

# Asian Dialogues on Sustainability in the Textile and Garment Industry

Online Seminar Series – Technical Seminars: A Deeper Dive

## What's the next – regional experiences sharing on building sustainable energy source in garment factories 02 August 2023

This online seminar invited the industry experts to share their practices and experiences on tackling regional variations in building sustainable alternative energy sources. Biomass as an alternative option plays an important role in transition from fossil fuel to renewable energy with lower carbon emissions.

Benefited by decades of the industry experiences, the invited panelists brought up discussions on those topics:

- What helps brands & retailers to have a strategic view on sustainable alternative energy sources when the suppliers are scattered in different countries.
- What a different approach to carbon emission reduction could be provided by innovative technology.
- What help from technology we could have to manage deforestation risk in biomass supply;

Two panel members with their onsite experiences provided their views and knowledge



### Peter Ford

Program Lead Climate, H&M Group

Peter Ford is based in H&M Group's Hong Kong office where he oversees country-level decarbonisation actions globally. He has probably the only climate change themed tattoo in H&M Group, which goes some way to explain his passionate focus on removing coal from across the supply chain.



### Francesco Carocci

Director, Khmer Green Charcoal (KGC) and renewable biomass energy advisor

Francesco's company recycles coconut shells and wood residues into sustainable charcoal products, saving 1 hectare of natural forest every 3 days. For that, KGC won first prize at the European Chamber of Commerce CSR award in 2019.

The online seminar comprised a lengthy panel discussion, followed by Q&A.

Peter Ford began by providing a context that brands supporting suppliers to build alternative sustainable energy supply and to improve energy efficiency in factories is the key for brands to reach their Science Based Targets. Learning from what Peter shared, the possible approaches to support suppliers could be:

- brands set up an in-house energy auditing team to analyze country or factory energy data. Support suppliers to form a more specific and accurate carbon emission reduction plan aiming at reducing ~25% emissions, meanwhile providing low interest loans to factories to enable fast and impactful actions.
- brands Pilot technology innovation projects with capable suppliers and extend it when conditions are right. One example is waterless dyeing innovation which is still in early phases but it shows a very promising future by greatly bring down the production demand on heat and water to effectively reduce carbon emissions.

Biomass as alternative sustainable energy source shares similar challenges in different countries such as unsteady supply and insufficient logistic infrastructure yet in countries like Cambodia it is increasingly tangled up in risk of deforestation.

Mr. Ford shared some insights on untangling decarbonization with deforestation:

- put a transition phase for factories to phase out wood completely and phase into other biomass supply such as wastes from producing rice, cashew and coconut, ideally in a mid-long-term factories switch to electric boilers or heat pumps for steam generation.
- brands require all factories with non-electric boilers use WOOD.Ai app to maintain traceability and transparency in wood supply, and only wood from plantation of mango, cashew, rubber, acacia and tamarind are allowed to be used in generating steam.

Mr. Francesco Carocci showcases how a reporting system for sustainable wood could help brands and suppliers to move away from deforestation when electric boiler is not yet the best option for factories in some countries. Mr. Carocci recognized that WOOD.Ai enabled suppliers to quickly identify wood species when the wood arrives at factories, while Woodchain focuses on linking sustainable wood source with factories and trace the wood transaction along the supply.

Led by Mr. Carocci, the project enables factories and brands report on the biomass sources under the Higg FEM 4.0 facility, and in a medium term of 3 years, develop this reporting system into a Country Specific Certification to formally certify the biomass sources.

In conclusion, the panelists agreed biomass remains an attractive option of sustainable energy source particularly in countries having abundant by-products from agriculture. By improving traceability and transparency in wood supply, APPs make it possible for brands and suppliers to untangle decarbonization from deforestation. On the other hand, brands and suppliers who already collected

low-hanging fruits might find adopting innovative technology such as waterless dye opens new spaces to carbon emission reduction by re-designing production processes.

### Watch a recording of the online seminar.

To learn more, watch the recording of What's the next – regional experiences sharing on building sustainable energy source in garment factories. For online seminars on similar topics, check out the [Asian Dialogues Series](#).

---

Published by:

Deutsche Gesellschaft für  
Internationale Zusammenarbeit (GIZ) GmbH

Author: Jessie Lie  
GIZ is responsible for the content of this publication.

Registered offices Bonn and Eschborn, Germany

Layout: Hani Can

FABRIC Asia  
No. 27, Street 302, Boeung Keng Kang 1  
Phnom Penh, Cambodia

On behalf of: Federal Ministry for Economic  
Cooperation and Development (BMZ)

[lisa.ramershoven@giz.de](mailto:lisa.ramershoven@giz.de)  
[www.giz.de](http://www.giz.de)

As at August 2023