

Terms of Reference for consultancy firm to conduct energy audit at 10 textile wet processing factories

Project: Greening Textile Program, funded by SDC and Tommy Hilfiger (40001917-402624-224148)
Work location: Consultants to be based in the North and South of Vietnam
Duration: January to May 2022

Background

Domestic fabric production and finishing is now considered in great demand for growth in the context of Vietnam's goals to boost its larger value added earnings from textile trade in the CPTPP and EVFTA, where the rule of tariffs removal is commonly applied for 'yarn forward' or 'fabric forward' sourcing internally in those FTAs' territories. At the same time, weaving and dyeing facilities are confronting scarcer and more expensive resources to reach their full production capacity. Water, energy is taking higher proportion of operational cost, while the cost for effluent of all kinds of wastes (wastewater, solid waste and gas emission) are peaking to comply with environmental regulations. Overexploitation of water, combining with drought and salt intrusion as the consequence of climate change have caused massive degradation in the quantity and quality of water aquifers. To its turn, water stress affects the energy production, as both hydro and thermal power plants heavily depend on water source. This time is more than ever when the business sustainability solutions is placing around the water and energy efficiency, renewable energy, and boosting resources' circularity.

Following the theory of change, behavioral change starts with change of knowledge and awareness for relevant stakeholders. As a science-based organization, WWF conducts a variety of researches to provide evidences of risk implications as well as practical solutions for stakeholders to address those risks. We aim to organize training seminar to transfer the knowledge to relevant parties. The engagement activities continue to ensure all relevant parties are required to engage and push the transformation process of the Textile sector becoming cleaner and environmental friendly, helping Vietnam Textile sector gaining brand "Sustainably made in Vietnam" instead of currently "Made in Việt Nam" one.

The green transformation journey at one textile-dyeing facility starts with a baseline energy audit which is to find out ineffective use of resources in the main production process or in auxiliary system and potential solutions to improve energy efficiency

Assignment Objective

This assignment aims at conducting energy audits at 10 textile wet processing factories

Field survey with selected factories to understand factory's energy consumption machines and equipment, analysis of efficiency, reflecting in indexes such as Specific Energy Consumption (SEC). The field visit also aim to explore common measures that textile enterprises have taken to improve energy efficiency and reduction in factory production and machinery systems. During the factory visit, meeting and interview with managerial and technical staff are to explore common measures that textile enterprises have taken to improve energy efficiency and reduction in factory production and machinery systems.

Assignment tasks

Specific tasks include:

- Take field study to each of 10 selected factories to conduct energy audit in order to collect energy consumption as well as evaluate performance efficiency of the companies/factories in SEC figures. The field study also conducts the inspection of key equipment and processes of companies to understand common measures already taken to improve energy efficiency and accordingly identify potential energy efficiency options;
- Compile and deliver audit report for each textile wet processing factories and suggest recommendations for energy sustainability improvement;

Deliverables

Consultancy firm will provide deliverables and respective timelines as below:

- Deliverable 1: 10 individual energy audit report, including analysis of SEC data
Ten (10) energy report to collect energy consumption, evaluate performance efficiency of the companies/factories in SEC figures, and recommend potential energy efficiency options; report submitted in either English or Vietnamese language, depending on individual factory's preferred language

Deliverables

- (a). 10 individual energy audit report, including analysis of SEC data.

Timeline

End of May 2022

Reporting line

This consultancy will be directly managed by WWF Vietnam's textile project manager. Relevant colleagues from WWF International and regional teams will provide indirect supervision.

Required Profile

Essential qualifications, knowledge and experts

- Consultancy firm to have excellent knowledge and experience of working with Vietnam textile sector in general and sustainability aspect in specific;
- Very familiar with the environmental dimension of the textile sector (i.e. water, energy, chemical and waste and wastewater management);
- Sound working skill to consolidate technical and financial data relating to resource efficiency practices
- Excellent experience in working with relevant departments at the ministerial and municipal level on environmental and water resource management in order to access to the secondary data on the water/energy use of enterprises;
- Good working experience at enterprise level, especially textile and garment enterprise;

- Experience working with research, primary and secondary data collection and other relevant professionals;
- Knowledge of pollution parameters and level of impacts
- Writing proficiency in English and Vietnamese languages.

Proposal format

- Proposal Cover Letter signed by a person authorised to sign on behalf of the Offeror;
- CV & Summary of relevant experience and projects;
- Technical Approach/Proposal for completing the deliverables;
- Work plan
- Financial proposal

How to apply

All proposals must clearly indicate the tender reference: “Ref. PR-HAN-FY22/0025 - **conduct energy audit at 10 textile wet processing factories**” and send via **email:** nga.hoangthanh@wwf.org.vn, cc: procurement@wwf.org.vn

The deadline for proposal submission is at **11:00AM, 27th January 2022.**

Late bids will be declared invalid.

“WWF is an equal opportunity employer and committed to having a diverse workforce.”