

# Sustainability at



November- 2024

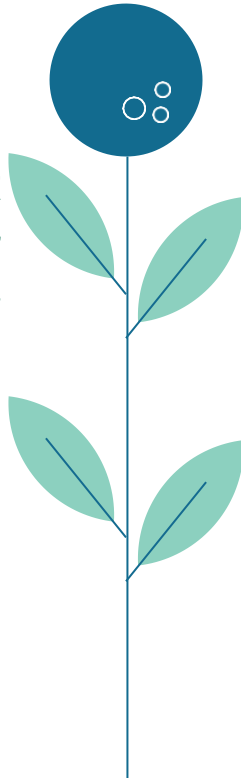
## BUILDING A SUSTAINABLE WORLD

### Rooted in our mission

We are Committed to be an agent  
of positive Change for the  
stakeholders and  
Community by pursuing Sustainable  
and an Ethical business Practices

# Commitment & Dedication toward Sustainability

Maheen Textile Mills (Pvt) Ltd is committed & dedicated to delivering high quality, sustainable textile solutions that not only meet but exceed the expectations of our global clientele. Our unwavering commitment to innovation, quality, and sustainability positions us as leaders in the textile industry, driving us to continually push the boundaries of excellence.



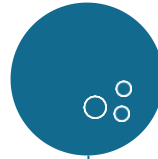
# Sustainability Strategy



**1-Materials & Chemicals**  
Sustainable in, sustainable out.



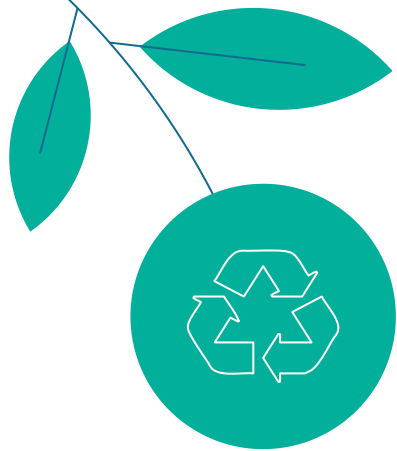
**3-Community & Welfare**  
Sustainable living, stronger community.



**2-Processes & Energy**  
Clean energy, cleaner world.

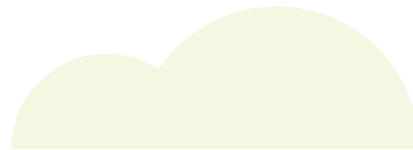


**4-Certifications**  
Get certified, make a difference.



# 01.

## Materials & Chemicals



# BCI Cotton

BCI Membership to offer BCI cotton to valuable customers



- Sustainable cotton production
- Reduces pesticide use
- Supports farmers' livelihoods

## Action Strategy:

1. Offering BCI material to customers
2. Priority to buying BCI instead of other material



# Organic Cotton

Maheen is GOTS certified, gradually increasing its usage of organic cotton over the last decade:

GOTS cotton is:

- Organic cotton production
- Environmentally friendly
- Socially responsible



## Action Strategy:

1. GOTS Certified and enhancing the use of Organic Cotton
2. Finding the sources for import of organic cotton to offer better prices to customers.



## GRS Polyester

Maheen is GRS certified, gradually increasing its usage of organic cotton over the last decade:



- Recycled polyester production
- Reduces waste
- Traceability

### Action Strategy:

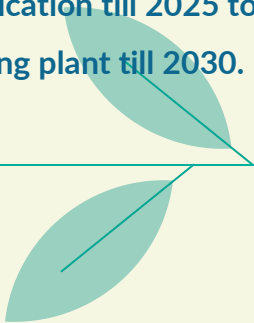
1. GRS Certified and enhancing the use of GRS.
2. Instalation of own recycling plant till 2030

# Sustainable Material

## 4,646,889 Kgs

BCI, GOTS, GRS & OCS materials use in last 03 years

### Action Strategy:

1. Increase the use of sustainable material up to 40% till 2030 & 60% till 2050
  - 2 Getting OCS & RCS Certification till 2025 to enhance the use of sustainable material
  3. Instalation of own recycling plant till 2030.
- 



## Specialized Sustainable Fibres



### Linen

Linen is sourced from flax plants and requires low irrigation or fertilizers.



### Hemp

Hemp fiber is biodegradable and tightly woven yet breathable and surprisingly soft.



### Lyocell & Tencel

Lyocell is made primarily of cellulose derived from wood and is highly breathable.



### Bamboo

Bamboo fabric is characterized by good hydrophilic properties.

# Chemical Management Program

## Current 2024

1. 73% Rating Chemical Management in STeP Oeko-Tex.
2. Road map to zero Program.
3. Road map to zero foundational level achieved
4. Implementation of Batch code system.
5. Complete traceability of chemical & Dyes
6. Usage of more than 80% ZDHC level-3 Approved Chemical/Dyes.
7. Training on chemical management & sustainable chemistry program

## Short Term Target 2026

1. To achieve 95% Rating in STeP
2. To be linked with BHive & STeP by Oeko-Tex
3. To Generate InCheck & Clear stream report.
4. Overall atomized dozing system of Chemical & Dyes.
5. To achieve ZDHC Progressive level
6. Use of up to 90% ZDHC level-3 approved Chemical/Dyes
7. Training plan on SVHC

## Long Term Target 2030

1. Sustain the rating
2. Online connection with customers to see Incheck & Clear stream report.
3. Achieve the target of Road map to zero.
4. To achieve ZDHC Aspirational level by up-gradation of ETP
5. Transferring to multi-functional chemical & Dyes.
6. Higg FEM Chemical Management Special verification

# Chemical Management Program

## ZDHC Certificate



## REACH Certificate



## Chemical Management Certificate



# Chemical Management Program

Technological Advancement to cut down Water & Dyes usage

## Current 2024

1. Installed of 01 Digital Printing.
2. Cut down of 15% water as compare to Rotary printing.
3. Cut down of 10% dyes as compare to Rotary printing

## Short Term Target 2030

1. Instalation of 02 Digital Printing.
2. To save water up to 30% on Digital printing as compare to Rotary
3. Dyes cut down will be up to 20%

## Long Term Target 2050

1. Installation of total 03 Digital Printing.
2. To save water up to 45% as compare to Rotary printing .
3. To cut down the Dyes usage up to 30%.

# Waste Reduction and Management

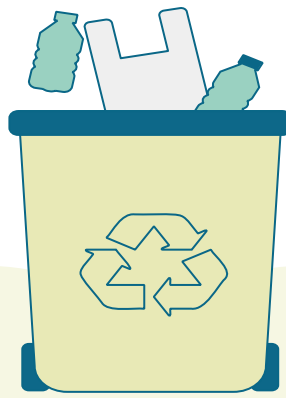
## Technology

Automation in cutting, stitching, and handling.



## Product Life Cycle

Circular product life, waste used to manufacture products.



## Transparency

Trackability through production process, certified vendor base.





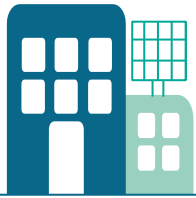
# 02.

## Processes & Energy



# Carbon Footprint

Changing climate conditions across the global require immediate actions by corporates to reduce emissions from their operations, keeping the temperature well below 2°C above pre-industrial levels, limiting it to 1.5°C.



## Textile Industry Standard

Journal of Cleaner Production estimates that a kilogram of fabric in the textile industry is estimated to be around:

25 kgCO<sub>2</sub>e



## Maheen Textiles Mills Pvt Ltd

SteP by OEKO-Tex verified that Maheen's carbon Footprint is:

14.89 kgCO<sub>2</sub>e  
2023



## Maheen Textiles Mills Pvt Ltd

Targeted Maheen's carbon Footprint by adopting sustainable practices:

9.0 kgCO<sub>2</sub>e  
Target-2025



## Maheen Textiles Mills Pvt Ltd

Targeted Maheen's carbon Footprint by adopting sustainable practices:

4.0 kgCO<sub>2</sub>e  
Target-2030

2023

# STeP by OEKO-TEX

## the highest level of sustainability

Maheen has one of the lowest  
carbon and water footprints in  
the industry.

Facility name: Maheen Textile Mills Pvt Ltd  
Region / Country: PK  
STeP certificate number: 23002298  
Institute: TBD

**OEKO-TEX®**  
INSPIRING CONFIDENCE

Period of calculation: 01.01.2023 - 31.12.2023

based on self-declared data & input values

### Carbon Footprint



Includes impacts (carbon footprint) created directly at the facility (gate-to-gate) and impacts generated by the production of raw materials and by the process steps which took place in another site (cradle-to-gate).



#### Gate-to-gate, on site

Per yearly production

5,785,381,53 kg CO<sub>2</sub>-eq.

Per 1 kg of material output

0,73 kg CO<sub>2</sub>-eq.



#### Cradle-to-gate

Per 1 kg of material output

14,89 kg CO<sub>2</sub>-eq.

### Water Footprint



Includes impacts (water footprint) created directly at the facility (gate-to-gate) and impacts generated by the production of raw materials and by the process steps which took place in another site (cradle-to-gate).



#### Gate-to-gate, on site

Per yearly production

9,431,552,73 m<sup>3</sup> world-eq.

Per 1 kg of material output

1,19 m<sup>3</sup> world-eq.



#### Cradle-to-gate

Per 1 kg of material output

92,72 m<sup>3</sup> world-eq.



# Strategy

## Increased use of cleaner materials

Growing every year

## Results

We have achieved our  
yearly targets, every time.



## Strong Commitment

Maheen has a clear  
commitment to be a sustainable  
manufacturer

## Close Monitoring

Through certifications, audits,  
and ERP we closely monitor our  
progress

# 4MW Solar Power

Maheen has installed 02-MW solar power plant which is operational.

02-MW solar power plant is in progress and Arrival is expected in April-2025

Short Term Target-2025 : 04 MW  
**AND**

Long Term Target-2030 : 06 MW



# Renewal Energy Source

Coal Phase Out

Coal Replaced by Bio-Mass

Bio-Fuel Usage

20-  
2023

98-  
2024

100-  
2025

Energy & Enveronmental Assesement Audit by WWF/ILO



International  
Labour  
Organization



# Emission Reduction Roadmap.

Maheen Textiles is acting on climate Change through adoption of cleaner technologies, green Buildings, energy conservation, and setting ambitious emission reduction targets



Description	Short Term Target 2025	Short Term Target 2030	Performance
<b>Science Base Target (Business Ambition for 1.5°C)</b>	Commitment has done. Targets validation	Target Achievement	Commitment Approved by SBTi, Validation in progress
<b>Road Map to Zero Program.</b>	Supplier to Zero Progressive level InCheck & Clear Stream	Supplier to Zero Aspirational level	Supplier to Zero Foundational level Achieved
<b>Use of Bio-Fuel for Steam generation.</b>	100% use of Bio-Fuel	Shifting on available emission free source to cut down bio-fuel	Using 98% Bio-fuel
<b>Green Energy</b>	Addition of Green Energy up to 4 MW	Enhancing green energy according to demand	02 MW Installed and rest of 02 MW is in progress
<b>Re-use of Gas generator Emissions</b>	Re-use of waste heat by using waste heat recovery boiler	100% Re-use of Generator and processing machine emissions	Heat recovery Boiler is operational for Re-using of Generator Emissions
<b>Re-use of Boiler Emissions</b>	Economizer installation to Re-use of Boiler Emissions	Up-gradation according to available latest technology	Economizer installed

# Emission Reduction Roadmap

Maheen Textile is acting on climate Change through adoption of cleaner technologies, green Buildings, energy conservation, and setting ambitious emission reduction targets



Description	Short Term Target 2025	Short Term Target 2030	Performance
<b>Re-use of Non-Contact Water &amp; Steam condensate, Heat recovery</b>	Re-use of Steam condensate from Dryers and Calanders. Waste head recovery from bleaching plant waster water	Re-use of heat from dying machine waster water.	Re-using of non-contact water from singing & saforizing. Steam condensate recovery from bleaching.
<b>Re-use of RO Rejection</b>	Re-use of RO rejection in Screen washing, utilities	Re-use of RO rejection in wet scrubber	Non-contact & steam condensate is being reused
<b>Plantation to control carbon footprint.</b>	Plantation up 5,000	Plantation up 20,000	3,000 recent plantation
<b>United Nation Sustainable Development Goals (SDGs)</b>	Aligned our strategy and business actions with United Nation Sustainable Development Goals (SDGs)	Implementation of United Nation Sustainable Development Goals (SDGs)	Understanding developed and got training
<b>Cut Down Water consumption</b>	Process optimization and consumption monitoring	Continuous fabric dying to save water.	Continuous monitoring, Reducing RO running period
<b>Waste Water Recycling</b>	Re-using of waste water up to 30%	Re-using of waster water up to 80%	Plant extension is in progress



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&

170962



INDUSTRY  
MEDIAN 58.66%

# Higg Index

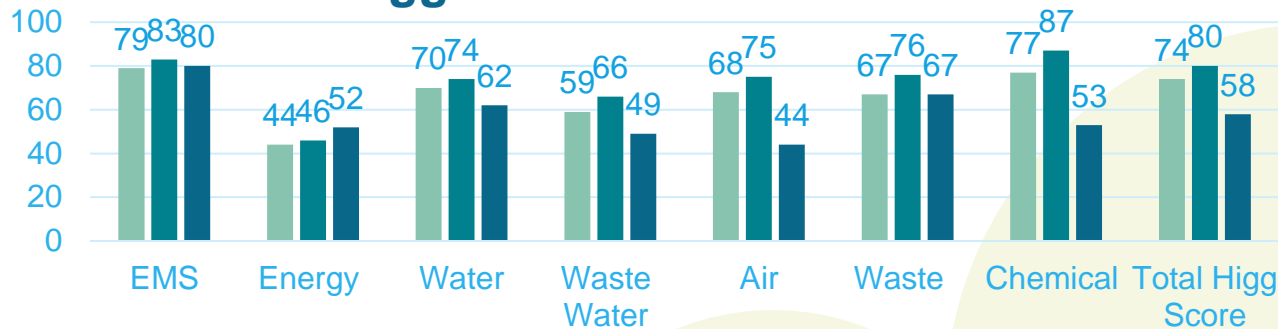
## 3rd Party Verified Assessment

2022 FEM PERFORMANCE

2023 FEM PERFORMANCE

BENCHMARK

### Higg Index Cumulative Performance



■ 2022 MAHEEN ■ 2023 MAHEEN ■ BENCHMARK

**Source:** Higg Index Benchmark is based on Median Values of more than 79 uploaded modules on Higg Index portal.



# Emission Reduction Results



Addressing Climate Change Through Sustainable Practices

**ZERO  
WASTE**

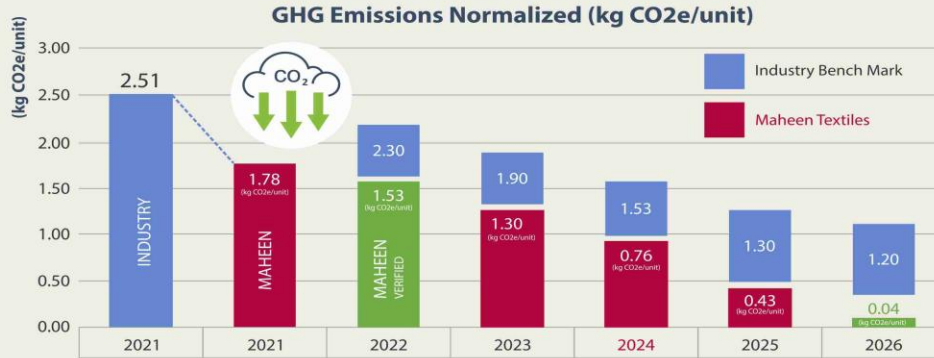
100%  
**biomass  
energy**



ROADMAP TO  
**ZERO**

SCIENCE  
BASED  
TARGETS  
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

**MAHEEN**  
TEXTILE MILLS (PVT) LTD  
MANUFACTURES & EXPORTS OF HOME TEXTILES AND FABRICS  
A SUSTAINABLE FUTURE



**Emission Reduction Normalised Percentage**

YOY (kg CO2e/unit) Percentage Reduction	Maheen Textile Mills (Pvt) Ltd	14%	27%	41% Verified	76%	97%
100% Green Energy						

Paris Climate Agreement 2015

*"Net Zero Emission by 2050 and shift on  
green energy by 2030 is the benchmark"*



**Maheen Textiles is 25 years ahead  
of the industry benchmark.**

**ECO FACTORY**

Retail, Health Care, Hospitality, Travel Industry

The Paris Agreement's goal is to keep the rise in global temperature to well below 2 °C and preferably limit the increase to 1.5 °C.

Emissions reductions to reach net zero by the middle of the 21st century.

To stay below 1.5 °C of global warming, emissions need to be cut by roughly 50% by 2030.

**Higg  
Index**

**TÜV Rheinland**



# OUR COMMITMENTS

We had set environmental and social goals and striving even Harder for meeting our commitments and expanding our focus towards responsible Materials, environmental management and a diverse & inclusive workforce across all operations.

## 2020-30 Goals

PLANET	PILLAR	IMPACT	TARGETS	TARGET YEAR	PERFORMANCE
		Sustainable Raw Materials	75% of total raw material	2030	40% current
		Water	40 % Reduction	2030	19 % Reduced
		Energy	35% Reduction	2030	22 % Reduced
		GHG Emissions	60 % Reduction	2030	41 % Reduced
		Renewable Energy	6 MW	2030	02 MW Installed and 02 MW in progress
		Renewal Fuel Source	100 Bio-Mass as fuel in boiler	2030	98% shifted on Bio-Mass
		Waste Water	ZDHC Aspirational Level	2030	ZDHC Foundational level achieved
		Sustainable Chemical & Dyes	Use of 100@% ZDHC Level-3 approved	2030	Using 80% ZDHC level-3 Approved
		Re-use of Emissions	100% Re-use of boiler & Power plant emissions	2030	Installation work of Economizer completed
		Waste Heat & Condensate Recovery	Heat from Bleaching waste water for all applicable processes	2030	57% is being recovered



## Sustainable Ventilation System

Maheen Textile Mills Pvt Ltd has taken a commendable step to address the impact of heat in processing units, aligning with the Better Work/ILO Team's recommendation to create a more comfortable environment for the workforce.

We installed eco-friendly ventilation systems featuring self-manufactured, powerless exhaust fans on the rooftop. These fans, uniquely designed to operate without any energy consumption, run continuously 24/7.

This innovative solution has successfully reduced internal temperatures up to 25-30%, contributing to a more sustainable and comfortable workplace.



# Sustainability Pledges



SCIENCE BASED TARGETS  
(BUSINESS AMBITION  
FOR 1.5°C)



PARIS AGREEMENT  
TO CLIMATE CHANGE

**OUR  
PLEDGE**



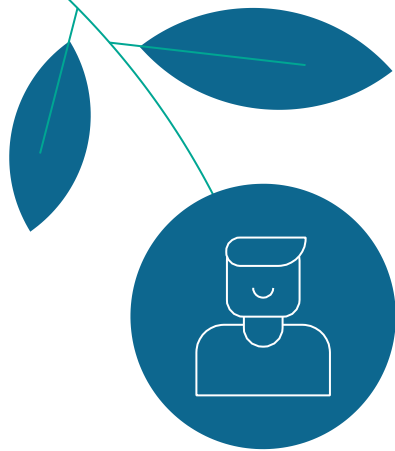
ALIGN THE PRACTICES  
WITH UN SDG



SCIENCE  
BASED  
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

VALIDATION OF SUSTAINABLE  
DEVELOPMENT GOALS



03.

# Sustainable Social Action

# Sustainable Social Welfare

People are our strategic assets and their professional growth is essential for company's growth. Our policies are focused on onboarding talented professionals, grooming through trainings and enabling workplace to develop as a valuable asset.

Performance-based career growth and job rotation makes Maheen Textiles a much sought-after employer.

## PEOPLE

Women Empowerment by increasing women Ratio



Women Empowerment success story : <https://www.giz.de/en/worldwide/153435.html>



Free Health Insurance for All Employees & their Families



Hiring of PWDs (Person with Disability)

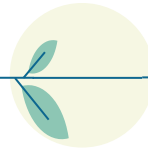


Diversity & Inclusion

Interest free Loan Scheme for employees for their financial growth



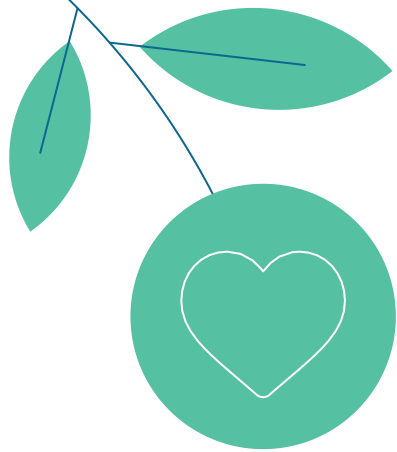
Meat & Food distribution to employees



Transgender Employment

Joint venture with Tech College for free education to employees and their Childrens

Blood donation Camps for Thalassemia patient



# 04.

## Certifications



# Certifications

STeP by  
Oeko-Tex  
Certified

Higg Index •  
Use Higg Index to  
measure sustainable  
actions

Oeko-Tex 100  
• Class-1 Certified

• ZDHC  
Achieving of ZDHC  
Foundational and  
Progressive Level.



HOME

WASTE  
MANAGEMENT

CO<sub>2</sub> EMISSIONS

COMMITTED  
EMPLOYEES

SOCIAL ACTION

## Fully comitted, fully certified.

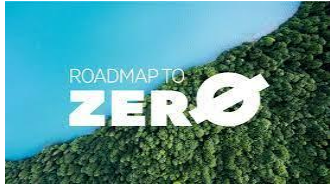
OEKO-TEX®  
INSPIRING CONFIDENCE  
**MADE IN GREEN**



OEKO-TEX®  
INSPIRING CONFIDENCE  
**STeP**

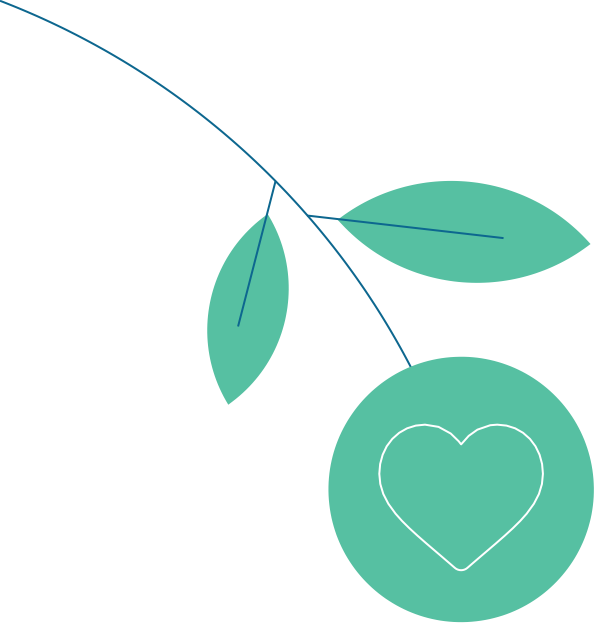


USB TEX2138



**amfori**   
Trade with purpose  
586-000286-002





# Future Sustainable Projects





# Future Sustainable Projects

## Maheen Organic Kapas\*

We are thinking to launch **Maheen Organic Kapas**; a project to develop a local organic cotton supply chain, improving the availability and traceability of organic cotton.

Maheen Organic Kapas will not only support regenerative farming practices but also focus on improving livelihoods of farming communities including capacity building, health and nutrition, and equal opportunities for female cotton pickers.



## Maheen Green Bio-Mass:

We have launched a project of forming the Napier Grass as Bio-Mass fuel which will be used in boiler as sustainable fuel to replace conventional bio-mass or coal.



## Waste Water Treatment Plant:

Installation of State of the art Waste Water Treatment of capacity up to 150 M3 and recycling plant, going to be operational in June-2025

