPMENT

To fully operationalise the *SPP Policy 2023*, Bangladesh must undertake coordinated actions across multiple sectors, but especially with respect to infrastructure development. The following steps, which have already been envisaged in the *SPP Policy 2023* at a general level, are essential to ensuring successful implementation in the infrastructure sector:



Capacity building for SPP implementation: Government officials, procurement officers, and private contractors need targeted training on SPP practices, which will equip them with the knowledge and skills to integrate sustainability criteria into the planning, design, and execution of infrastructure projects. Additionally, international development partners can support capacity-building efforts through technical assistance and knowledge exchange programmes.



Operationalising SPP guidelines in infrastructure projects: While the *SPP Policy 2023* outlines general guidelines for sustainable procurement, specific operational procedures and capacity-building measures are necessary for the infrastructure sector. Ministries and agencies responsible for infrastructure projects, such as the Local Government Engineering Department (LGED) and the Roads and Highways Department (RHD), should develop sector-specific guidelines to apply SPP principles in areas such as materials selection, energy and water efficiency, waste management, and construction practices. Integrating these criteria into tendering and contract management processes will ensure that contractors offering sustainable and innovative solutions are incentivised in

procurement for infrastructure development. It is therefore essential that the government prioritise the issuance of mandatory SPP Guidelines that incorporate the minimum SPP policy provisions in Standard Bidding Documents (SDB).



Developing sector-specific SPP roadmaps: Each infrastructure-related ministry and department should develop sector-specific roadmaps for SPP implementation, which should include clear targets for adopting green technologies, reducing carbon footprints, and enhancing resource efficiency in infrastructure projects. The roadmaps should align with the broader national development strategies, such as Vision 2041, Climate Change Strategy and Action Plan, and the UN Sustainable Development Goals (SDGs).



Attracting development partners: Development partners such as the World Bank, ADB, and other international agencies play a critical role in supporting the implementation of SPP. By aligning donor-funded projects with the *SPP Policy 2023*, Bangladesh will be able to leverage external funding and expertise to accelerate the adoption of sustainable practices in infrastructure development.

4 POLICY RECOMMENDATIONS FOR A STRONG UPTAKE IN THE INFRASTRUCTURE SECTOR



Strengthen policy implementation: To ensure consistent application of provisions of *SPP Policy 2023*, the government should establish a dedicated Sustainable Public Procurement (SPP) Unit within the Bangladesh Public Procurement Agency (BPPA). This unit would be responsible for coordinating SPP-related initiatives, providing guidance on incorporating environmental and social criteria into tender processes, and closely monitoring project execution to ensure compliance. This Unit should also play a key role in building capacity among procurement officials, conducting market readiness assessments, developing mandatory green building standards, setting up a green directory of construction materials, and facilitating cross-agency collaboration. By instituting regular audits and progress reviews, the SPP Unit would ensure that sustainability remains a central focus throughout the project life cycle, driving accountability and encouraging the integration of green practices across all infrastructure initiatives.



Mandatory sustainability requirements in public infrastructure projects: Sustainability criteria, such as water consumption, energy efficiency, resource efficiency, and social inclusion, should be made mandatory for all public infrastructure tenders in sectors where the market is adequately prepared. In areas where capacity is not yet fully developed, such requirements should be introduced incrementally to drive market transformation and foster local industry readiness. By setting clear mandatory standards where feasible, Bangladesh can ensure that sustainability becomes a core, non-negotiable element of infrastructure development. This approach will not only ensure environmental and social benefits, it will also stimulate innovation and growth within key industries, positioning the country as a leader in green infrastructure development.



Generate demand and market shift through fiscal measures: The government can actively incentivise private contractors and suppliers to adopt green technologies and sustainable practices through a combination of fiscal and tax benefits, preferential access to green climate financing, and additional points in public tenders for companies that demonstrate a strong commitment to environmental and social standards. By offering tax incentives on the purchase of energy-efficient machinery, and granting easier access to low-interest loans or green bonds, the government can reduce the financial barriers to sustainability. Giving such preferential treatment in public procurement will encourage widespread adoption of green practices and foster market competition, driving innovation and sustainability within the private sector. These measures will create a virtuous cycle where sustainable investments are financially attractive and integral to doing business, accelerating Bangladesh's transition to a low-carbon, inclusive economy.



Establish a centralised SPP monitoring and evaluation system: The government should establish a centralised platform, linked to the e-GP system, to track SPP implementation and sustainability outcome across infrastructure sectors. This platform should allow the selection of green criteria from dropdown menus in tenders and enable real-time monitoring of sustainability outcomes. By offering transparency and accountability, it would ensure compliance with SPP goals while fostering greener procurement practices. The *SPP Policy 2023* calls for M&E frameworks that track compliance with sustainability criteria. Infrastructure agencies such as the Local Government Engineering Department (LGED) and Roads and Highways Department (RHD), etc. should adopt transparent M&E practices, including regular sustainability audits by a third party and reporting mechanisms against sustainability matrices, to ensure that projects meet the environmental and social goals outlined in the procurement policy.

5 INNOVATIVE STRATEGIES FOR IMPLEMENTING SPP IN BANGLADESH'S INFRASTRUCTURE SECTOR



Incorporating climate resilience in infrastructure design: The infrastructure in Bangladesh is highly vulnerable to climate hazards, including flooding, cyclones, and sea-level rise. Incorporating climate resilience into the planning and design of infrastructure projects is essential to reduce physical damage to infrastructure and limit loss of life, livelihoods and property. The World Bank has estimated that the financial return on investment in more resilient infrastructure in low- and middle-income countries like Bangladesh is huge, with a benefit of USD 4 in return for each dollar invested.² Adopting the principles of 'building back better' by utilising climate-resilient materials and designs at the planning stage of infrastructure projects itself is critical.

Insurance for infrastructure assets has become more expensive, as the vulnerability of such assets to climate change-induced disasters has increased. Some assets may not be worth insuring because the high cost of insurance does not justify the asset valuation. That said, the cost of insurance goes down with better climate resilience of the infrastructure. Although the cost of building such infrastructure might be higher, the costs are effectively offset by cheaper insurance.



Integrating circular economy principles: The construction sector in Bangladesh is a prominent consumer of resources, and public infrastructure projects account for a major share of domestic consumption of steel (40%) and cement (30%). This situation has led to increases in imported steel and cement clinker in recent years, at 17% and 10% per annum, respectively.³ Implementing circular economy principles in the infrastructure sector – such as resource efficiency, reusing construction materials, using hollow bricks, recycling of waste, and retrofitting of old structures – can reduce emissions, lower materials costs, and minimise waste. The replication of successful retrofitting of the Kanchpur Bridge by the Roads and Highways Department using carbon fibre reinforcement polymer (CFRP) instead of demolishing the old bridges set an example for future infrastructure projects to follow circular economy principles, while spending public funds responsibly. To mainstream such practices, the government should allow public agencies to consider retrofitting or repurposing existing infrastructure while mandating a greener and more efficient use of construction materials, including hollow blocks, low-carbon cement, recycled steel, and sand and water in public infrastructure projects.

² Hallegatte, Stephane; Rentschler, Jun; Rozenberg, Julie. 2019. Lifelines: The Resilient Infrastructure Opportunity. Sustainable Infrastructure. © Washington, DC: World Bank. <http://hdl.handle.net/10986/31805> License: CC BY 3.0 IGO.

³ Bangladesh Investment Development Authority; July 2019; Construction Materials Industry. Available at <https://bida.gov.bd/storage/app/uploads/public/616/6c3/877/6166c3877dabe508473704.pdf>



Promoting the use of greener construction materials: The *SPP Policy 2023* encourages the use of sustainable building materials, such as locally sourced and recycled materials, as well as energy-efficient technologies. To achieve this goal, the government should mandate the use of green materials such as hollow blocks, low-carbon cement, and recycled steel in public infrastructure projects, which is particularly important as Bangladesh is dependent on imports for major construction materials such as steel, cement and aggregates. The Government needs to strengthen national standards, voluntary standards, and ecolabels for widely used construction materials, keeping sustainability and climate objectives in mind. Additionally, public procurement processes should prioritise suppliers who meet environmental certifications, such as Leadership in Energy and Environmental Design (LEED) for public building infrastructure. The Government could also provide fiscal/tax incentives to support such innovations/technology and create local manufacturing capacity for to replace imported construction materials. In the long term, fiscal incentives strengthen local enterprises and generate government revenue in innovative sectors.

6 CONCLUSION

For Bangladesh, the *Sustainable Public Procurement (SPP) Policy 2023* marks a transformative milestone in the quest for sustainable development, especially in the infrastructure sector. However, the success of this policy hinges on more than just adoption: it will require strategic execution driven by coordinated action from government bodies, the private sector, and international development partners. By crafting and enforcing sector-specific strategies, strengthening accountability mechanisms, and prioritising capacity building, Bangladesh has a unique opportunity to align its infrastructure growth with sustainability goals. The implementation of SPP will not only elevate the quality, efficiency, and climate resilience of public infrastructure, but it will also catalyse the country's leadership in regional sustainability efforts. This bold policy step has the potential to reshape the country's development trajectory, turning Bangladesh into a model for sustainable infrastructure development, both economically and environmentally, across South Asia.



www.switch-asia.eu



EU SWITCH-Asia Programme
@EUSWITCHAsia



SWITCH-Asia
@SWITCHAsia



SWITCH-Asia Official
@switch-asia-official