



# Decarbonization Roadmap & SBTi Progress Report 2023-24



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## SUSTAINABILITY ROADMAP

Lucky Textile Mills Limited has committed to promote sustainability initiatives and practices continually in its entire supply chain. We seamlessly integrates our Sustainable Development Goals into every facet of our operation, exemplifying a dedication towards environmental and social responsibility.

Lucky Textile Mills is working on different areas of sustainability including energy conservation practices in operation, Solar Renewable energy, Water treatment, recycling, conservation & recovery systems, Sustainable process & productive machines, Recycled & Environment friendly Fibres, Waste circularity, Biodiversity & Natural habitat protection, Community & social stewardship and much like that.

Lucky Textile Mills is greatly conscious about the global challenges of climate change and its adverse impact to the environment. For the purpose to protect; We have become a signatory body over the project of Net Zero Carbon Emission by 2050 with Pakistan Environment Trust, taking actions day to day, setting goals to achieve our decarbonization roadmap, calculating our emissions and implementing technologies to offset GHG emission.



## APPROVED & VALIDATED SBTi

On June 27th, 2024, Lucky Textile Mills near-term and long-term net zero greenhouse gas (GHG) emissions reduction targets, aligned with a 1.5°C pathway, have been officially validated and approved by the Science Based Targets Initiative (SBTi). This validation encompasses our entire supply chain and operational facilities, spanning from fiber spinning to the final dispatch of products.

We have committed to reaching net-zero GHG emissions across our entire value chain by 2050. To this end, Lucky Textile Mills Limited has set ambitious targets:

- **Overall Net-Zero Target:** Lucky Textile Mills Ltd. commits to reach net-zero greenhouse gas emissions across the value chain by 2050.
- **Near-Term Targets:** Lucky Textile Mills Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 50.4% by 2032 from a 2022 base year.\*
- Lucky Textile Mills Ltd. also commits to reduce absolute scope 3 GHG emissions from purchased goods and services, fuel and energy related activities, and upstream transportation and distribution 30% within the same timeframe.
- **Long-Term Targets:** Lucky Textile Mills Ltd. commits to reduce absolute scope 1 and 2 GHG emissions 95% by 2050 from a 2022 base year.\*
- Lucky Textile Mills Ltd. also commits to reduce absolute scope 3 GHG emissions 90% within the same timeframe.

\*The target boundary includes land-related emissions and removals from bioenergy Feedstocks.

## GREENHOUSE GASES (GHG) INVENTORY

The GHG inventory report covers all Scope 1, 2, and 3 emissions for Lucky Textile Mills Limited in the reporting year 2022 & 2023. All the sites of Lucky Textile Mill have been included within the operational boundary.

Lucky Textile Mills Limited has compiled a GHG inventory report for the period 2022 & 2023 (1<sup>st</sup> Jan to 31 Dec) to understand their emissions and carbon footprint. The corporate organisational boundaries for the inventory were defined according to the requirements of clause 4.1 of the ISO 14064-1 standard. The operational control approach was used for the consolidation of corporate GHG emissions. Below is Table 1 shows the complete GHG inventory for the reporting year 2022 & 2023.

**Table 1.**

SCOPE CATEGORIES	BASELINE YEAR 2022 EMISSIONS (tCO <sub>2</sub> e)	YEAR 2023 EMISSIONS (tCO <sub>2</sub> e)	% CHANGE BY BASELINE YEAR
Scope 1 Stationary Combustion	72,164	61,610.78	-14.62 %
Scope 1 Mobile Combustion	1,326	1,250.92	- 5.66 %
Scope 1 Refrigerants	2,163	2,235.52	+3.35 %
<b>Scope 1 Total Emission</b>	<b>75,653</b>	<b>65,097.22</b>	<b>-13.95 %</b>
<b>Market Based Scope 2 Emission Total Purchase Electricity / Steam</b>	<b>41,839.92</b>	<b>45,982.19</b>	<b>+9.90 %</b>
Scope 3, Category 1 Purchased goods & services	84,976.79	90,726.73	+6.76 %
Scope 3, Category 2 Capital goods	33.42	35.59	+6.49 %
Scope 3, Category 3 Fuel & energy related activities	13,277.73	9,188.50	-30.79 %

## GREENHOUSE GASES (GHG) INVENTORY

SCOPE CATEGORY	BASELINE YEAR 2022 EMISSIONS (tCO <sub>2e</sub> )	YEAR 2023 EMISSIONS (tCO <sub>2e</sub> )	% CHANGE BY BASELINE YEAR
Scope 3, Category 4 Upstream transportation & distribution	6,711.03	4,781.38	-28.75 %
Scope 3, Category 5 Waste generated in operations	939.26	184.54	-80.35 %
Scope 3, Category 6 Business travel	26.42	39.34	+48.90 %
Scope 3, Category 7 Employee commuting	1,152.30	936.32	-18.74 %
Scope 3, Category 8 Upstream leased assets	0	0	0 %
Scope 3, Category 9 Downstream transportation & distribution	28,271.68	25,031.75	-11.46 %
Scope 3, Category 10 Processing of sold products	0	0	0 %
Scope 3, Category 11 Use of sold products	0	0	0 %
Scope 3, Category 12 End of life treatment of sold products	12,807.76	9,767.03	-23.74 %
Scope 3, Category 13 Downstream leased assets	0	0	0 %
Scope 3, Category 14 Franchises	0	0	0 %
Scope 3, Category 15 Investments	178.50	155.91	-12.65 %
<b>Scope 3 Total Emission</b>	<b>148,374.89</b>	<b>140,847.10</b>	<b>-5.07 %</b>
<b>Total Emissions of Scope 1,2 &amp; 3</b>	<b>265,867.81</b>	<b>251,926.50</b>	<b>-5.24 %</b>

## GREENHOUSE GASES (GHG) INVENTORY

The biogenic emissions in Table 2 from biomass combustion in factory boiler operation, 5,048.89 tCO<sub>2</sub> have been reported in 2023 as outside of Scope 1.

**Table 2.**

SCOPE CATEGORY	BASELINE YEAR 2022 EMISSIONS (tCO <sub>2</sub> )	YEAR 2023 EMISSIONS (tCO <sub>2</sub> )	% CHANGE BY BASELINE YEAR
Outside of Scopes Emission from Biomass combustion	0	5,048.86	+100 %

The total emissions from FLAG related activities from the purchasing of raw materials with in the Category 1 Purchased goods and accessories of Scope 3 emission mentioned in the below table 3.

**Table 3.**

SCOPE CATEGORY	BASELINE YEAR 2022 EMISSIONS (tCO <sub>2</sub> e)	YEAR 2023 EMISSIONS (tCO <sub>2</sub> e)	% CHANGE BY BASELINE YEAR
FLAG Emission of Scope 3 within Cat-1 purchasing of Raw Material	43,292.10	42,222.42	-2.47 %
% of FLAG Emission across all scopes	16.28 %	16.75 %	----

## SCIENCE BASED TARGETS PROGRESS

### NEAR TERM TARGETS PROGRESS

Near Term Target Boundaries		Baseline Boundary Emission Year 2022 (tCO <sub>2</sub> e)	2023 (tCO <sub>2</sub> e)	2024 (tCO <sub>2</sub> e)
Scope 1 (Reduce 50.4% GHG Emission by year 2032, boundary includes land-related emissions and removals from bioenergy feedstocks)	Target Achievement Progress	75,653	65,097.22	--
	<i>Annual Reduction Plan</i>	<i>75,653</i>	<i>71,840.1</i>	<i>68,027.2</i>
Scope 2 (Reduce 50.4% GHG Emission by year 2032, boundary includes land-related emissions and removals from bioenergy feedstocks)	Target Achievement Progress	41,839.9	45,982.2	--
	<i>Annual Reduction Plan</i>	<i>41,839.9</i>	<i>39,731.2</i>	<i>37,622.5</i>
Total Scope 1 & 2 (Reduce 50.4% GHG Emission by year 2032, boundary includes land-related emissions and removals from bioenergy feedstocks)	Target Achievement Progress	117,493	111,079.42	--
	<i>Annual Reduction Plan</i>	<i>117,493</i>	<i>111,571.3</i>	<i>105,649.7</i>
Scope 3 (Reduced 30 % GHG Emission from purchased goods and services, fuel and energy related activities, and upstream transportation & distribution by 2032)	Target Achievement Progress	104,965.6	104,696.6	--
	<i>Annual Reduction Plan</i>	<i>104,965.6</i>	<i>101,817</i>	<i>98,668</i>



## SCIENCE BASED TARGETS PROGRESS

For the Scope 1 and 2 targets, Lucky Textile Mills Limited have achieved a 5.46% reduction in emissions from 2022 to 2023. This reduction is slightly ahead of the requirement of the target, demonstrating that Lucky textile are making strong progress towards our Scope1 & 2 targets. Increased in the high production level & operation in the year 2023 is a cause of rising Scope 3 emission as factory have strong objectives and plan to offset these GHG in next coming years. The big progress behind scope 1 reduction is initiate renewable energy projects in factory own premises.

For the near-term Scope 3 target, emissions in the relevant categories have decreased by 0.26%. Emissions from Purchased Goods and Services increased by 6.77%, predominantly due to an increase in the purchase quantity of fabric materials. The emissions from Fuel and Energy Related activities decreased, by 30.80%. Emissions from Upstream Transportation and Distribution decreased by 28.75%.

The net-zero emissions target is a longer-term target, and significant progress would not be expected in the short-term. The total emissions have decreased by Lucky Textile Mills Limited in the year 2023 is 5.24% within the entire scope 1,2 & 3.

## INITIATIVES TOWARD DECARBONIZATION

Lucky Textile Mills Limited is greatly conscious about the global challenges of climate change and its adverse impact to the environment. We promote sustainability initiatives in our complete supply chain operations and processes for the continuous offsetting of GHG emissions with in all scopes.

A well competent dedicated team of the factory is totally aware about the reduction efforts on every single cause of carbon emission. We train our employees, creating awareness and culture within the organization towards the climate protection activities.

The factory has taken many initiatives to reduce its scope 1 & 2 GHG emission including 10.6-MW Solar installation within the factory to generate electricity, introduced its 1<sup>st</sup> Biomass project in operation to generate steam, by which Scope 1 emission reduce up to 13%. Lucky Textile is also working on KPIs with its Energy provider to reduce its Scope 2 GHG Emission Factor for energy generation about 20% by the Next 8 to 10 Years, and they are also capable to provide eco-friendly generated steam to the facility which is generating by waste heat recovery system.

Lucky Textile Mills has introduced Supplier Coordination and Evaluation program for their active participation with the factory to achieve its Scope 3 emission goal. The factory has reduced its emission in the reporting year within the category of Fuel & energy related activities through reduction in consumption of fossil fuel and fresh water. Up stream transport & distribution emission were also reduced by compacting suppliers' transportation and deliverable frequencies.



## FUTURE OBJECTIVES & GOALS

Lucky Textile Mills Limited has set its goals toward decarbonization for achieving Net term and Net zero targets. There are so many objectives which will reduce factory GHG emission with in all Scopes including;

- Exceeding its Renewable energy project implementation by installation of Solar energy which will reduce about 4 to 5% Scope 1 GHG Emission.
- Introduce Biomass Boiler to enhance eco-friendly generated steam in operation which will reduce about 5% Scope 1 GHG emission.
- Initiating Green energy and reduction of emission factor will reduce 5 to 7% Scope 2 GHG emission in corresponding with our market-based electricity provider.
- Sourcing of eco-friendly and less carbon footprint products from suppliers and Fiber with recycle and low life cycle profile to reduce about 5% Scope 3 emission.
- Develop policy and action plan with external transportation & distribution system to reduce Scope 3 GHG emission.
- Lucky Textile Mills shall revalidate its targets at a minimum of every 5 years and also recalculated where required or needed, to reflect significant changes that could compromise relevance and consistency of the existing target.
- Lucky Textile Mills will continue monitor its FLAG emission to check its minimum threshold for setting separate targets as per SBTi guideline.



we continuously strive to enhance the performance of our green supply chain & sustainability management system. Our value chain consistently adopts the best approaches, organizational systems, and technologies to protect the climate, reduce emissions, and safeguard our environment. We have committed to care, our fiber, our water, our planet, & our community.

