

Strategic Plan for Sustainable Procurement of Construction/ Infrastructure

1. BACKGROUND

The One Planet network has developed 'One Plan for One Planet' strategy 2019-22. In order to achieve specific objectives of 'One Plan for One Planet', the Sustainable Public Procurement (SPP) Programme has identified procurement of works (Construction/ Infrastructure) as one of the priority areas for 2019-22.

The rationale for choosing this area rests on the fact that most countries spend more than 50% of their total expenditure on public procurement for procurement of works. The works include new construction of structures of all kinds (buildings, highways, bridges, water & sewage treatment plant, transmission lines, renewable power generation etc.), renovations, extensions, and repairs¹. As per UNCTAD, developing countries alone would need investment to the tune of \$ 1.6-2.5 trillion annually from 2015 to 2030 to meet infrastructure demand so that no one is left behind. China, through its Belt and Road Initiative, has already pledged \$1 trillion to Belt and Road projects. Approximately, half of the Multilateral Development Banks (MDBs) lending to developing countries goes to infrastructure projects. The scale of investment going into the sector in next two decades has potential to create havoc with natural resources and cause irreversible damages to environment and natural habitats if sustainability consideration is not taken into consideration in business decision. However, the unrealised demand in developing and poor countries means that majority of the infrastructure is yet to be built, so offers a unique opportunity for countries to accelerate the transitions towards low-carbon, climate resilient and sustainable economy by mainstreaming sustainability in procurement phase of infrastructure.

1.1 Procurement as a strategic tool

Procurement of works begins with project planning and goes through different phases for final delivery of intended works. The decision made during the procurement phase has impacts on the whole life cycle of infrastructure, beginning with how the infrastructure is planned and designed to how it is dismantled, repaired and reused at the end of life. That is why the procurement phase of the infrastructure cycle presents perhaps the most critical opportunity to deploy sustainable infrastructure². The rationale for leveraging procurement phase as a tool is based on several important learnings. Firstly, in developing and emerging economies, about 60–65% of the cost of infrastructure projects is financed by public resources³. Secondly, it is the stage at which governments /clients go to a market and issue public tenders in an effort to seek out bidders that offer the best for 'Value for Money' (VfM). Thirdly, procurement acts as a gatekeeper and choices exercised at this stage of procurement on the kind of products and services has a significant bearing on overall impact on environment and wellbeing of people. By demanding greener products, works and services, the government can minimize (if not eliminate) negative impacts of infrastructure during its construction, operation and use on the environment and society. And finally, the procurement cycle enables lifecycle thinking to be applied across the construction, use and disposal phases of infrastructure projects.

¹ <https://procurementclassroom.com/public-procurement-categories/> accessed on 06.04.2019

² The role of Public Procurement in Deploying Sustainable Infrastructure, IISD, 2016

³ The Sustainable Infrastructure Imperative – Financing for better growth and development, 2016



Source: Action Sustainability

The traditional linear method to achieve VfM has significant shortcomings, which undermine the delivery of wider government objectives. Firstly, it does not consider all economic costs over the entire life cycle of the project when arriving at the lowest price. This in turns leads to misallocation of resources, hindering innovation and poor return on investment. Secondly, it does not capture the negative externalities caused during execution, operation, use and dismantling of the infrastructure on environment and society. Thirdly evaluation criteria based on least cost can significantly increase environmental impacts compared with other market ready solutions. Therefore, the VfM as a concept has to be broadened to include social and environmental externalities or factors such as employment creation, support for vulnerable groups, or local content etc. to better utilise tax payers' money and achieve wider sustainability objectives of the government.

In the traditional system of design-bid-build procurement, many important decisions about a construction/infrastructure project are often made before procurement comes into play i.e. during the development of business case and design in the Planning phase. If sustainability is not considered strategically during this phase, procurement would often get locked in decisions that have been made prior to their involvement and procurement strategy would have limited leverage to encourage and influence the market. However, in design-build procurement, bidder has ample opportunity to come up with innovative design, use alternative/secondary materials and do things differently to achieve better sustainability outcome. Therefore, the choice of procurement method too has a bearing on delivery of sustainable outcomes during the life cycle of the construction/infrastructure. Further construction industry is unique and each project throws up different challenges. This rules out "one size fits all" solution and each project needs to consider their unique impacts on the environmental, social and economic setting.

1.2 Progress of implementation of sustainable procurement of works

In order to understand the existing practices, challenges and gaps in implementation in members countries, a detailed study was carried out through multi-stakeholder process. It

involved taking inputs from the member of the Task Team⁴, collating that information and fine-tuning the findings during online consultation process. The Situation Analysis gave the following key insights on existing practices in member countries.

- The EU [directive 2004/18/EC](#) gives option to organisation to choose “ Most Economically Advantageous Tender” as evaluation criteria to obtain the best value for money. This has promoted adoption of the Most Economically Advantageous Tender (MEAT) as evaluation criteria in European countries for procurement of works. In the course of implementation, countries have developed many tools, guidelines and best practices on procurement of works
- The One Planet Sustainable Building and Construction Programme has been active in championing the cause of integrating sustainability in building sectors and has supplemented governments efforts to green this sector.
- The use of secondary materials, which is critical to closing material loops, has become a common practice in many countries and been growing in many non-industrialized countries even though they don't have an overarching sustainable public procurement policy.

It was noted that the progress in adoption of sustainability consideration in construction has been hindered by many barriers such as the Construction/infrastructure industry's fragmented nature, lack of long term perspective, clients' unwillingness to share the risk burden and lack of awareness, which seems to be problematic in both the developed and the developing worlds⁵. Therefore, more effort is needed to reach a common understanding of the issues representing different dimensions, highlighting the relevance of such issues to the different parties, linking them to the project life cycle and defining how they can be addressed within this cycle.

The Situation Analysis highlighted the following challenges that are hindering progress of sustainable procurement of works in these countries.

- The current Legal and regulatory public procurement frameworks do not facilitate sustainable procurement of works in many countries.
- The lack of awareness and corporate commitment to lifecycle thinking and circular economy have meant that the economic case for embedding sustainability in procurement of works is still not understood by most decision makers. This is further hindered by lack of a comprehensive method for lifecycle costing/Total Cost of Ownership as evaluation criteria.
- Resources such as tools, guidelines and best practices are not readily available to procurers at local, regional or national levels. Even if such tools are readily available in many regions such as Europe and North America, their application in actual practices is limited due to lack of awareness, mismatch with the corporate policy, difficulties in applying these criteria etc. In other regions, the existing tools are simple not fit for purpose due to client and market immaturity.
- There is in general lack of resources and awareness on sustainability in many low and developing countries. As a result. sustainability has not yet moved upward in the list of priorities for the nation.

⁴ The Task Team consisted of members of One Planet Network, who voluntarily chose to work on this project.

⁵ Amr Sourani,, A review of sustainability in construction and its dimensions, Loughborough University

Addressing these challenges would require breaking down the sustainability concept from the abstract level, making more use of examples that could facilitate better understanding of the concept, and providing simpler and more structured guidance. Training on sustainable procurement particularly at the level of senior procurement decision makers and other stakeholders needs to be provided in government organisations.

2 OBJECTIVES

The broad objective is to support implementation sustainable procurement of works on the grounds by making existing resources (tools, guidelines, best practices etc.) available to procurers at regional, national and local level. Under this broad objective, the following sub-objectives were identified to address above challenges in embedding sustainability in different phases of procurement of works (Figure-1).

Objectives of Strategic Implementation Plan

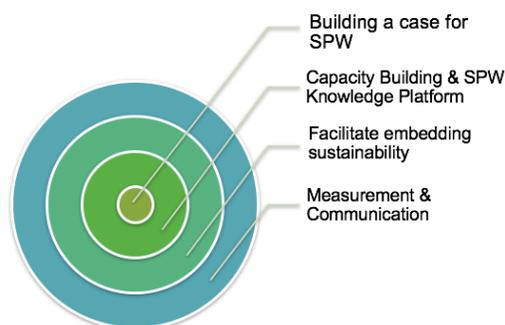


Figure 1: Objectives of Strategic Implementation Plan

The Task Team realised that these objectives are fundamental to address existing gaps in implementation of sustainable procurement of works in member countries. Each objective is proposed to be backed by various activities to realise the respective objective. The timeline of various activities proposed to be carried out under strategic implementation plan is shown in the Figure-2.

2.1 Building a case for Sustainable Procurement of Works

The decision makers and budget controllers have not yet fully realised the benefits of embedding sustainability in procurement decision in many countries. Even if stakeholders realise such benefits, they are unable to implement necessary changes due to process barriers, inertia, lack of time etc. Therefore, building a business case for embedding sustainability in procurement decision, communicating these benefits to stakeholders and soliciting political and leadership support would be crucial for taking this work forward. It is realised that procurement professionals can no longer be an outlier in the process but have to be part of the process to find solutions for scaling up sustainability in procurement of works. A combination of desk review and online survey is proposed to gather evidences of challenges for embedding sustainability in procurement of works and tools employed by organisations to address those challenges. The result of this desk review and online survey is proposed to be discussed in a regional workshop of key stakeholders to understand their actual needs. At the same time, effort needs to be made to leverage financial power of the World Bank, Multilateral Development Banks (MDBs), New Development Bank (NDB) and other financial institutions to get political and leadership support of member countries on sustainable procurement of works. It is

acknowledged that UNE is uniquely positioned to start a strategic dialogue with these institutions and garner their support for its implementation in projects funded by them.

2.2 Sustainable Procurement of Works Knowledge Platform (SPWKP)

It has been found that despite excellent procurement expertise, capacity of procurement professionals is often lacking in terms of awareness and technical capability to specify, evaluate, document and verify sustainability criteria in procurement process. Procurement professionals are looking for specific sustainability support such as model bid document, evaluation criteria, scoring methodology, contract languages etc. for embedding sustainability criteria in procurement of works at different stages of procurement cycle. The current resources are often generic, irrelevant and require time for segregating specific information. Therefore, the relevant resources are needed to be identified, catalogued and tagged with procurement stage. It is proposed to make available all these resources at a centralised place on the One Planet Network and call it Sustainable Procurement of Works Knowledge Platform (SPWKP). This would ensure easy access to procurers around the world. The idea here is not on creating a resource afresh but digging out the most relevant tools, guidelines and best practices and make them available to procurers in their native languages as far as possible. The effort would also be needed to disseminate existence of such platform to stakeholders.

This would further require creating standard training modules for different target groups that can be adopted in specific country context.

2.3 Facilitate embedding sustainability in procurement decisions

This focuses on addressing challenges, which are at the heart of implementation of sustainable procurement of works on the ground. It envisages creating model templates for RFP/ bid documents, sector wise a sustainability framework, including guidance and scoring criteria, contract language etc. which could be picked up and inserted/modified depending on the local context. This would also entail providing tools and guidelines to quantify and evaluate sustainability in procurement of works. The attempt would be made to link different RFP/evaluation methodology/contract condition etc. with specific examples already implemented in some or other parts of the world. Considering the huge amount of works that it would require, it is proposed to initially focus only on prioritised specific theme such as energy, water and resources from circular economy perspective.

2.4 Measurement of impacts

There is need to measure benefits accruing to organisation and country as a result of implementation of sustainable procurement of works on behalf of stakeholders. This helps in building the business case and facilitate adoption of similar initiatives in the same and sister organisations. The Group propose to develop standard methodology for evaluation of impact in collaboration with other partners of One Planet Network and test it with few organisations before sharing it for wider adoption by organisation and country around the world. An attempt would also be made to link the benefits with SDGs and One Planet Strategy.

2.5 Communication of impacts

There is need to communicate the measured benefits to stakeholders within project, at national level and internationally in order to accelerate take-up and scale. This helps continue to build the evidence base and business case and facilitate adoption of similar initiatives in the same and sister organisations. The Group propose to develop and implement a communications plan

in collaboration with UNE communication team to ensure that awareness of the methodology is raised; the methodology is taken up, that impacts and successes are reported and that lessons learned are acted on.

3.0 ACTIVITIES AND TIMELINES

The different activities proposed to meet above objectives have been further mapped on the time scale and is shown in the Fig:2. The timelines shown in the figure is indicative and would depend on mobilisation of resources for undertaking those activities and commitment by members and UNE secretariat.

The activities shown in blue colour above is to be undertaken by the UNE secretariat but they are expected to play a pivotal role in undertaking other activities too. While the objective of Capacity Building and Creation of SPW Knowledge Platform is focused on making existing policy, procedures, tools, criteria etc. available to all procurers across the globe, the objective of Facilitating embedding sustainability in procurement of works is focussed on developing various template for different procurement cycle so that these templates could be harmonised to the local conditions and adopted without much hassles by procurers in different countries.

In nutshell, the Group aims to achieve the goal of mainstreaming sustainability in procurement of works by focussing on various activities on the ground. While some activities are short term in nature the other activities require long term sustained action by the group members. Further, both bottom up and top-down approaches have been conceived to meet the goal.

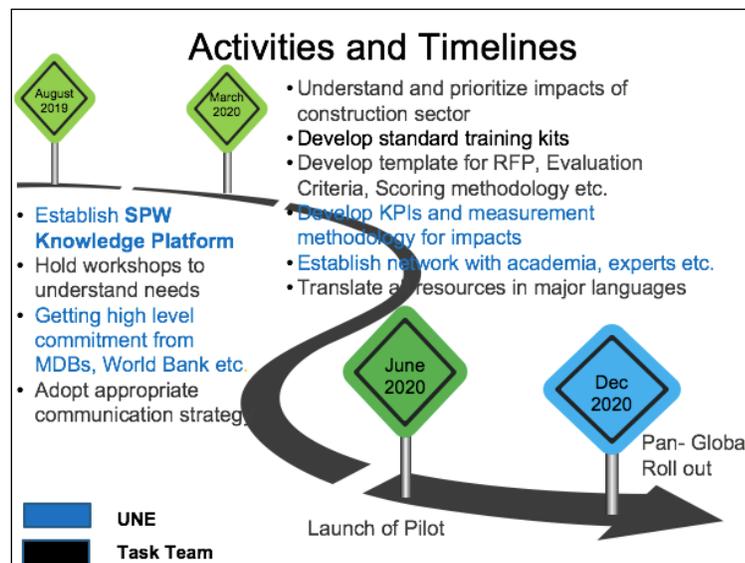


Figure 2: Activities and timelines

4. PROJECT BUDGET

The estimate of expenditure for undertaking different activities has been worked out and is tabulated in the Table-1. Indian Railways is committed to provide in-kind supports for providing secretarial services for coordinating above activities. The group has identified different sources of funding that could be mobilised to support these activities within the project timeline.

TABLE -1

SN	Description of Activities	Timeline (in month)	Unit Cost (in USD)	No of units	Total Cost (in USD)
1.	Establish SPW Knowledge Platform	30	500000	1	500000.00
2.	Hold regional workshops to understand the needs of procurers (25 participants)	6	25000.00	4	100000.00
3.	Getting high level commitment from MDBs, World Bank etc.	6	10000.00	1	10000.00
4.	Adopt appropriate communication strategy	3	In collaboration with UNE Communication team		
5.	Understand and prioritize impacts of construction sector	12	Open a UNE Chair in a university and entrust this work		
6.	Develop standard training toolkits	12	20000.00	1	20000.00
7.	Develop template for RFP, Evaluation Criteria, Scoring methodology etc.	12			
8.	Develop KPIs and measurement methodology for impacts	18	In collaboration with Group on Measurement		
9.	Establish network with academia, experts to develop roadmaps for key materials like concrete, cement, steel, asphalt etc.	6	10000.00	1	10000.00
10.	Translate relevant resources in English	12	15000.00	1	15000.00

Total Expected Expenditure – \$ 655,000.00

5. OPPORTUNITY FOR COLLABORATION

The Interest Group is in correspondence with the Healthcare Group. The Healthcare Group has given in-principle consent for collaboration with this group for construction of Hospital infrastructure. However, detail outline of collaboration is yet to be worked out. The Interest Group is also working on setting up a joint working group with SBC Programme.

It is believed that outcome of the Group could be used in the projects funded by the World Bank, MDBs, NDB and other bilateral funding agencies. It would be crucial for One Planet Network to begin a strategic dialogue with them for uptake of sustainable procurement of works in member countries. It is also recognised that the Group needs to bring in experts and institutions from private sector to undertake several activities.

The Interest Group has successfully concluded negotiation with Sustainable Supply Chain School, UK for using their resources by members countries.

6. MONITORING OF PLAN

The strategic implementation plan is proposed to be monitored by the current Task Team led by Indian Railways.

7. PROBABLE RISKS TO PROJECT

The entire strategic implementation plan has been developed considering this as a collaborative works. The success of the work would depend on the members contribution in terms of inputs, time and their bilateral engagement with appropriate authorities in respective countries.

The role of United Nations Environment remains very crucial in holding the group members together and initiating high level dialogue with the World Bank, MDBs, NDB etc. for bringing them on board.

8. MEMBERS OF THE TASK TEAM

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