Terms of reference (TOR)
Consultancy Services for Technical Support in the project “Decarbonizing the Textile Manufacturing Sector of Pakistan”

Introduction
Textile industries in Pakistan rarely comply with environmental regulations unless linked to international supply chains, where compliance is mandated by international market requirements and regulations. Locally, weak enforcement of regulations and lack of incentives to comply with environmental laws, has led to widespread non-compliance. There is not only a lack of private-sector capital available for investment in energy efficient technologies, but a general lack of awareness of the financial benefits of shifting to green production practices which leads to an unwillingness on the part of textile SMEs to change production patterns.

The proposed NAMA Support Project (NSP) aims to promote investments in renewable energy and green technologies to mitigate GHG emissions by providing access to finance, establishing a local market for resource efficient technologies and through advocacy and policy interventions.

The following are the key outcomes for the proposed NSP:

1. Improved access to finance for Energy Efficient and Renewable Energy technologies
2. Enhanced GHG mitigation in the textile sector of Pakistan
3. Enable regulatory environment for enhanced carbon-neutral development in the textile sector
4. Developed market for EE and RE technologies

The project will support better enforcement of environmental regulation, to achieve reduction in GHG emissions in the textile sector. Through the adoption of renewable energy and energy efficient technology, Pakistan’s textiles sector could reduce energy consumption by 22 percent, and save over $60 million in costs. The proposed NSP aims for an overall GHG reduction of 4.3 million tons. Moreover, at the end of the NSP, a strong domestic market for energy and resource efficient technologies will be well established making it easier for SMEs to acquire technologies that can help save energy and reduce their GHG emissions.
Objectives

The objective of this consultancy is to assist WWF-Pakistan in sectoral assessment, grading of technologies, formulation of decision support tools for financial institutes & devising Monitoring and verification protocols. The provision of advice, support and technical guidance is a key part of the consultancy services.

Scope of Consultancy

The consultant will be responsible for the delivery of the tasks assigned by WWF-Pakistan. The consultant will be bound for executing the duties as mentioned in the TORs.

The Project Advisor (Technical) will work closely with the project team and financial implementation partner in order to assess the feasibility to evaluate mitigation potential and conduct country wide market assessments for green technologies pertinent to textile sector, with a focus on creating more accessible and affordable clean energy financing solutions for the textile SMEs in Pakistan. The following are the key responsibilities;

1. Mapping of stakeholders on textile landscape relevant to resource consumption and defining their roles
2. Formulate verifiable resource efficiency & renewable energy profile of the local textile manufacturing sector of Pakistan which will include baseline assessment of resource consumption (water, priority chemicals like caustic) in textile spinning, weaving, processing, and garmenting mills of Pakistan
3. Work closely with project team & in consultation with identified stakeholders (as per 1) to establish readiness of textile industry for switching to green technologies
4. Map the renewable energy (PV, Solar Thermal & Biomass) potential specific to the textile clusters of Pakistan. The baseline assessment will highlight actual potential and existing utilization of renewables in the textile spinning, weaving, processing and garmenting mill of Pakistan
5. Identify Energy / Resource Efficiency of existing technology to determine eligibility and viability of replacing existing equipment with energy efficient alternatives
6. Conduct the cost benefit analysis of the proposed energy/resource efficient alternative technologies
7. Guesstimate the potential GHG emission reduction through adoption of proposed Energy Efficiency / Resource Efficiency technology
8. Identify suitable technical implementation partners for the project
9. Work closely with the project team in assisting to conduct baseline assessment and formulation of special purpose vehicle for access to finance for green technologies
10. Assist the project team in preparation of project documentation for bankable applications of green technologies including key performance indicators, preparation of performance contracting mechanisms and templates, loan proposal documentation and a specialized credit checklist to process any loan application
11. Support the project team in performing detailed bankable assessment of green technologies including development of technology packages for textile SMEs
12. Work closely with the project team to identify and assess potential for existing funding schemes for renewable energy that can be tapped for technologies proposed in the NSP
13. Conduct country wide analysis of existing green and renewable technology suppliers to assess the maturity level, expertise, skills along with technoeconomic features
14. Devise an expansion strategy to broaden the scope of the project to progressive SMEs & enterprises in the export-oriented textile manufacturing sector based on potential for scale up and replication
15. Explore the possibility of setting up secondary market for green technologies with an over-arching goal to incorporate buy-back clause with green technology vendors for the formulation of financial instrument
16. Provide input to the draft of detailed project proposal and coordinate with the Program Development Team (including but not limited to log frames, work plans, and budgets) with WWF-Pakistan’s various teams, global WWF Network, and other partners and stakeholders
17. Liaise with the government institutions, trade associations and other related stakeholders and organize consultative workshops on Green Technologies & the greenhouse gas mitigation interventions
18. Provide regular input to the project team for the development of project risk matrix
19. Any other responsibility assigned by the Project Director / Manager

REQUIREMENTS

- The consultant should have a PhD energy and/or environmental engineering or related discipline with 8-10 years’ experience or Masters in energy and/or environmental engineering or related discipline with a 10-15 years’ experience from a reputable international or Pakistani institution. Certificate or degree in alternative energy will be given preference.
- Experience in industrial resource efficiency and renewable energy projects or other relevant projects in the textile sector
- Preference will be given to candidates having experience with solar/renewable project
- Professional exposure of working in Pakistan
- Experience working in a multicultural environment preferred