

CLOSING REPORT

COUNTRY MEASURE 04 - EVALUATING RENEWABLE THERMAL ENERGY OPTIONS FOR TEXTILE AND GARMENTS SECTORS IN BANGLADESH AND PAKISTAN – PREFEASIBILITY STUDY

Imprint

Authors: M. Salman Butt – Executive Director Espire Consult

Reviewer: Jürgen Porst – Team Leader – adelphi consult GmbH,
j.porst@adelphi.de

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CONTENTS

1. Background and Introduction	4
2. Objective and Content Summary	4
3. Trainers and Facilitators	Fehler! Textmarke nicht definiert.
4. Proceedings of the Workshop	Fehler! Textmarke nicht definiert.
4.1 Workshop Agenda	Fehler! Textmarke nicht definiert.
4.2 Workshop Delivery	Fehler! Textmarke nicht definiert.
4.3 Participants' Attendance	Fehler! Textmarke nicht definiert.
5. Workshop Evaluation by Participants	Fehler! Textmarke nicht definiert.
5.1 Evaluation results	Fehler! Textmarke nicht definiert.
5.2 Findings:	Fehler! Textmarke nicht definiert.
6. Repository of Training Material	5
7. Way Forward	Fehler! Textmarke nicht definiert.
Annexure 1: Workshop agenda	6
Annexure 2: List of Participants and Their Attendance	Fehler! Textmarke nicht definiert.
Annexure 3: Overall Evaluation Form	Fehler! Textmarke nicht definiert.

List of Abbreviation

FABRIC	Fostering and Advancing Sustainable Business and Responsible Industrial Practices in the Clothing Industry in Asia
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GHG	Green House Gas

1. Background and Introduction

The Regional Project “Promotion of Sustainability in the Textile and Garment Industry in Asia” (FABRIC) implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) addresses capacity building for academia in sustainability in textiles as one of the key Project’s crucial actions of target countries.

GIZ FABRIC supported H&M in conducting the study on replacing fossil fuel based thermal generation with renewable fuel (biomass, biofuel) in textile and garments sector in Bangladesh and Pakistan. The goals of the study were to identify potentials to reduce the GHG emissions with the focus on renewable energy resources. This includes three envisaged separates, sequenced but linked phases.

1. Phase-1: To conduct a pre-feasibility study on renewable fuel market and identify alternative renewable sources for boilers or thermal application replacing fossil fuel in textile and garments sectors of Bangladesh and Pakistan
2. Phase-2: To conduct a detail study on the most relevant and suitable renewable fuel source to use in boiler operation in the industry (Later excluded)
3. Phase-3: To support H&M to initiate a pilot in 8 - 10 factories and demonstrate the viability of renewable fuel boiler that will help to develop a business case for a much broader cross section of suppliers (Later excluded)

The Prefeasibility study presents the Phase-1 of the study However, the study was later limited to only Phase-1.

A consortium of consulting companies; adelphi consult of Germany taking the lead, and one consulting company from each of the three partner countries (Espire Consult in Pakistan, RCB in Bangladesh and TUV Rheinland in Vietnam); support GIZ for implementation of the environment component of the project; and, to conduct this study.

2. Objective and Content Summary

Objective:

The prefeasibility study on replacing fossil fuel based thermal generation with renewable fuel in textile and garments sector of Bangladesh and Pakistan assesses the suitability and technical viability of using (i) Bio-mass for generation of steam replacing natural gas, and (ii) solar water heaters to heat up process water instead of using steam.

Outcome:

The study provided H&M and the industry in general an overview of various feasible options for using renewable thermal energy, as well as outlook of available technologies and sources of renewable thermal energy.

The study was compiled in form following

- 1- A prefeasibility report combined for Bangladesh and Pakistan
- 2- Two presentations separate for Bangladesh and Pakistan

The study was later presented in the Regional Event (RE04) i.e., Webinar on Combating GHG Emissions through Using Solar Thermal and Biomass in Textile and Garments. The flyer is enclosed in Annexure-1

3. Researcher

The consortium assigned one international expert, Mr. Muhammad Salman Butt (Espire Consult) to conduct the prefeasibility study.

The expert was supported by following professionals for (i) identification of selected topics; (ii) collection of existing data and studies, (iii) provision of assistance/support in connecting to industry for data collection, and (iv) reviewing and finalizing the prefeasibility report.

- Abdun Noor (Reed Consulting)
- Arjmand Qayyum (Espire Consult)

In addition, commendable support was provided by following persons.

- Muhammad Abdullah Yousuf Khan (GIZ)
- Faisal Rabbi (GIZ)

4. Repository of Material

The training material produced for this program contains the following contents

- 1 Prefeasibility Study
- 2 PowerPoint presentations on the study for Bangladesh and Pakistan
- 1 PowerPoint presentation for the RE04 Webinar

All these contents are uploaded in relevant MS Teams folder for FABRIC

5. Annexures

Annexure 1: RE04 Webinar Agenda



Webinar on

**How fashion industries contribute to combating climate change?
Biomass and Solar Water Heating to reduce GHG emissions**

Feasibility studies from Bangladesh, Cambodia, Pakistan and Vietnam - conducted by GIZ FABRIC, Geres in collaboration with H&M - showcase solutions for industrial process heat to reduce GHG emissions of textile processing industries by using sustainable thermal energy options in Asia.

Speakers

 <p>Gundolf Klaehn GIZ</p>	 <p>Salman Butt Espire Consult</p>
 <p>Aude Petelot Geres</p>	 <p>Tanzida Islam H&M</p>

To register, please [click here](#) or go to tinyurl.com/fabric07 or  SCAN

**07 April 2022
Thursday**

12:00 PM Bangladesh
01:00 PM Cambodia
07:00 AM CET
02:00 PM China
11:00 AM Pakistan
01:00 PM Vietnam

(90 minutes)