



STAR Network

MINI ARTICLE



Adopting Renewable Energy

Powering Change in Asia's Garment Sector

Introduction

The Garment & Textile sector is a substantial energy consumer. By ILO estimates, the industry is responsible for between 6-8% of global carbon emissions - and is often reliant on conventional power sources such as coal and other fossil fuels.

Priorities (and buyer expectations) are shifting towards greater ecological and social responsibility. The industry also grapples with rising energy costs, and the global demand for energy is rising. In this context, the adoption of Renewable Energy (RE) becomes even more important. Now more than ever, the garment industry must ensure it works towards both competitiveness and sustainability.

Recognizing this, the Sustainable Textiles of the Asian Region (STAR) Network developed a position paper: *"Advocating for Enhanced Renewable Energy Regulations Within Garment-Producing Nations"*. By this paper, the STAR Network actively calls for improved regulations and states its position as a willing contributor in the energy transition.

STAR's RE Stance

The STAR Network, is a joint voice for 9 producer associations constituting around 50% of the world's garment exports. Our paper acknowledges the shared obstacles faced moving towards sustainable energy.

The paper tackles the urgent requirement for effective policies, regulations, and programs that facilitate the adoption of RE, with a particular focus on Rooftop Solar (RTS).

It recognizes that while progress has been made, notable difficulties persist, including significant initial investment costs, complex regulatory processes, and limited financing options, which continue to impede wider adoption across Asia.

Key Challenges to Overcome

Key challenges obstructing the adoption of renewable energy within STAR member countries include:

Financial Constraints

The high costs associated with initial investments and restricted access to specifically designed financing mechanisms present considerable barriers.

Regulatory Intricacies

Inconsistent and intricate regulations, coupled with limitations in grid access, hinder the implementation of RE projects.

Technical and Infrastructural Limitations

Ensuring the stability of the grid and possessing the necessary technical proficiency for RE project execution are vital yet often lacking.

Gaps in Awareness and Capacity

Limited understanding regarding the advantages and practicality of RE, along with insufficient technical skills, further impede the pace of adoption.

Why the Paper?

Our aim is that STAR members, manufacturers, and other lobby groups can use the paper, and its comparison tables (e.g. Table 1) to advocate for the missing RE support factors. Peer pressure (even at a country level) can be surprisingly effective!

Paper Findings - Recommendations

Our paper makes broad recommendations for each member country. These can be categorised as:

- 1 Make it easier to get funding and raise awareness of available support programs.
- 2 Cut red tape and speed up approvals for renewable energy projects.
- 3 Ensure factories can connect to the grid and sell extra energy fairly. Actively incentivise factories that invest in a greener future.
- 4 Run campaigns to help people understand the benefits of renewable energy and energy efficiency.
- 5 Boost regional cooperation on RE uptake by sharing knowledge & insights to work towards aligned technical standards

The paper also highlights successful case studies as examples, demonstrating the impact of effective policies such as Feed-in Tariffs (FiT) in Vietnam and China, Net Metering, Wheeling in South Africa and India, and Renewable Portfolio Standards (RPS) in the United States.

Commitment for a Greener Tomorrow

The STAR Network's position paper represents a shared commitment from its members, united in their desire to transition to greener energy in production activities.

Embracing renewable energy is both an ecological imperative and longer term, a competitive advantage. STARs Position is that Garment-producing nations that proactively adopt green energy solutions will be better positioned to meet the evolving demands of international buyers and consumers, who are increasingly prioritizing sustainability. They will also be well positioned to attract investment in new sectors, such as electronics, automotive, and more advanced manufacturing.

How do STAR Countries compare?

China is leading with a supportive policy environment and ever-greening energy mix. All STAR countries are working towards greener energy use. China, Cambodia, and Myanmar lead in installed renewable energy capacity (as a % of total installed capacity). All three generate around 50% of their power from hydro, solar or wind.

However, rooftop solar tells a different story—Bangladesh, despite a lower overall renewable mix, has advanced rooftop installations under a net metering scheme. Vietnam and Pakistan also show strong rooftop growth, while Myanmar and Cambodia face regulatory challenges in scaling industrial RTS uptake despite available solar potential.

Table 1: Status of Key Policies and Programs in STAR Network Member Countries

Factors/Countries						
Policy Framework						
Vision, Objectives, And Target	Green	Green	Green	Yellow	Green	Green
Feed-in-Tariff	Red	Red	Green	Red	Red	Red
Net Metering	Green	Red	Yellow	Red	Red	Red
Tax Incentives and Rebates	Yellow	Yellow	Green	Yellow	Yellow	Yellow
Voluntary Agreement	Red	Red	Green	Red	Red	Yellow
Wheeling Mechanism	Red	Red	Green	Red	Red	Green
RPS	Red	Red	Green	Red	Red	Red
Training & Certification	Yellow	Yellow	Green	Yellow	Yellow	Green
Investment Framework						
Direct PPA	Yellow	Yellow	Green	Red	Yellow	Green
Solar Lease	Yellow	Red	Green	Red	Yellow	Yellow
Risk Sharing Schemes	Yellow	Red	Green	Red	Yellow	Yellow
Special Credit Lines	Yellow	Red	Green	Red	Yellow	Yellow

Legend – Red: Not in place, Yellow: Partially implemented or need further improvement, Green: in place

Table 2: Overview of Installed Capacity, Energy Mix and Average Costs across STAR Network Member Countries

Country	Installed Capacity (MW)	Energy Mix (%)	RE (%) (incl. Hydro) *	Avg. \$ / kWh*
Bangladesh	24,911	Solar: 1.8%, Import: 10.7%, Coal: 10.8%, Oil: 26%, Natural Gas: 45.7%,	1.84	0.05
Cambodia	4,649	Hydro: 38.5%, Solar: 9.4%, Coal: 28%, Fuel Oil: 10.1%, Biomass: 1.1%, Import: 14.5%	49	0.14
China	3,349,000	Hydro: 14.4%, Solar: 20.9%, Wind: 15.1%, Nuclear: 1.9%, Thermal (E.g. Coal): 47.6%,	50.4	0.07-0.08
Myanmar	7,100	Solar: 3%, Hydro: 45%, Coal: 2%, Natural Gas: 50%,	48	0.051
Pakistan	42,932	Hydro: 18%, RE: 4%, Thermal: 58%, Nuclear: 20%,	22	0.16
Vietnam	80,555	Hydro: 28%, RE: 27%, Coal: 33%, Gas: 9%, Oil: 1%, Import: 1.2%, Others: 0.2%	55	0.07

Key Message

In short: manufacturers also want a greener supply chain and increased RE uptake - they need regulatory and financial support to achieve it.

Rooftop Solar (RTS) has the potential to offer substantial savings to manufacturers. The STAR Network urges all stakeholders: manufacturers, buyers, and government regulators - to collaborate towards creating a supportive environment for the adoption of renewable energy – particularly Rooftop Solar.

To dig deeper into this issue, please find the full paper here:

