

A close-up photograph of green leaves with water droplets, serving as the background for the report cover.

TOWARDS A **SUSTAINABLE** WORLD IN A **CIRCULAR** WAY

Environmental Performance Report 2025

For The Year: 2025

Frequency: Annually

Ref. Std.: AKT/PR/064



OUR SUSTAINABILITY PHILOSOPHY

“

Al-Karam's sustainability framework is primarily based on PEOPLE, PLANET & PROSPERITY. We are strictly acting on these principles since our foundation.

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KEY NOTE

Sustainable Development at Al-Karam Textile Mills (Pvt.) Ltd.

Al-Karam Textile Mills (Pvt.) Ltd. has integrated UN SDGs (**Sustainable Development Goals**) into its business practices since 2017. From free health services for employees to free education for underprivileged, efficiencies in our processes to investment in clean energy, all of our actions are supporting 17 SDGs. This report is mainly based on our completed projects in calendar year 2025 which are linked with the environment related SDGs.



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Highlights 2025

Saved **267 MWh** of electricity has been saved 

2.57 M m3 of natural gas has been saved

 Saved energy amount is equal to the annual consumption of **1,335 Homes**.

Produced **441.52 Tons** of fabric waste from our **Inhouse Fabric Recycling Plant**.



8,505 Tons of CO²eq is reduced from our Scope 1 & 2.



The amount of saved carbon dioxide emissions is equivalent to the plantation of **391,813** trees.

Produced **6,885.37 MW** of Electricity from **Renewable** sources of our In-house **Solar Photovoltaic**.

Avoid of CO²eq emission **3,508 Tons** annually.

9.6 Million Gallons of water has been saved.

Saved water amount is equal to **2,193 People** annual usage.





ENERGY

EFFICIENCY

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Installation Of Spray System

Baldwin Spray System:

Machine efficiency increase 30% to 40%, Gas Consumption Reduces 30% power consumption reduces 15% to save energy around 40-45%

Completion Date: October 2025

Yearly savings	Investment	Payback
Unit (M3 of Gas)	(PKR)	Months / years
Gas Saving = 115,500 m3/Year	38,750,000	Immediate



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Installation Of Advance Technology

Replacement of JGS 320 gas engine with new efficient JGS 420 Gas Engine.

Completion: May 2025

Yearly savings	Investment	Payback
Unit (M3 of Gas)	PKR	Months / years
Gas Saving = 518,400 m3/Year	105,000,000	2 Years



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Installation Of Advance Technology

Replacement of 620 premium short block with old 620 version.

Completion Date: June 2025

Yearly savings	Investment	Payback
Unit (M3 of Gas)	PKR	Months / years
Gas Saving = 1,572,480 m3/Year	158,623,200	1 Year

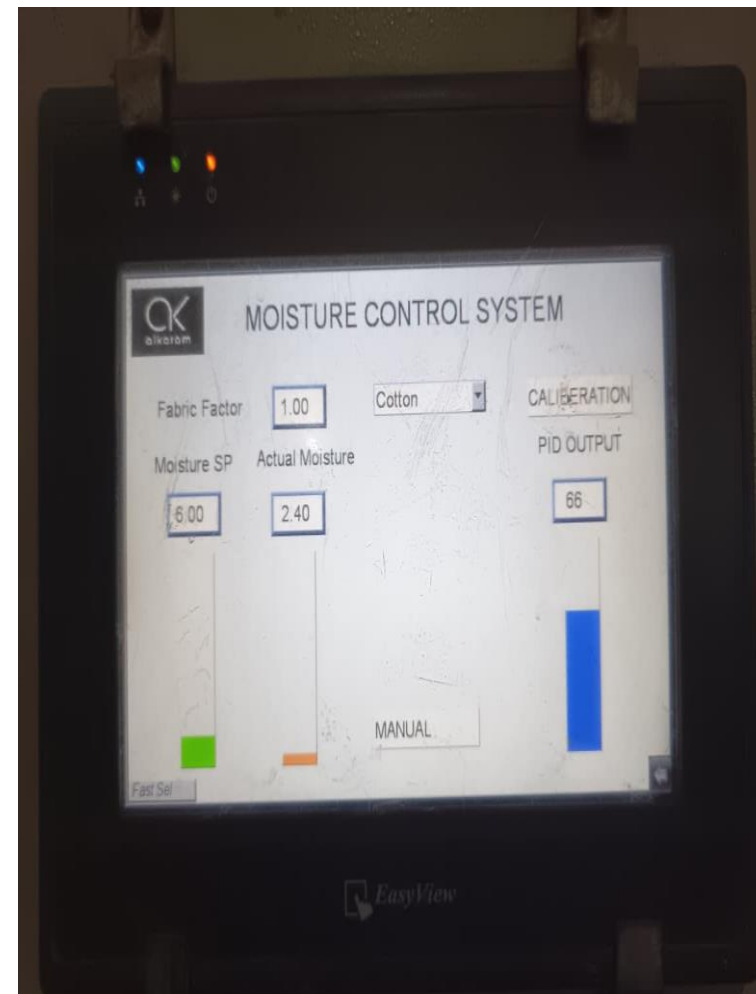


Installation Of Moisture Control System

Installation of Moisture Control System to save steam of dryer section and maintains 8% of the Fabric Moisture, resulting in saving of Natural Gas 3,920 M3 monthly.

Completion Date: Mar 2025

Yearly savings	Investment	Payback
Unit (M3 of Gas)	PKR	Months / years
Natural Gas Saving = 47,040/Year	1,624,000	5 Months



Installation of Energy Efficient Dry Can

Installation of Energy Efficient Dry Can to save about 10% to 15% of steam from Dryer section which is equal to 84 tons of steam on a monthly basis.

Completion Date: Mar 2025

Yearly savings	Investment	Payback
Unit (M3 of Gas)	PKR	Months / years
Gas Saving = 70,560 M3/Year	16,995,000	1.5 Year



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Installation Of Heat Exchanger Pozzi

The Pozzi heat exchanger is highly beneficial as it improves energy efficiency by recovering waste heat, reduces operating costs, lowers emissions, supports water conservation, and ensures reliable performance with minimal maintenance.

Completion Date: Mar 2025

Yearly savings	Investment	Payback
Unit (M3 of Gas)	PKR	Months / years
Gas Saving = 252,000 M3/Year	5,138,000	5 Months



Modification In Current Technology

Melang area filter modification from 94kW to 7.5kW/hr in our spinning department to save 4,704 units of electricity on a monthly basis.

Completion Date: August 2025

Yearly savings	Investment	Payback
Unit (kWh of Electricity)	PKR	Months / years
Electrical Saving = 56,448 KWH/Year	200,000	2 Months



Installation Of Advance Technology

Replacement of energy efficient new Ring Motor of 1.42 kWh to save 1,022 kWh in every month.

Completion Date: Mar 2025

Yearly savings	Investment	Payback
Unit (kWh of Electricity)	PKR	Months / years
Electrical Saving = 12,264 KWH/Year	580,691	1.5 Year



Use of LED Lighting

We have replaced 300 conventional tube lights convert LED light 18Watts in our stitching tower 01 Home Textile.

Completion Date: September 2025

Yearly savings	Investment	Payback
Unit (kWh of Electricity)	PKR	Months / years
Electrical Saving 5,508 kW / Year	795,000	Seven Months



Use of LED Lighting

Convert 600 conventional Tube Light into LED Lights. We have replaced 600 conventional tube lights convert LED light 18Watts in Home Textile Tower 2

Completion Date: June 2025

Yearly savings	Investment	Payback
Unit (kWh of Electricity)	PKR	Months / years
Electrical Saving 132,192 kW / Year	1,590,000	6 Month



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FABRIC

RECYCLING



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Recycling of Post-Industrial Textile Waste

We operate an in-house fabric shredding plant with a capacity of 100,000 kg/month to recycle post-industrial textile waste into fiber. This initiative advances our Zero Waste objectives and supports multiple SDGs by reducing indirect water, energy, and chemical footprints, and by avoiding tons of GHG emissions across all scopes.



Trash Turn into Asset

441,520 Kg Annually

WATER

CONSERVATION



Singeing Water Return

Singeing water return in textiles is the reuse of cooling water from singeing machines after treatment, instead of discharging it. This practice reduces fresh water consumption, saves energy by retaining heat, lowers costs.

Water Saving

6.98 Million Gallons / year



Sanfo Water Return

In the Sanforizing process, cooling water is used to regulate the rubber blanket and stabilize fabric. Instead of wasting this water, mills can collect and recycle it. This reduces freshwater consumption, lowers energy costs since recycled water retains heat, and minimizes wastewater discharge.

Water Saving	2.62 Million Gallons / year
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