MELZER
CHEMICALS PVT LTD

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Issue No-01

NET-ZERO STRATEGY

NET TRANSITION PLAN

Transitioning towards 1.5°C-aligned decarbonization and Net Zero by 2050

SBTi-aligned internal planning framework | Not submitted for SBTi validation

Planning Period: CY-2024 to CY-2050

CY-2024	CY-2030	CY-2035	CY-2050
BASELINE **2,245.28 tCO_2e** **Scope 1 + Scope 2**	**SBTi-ALIGNED MILESTONE** **1,657.27 tCO_2e** Scope 1 + Scope 2	**CORPORATE TARGET** **1,122.64 tCO_2e** 50% reduction	**NET ZERO** **Deep decarbonization** Residuals addressed
50% reduction in combined Scope 1 + Scope 2 by CY-2035 • Net Zero ambition by CY-2050			

1. Purpose of the Climate Transition Plan

Melzer Chemicals Private Limited has developed this Climate Transition Plan to establish a structured, measurable and science-aligned pathway for reducing greenhouse gas (GHG) emissions across its operations and value chain and to support the Company's transition towards net-zero emissions by 2050.

The Plan has been developed with reference to the SBTi Corporate Net-Zero Standard V1.3.1 (April 2026), the SBTi Corporate Net-Zero Standard V1.3.1 Method Appendix, ISO IWA 42:2022 - Net Zero Guidelines, and ISO IWA 48:2024 - ESG Implementation Principles. These frameworks emphasize science-based emissions reduction, ambitious interim targets, prioritization of actual GHG reductions, value-chain decarbonization, credible measurement and monitoring, transparency, accountability and continual improvement.

CY-2024 has been established as the baseline year for Melzer's climate transition pathway. The CY-2024 GHG inventory reported 834.35 tCO2e of Scope 1 emissions, 1,410.93 tCO2e of Scope 2 emissions and 21,151.11 tCO2e of Scope 3 emissions, resulting in total reported emissions of 23,396.40 tCO2e. Combined Scope 1 and Scope 2 emissions were therefore 2,245.28 tCO2e in the baseline year.

Melzer has committed to achieve a 50% reduction in combined Scope 1 and Scope 2 GHG emissions by CY-2035 and to reach net-zero emissions by CY-2050. Based on the CY-2024 baseline, the 2035 commitment corresponds to reducing combined Scope 1 and Scope 2 emissions to 1,122.64 tCO2e or below.

The Plan also recognizes that Scope 3 represents approximately 90.4% of Melzer's CY-2024 total GHG emissions. Therefore, a credible transition to net zero requires progressive Scope 3 decarbonization in addition to operational Scope 1 and Scope 2 reductions.
The transition pathway is structured as: CY-2024 Baseline -> CY-2030 SBTi-Methodology-Aligned Milestone -> 50% Scope 1 & Scope 2 Reduction by CY-2035 -> Deep Decarbonization -> Net Zero by CY-2050.

Reference basis: Melzer GHG Emission Report CY-2025, comparative CY-2024/CY-2025 analysis; SBTi Corporate Net-Zero Standard V1.3.1 and Method Appendix V1.0.

2. Climate Transition Objectives

2.1 Operational Decarbonization

- Energy efficiency and energy-performance improvement
- Renewable electricity and on-site solar generation
- Process optimization and heat recovery
- Electrification of suitable equipment and vehicles
- Equipment modernization and reduction of fossil-fuel use

2.2 Value-Chain Decarbonization

- Supplier engagement and improved primary Scope 3 data
- Low-carbon procurement

- Transportation and logistics optimization
- Packaging efficiency and circularity
- Green chemistry and lower-carbon product/process development

2.3 Science-Based Transition

Maintain an emissions reduction pathway informed by the current SBTi methodology and periodically review the pathway against updated criteria, tools and sector guidance.

2.4 Net-Zero Transformation

Progressively reduce Scope 1, Scope 2 and material Scope 3 emissions to residual levels consistent with applicable net-zero pathways and appropriately address residual emissions at the net-zero target date.

3. Climate Commitment and Target Statement

Corporate Climate Commitment

"Melzer Chemicals Pvt. Ltd. commits to reduce absolute combined Scope 1 and Scope 2 GHG emissions by 50% by CY-2035 from the CY-2024 baseline and aims to achieve net-zero GHG emissions by CY-2050."

3.1 SBTi Alignment Statement

This Climate Transition Plan has been developed with reference to the SBTi Corporate Net-Zero Standard V1.3.1 (April 2026) and the applicable SBTi methodology. The targets and pathways presented in this Plan represent Melzer Chemicals Private Limitied's internal climate commitments and transition-planning framework and have not been submitted to or validated by the Science Based Targets initiative. The Company will periodically review and update the Plan against the latest applicable SBTi criteria, methodologies, tools and sector guidance.

4. Baseline and Emissions Profile

4.1 CY-2024 Baseline

Emission Scope	CY-2024 Emissions	Share of Total
Scope 1	834.35 tCO2e	3.57%
Scope 2	1,410.93 tCO2e	6.03%
Scope 1 + Scope 2	2,245.28 tCO2e	9.60%
Scope 3	21,151.11 tCO2e	90.40%
Total	23,396.40 tCO2e	100%

4.2 Latest Inventory - CY-2025

Emission Scope	CY-2025 Emissions
Scope 1	1,132.79 tCO2e
Scope 2	1,549.77 tCO2e
Scope 3	23,171.67 tCO2e
Total	25,854.23 tCO2e

The CY-2025 report notes that additional fuel sources were included under Scope 1, improving the completeness and accuracy of emissions accounting. Annual performance comparisons will therefore consider changes in inventory completeness and boundaries before target performance is assessed.

5. Climate Transition Principles

1. Science-based action
2. Early and continuous emissions reduction
3. Reduction before neutralization
4. Value-chain responsibility
5. Renewable-energy transition
6. Technology and process innovation
7. Data integrity and transparency
8. Risk-based decision-making
9. Stakeholder engagement
10. Continual improvement

Reference basis: ISO IWA 42:2022 principles on alignment, urgency, ambition, prioritization, scientific evidence and risk-based decision-making.

6. Climate Target Architecture

Target Level	Year	Purpose
Baseline	CY-2024	Reference emissions year
Near-term SBTi-aligned milestone	CY-2030	Maintain an ambitious science-based reduction trajectory
Corporate commitment	CY-2035	50% reduction in combined Scope 1 + Scope 2
Long-term net-zero pathway	CY-2050	Deep reduction across Scopes 1, 2 and 3 with appropriate treatment of residual emissions

The SBTi methodology uses dynamic linear annual reduction rates rather than a single arbitrary percentage. The calculation depends on the base year, most recent year, target year and applicable pathway.

7. Alignment with SBTi and ISO Frameworks

7.1 SBTi Corporate Net-Zero Standard Alignment

The current SBTi Corporate Net-Zero Standard requires Scope 1 and Scope 2 near-term targets to have a minimum 1.5°C level of ambition. The Standard also requires both near-term and long-term targets and establishes requirements for Scope 3 when it is material to the inventory.
For Melzer, the Plan incorporates CY-2024 as baseline, CY-2030 as a methodology-aligned milestone, the 50% Scope 1 + Scope 2 reduction commitment by CY-2035, a long-term net-zero ambition by CY-2050, and a material Scope 3 decarbonization pathway.

7.2 SBTi Methodology Alignment

The SBTi V1.3.1 Method Appendix introduces a dynamic rate adjustment methodology. It describes the sequence of calculating the dynamic annual reduction rate, initial target ambition, target-year emissions, conversion to the base year, minimum annual reduction rate, adjusted target ambition and final target-year emissions.

Target Type / Reference	CY-2024 Reference Rate
Combined Scope 1 + 2, 50:50 illustrative ratio	4.86% LARR
Scope 3 - 1.5°C	3.46% LARR
Scope 3 - WB2C	2.88% LARR
Minimum annual reduction rate for Scope 1	4.2%
Minimum annual reduction rate for Scope 2	4.2%

Melzer's Scope 1 and Scope 2 targets are calculated separately because their pathway assumptions differ under the SBTi methodology. The combined target is then derived from the separate Scope 1 and Scope 2 target-year emissions.

7.3 ISO IWA 42:2022 Alignment

The Plan incorporates ISO IWA 42 principles through a defined baseline, interim targets, mitigation actions, monitoring, risk-based decision-making, transparent reporting and a reduction-first approach to residual emissions.

7.4 ISO IWA 48:2024 Alignment

The Plan incorporates ISO IWA 48 principles through environmental risk and opportunity assessment, materiality, stakeholder engagement, evidence-based KPIs, leadership, data quality, reporting and continual improvement.

8. Quantified Scope 1 and Scope 2 Transition Targets

Metric	CY-2024
Scope 1	834.35 tCO2e
Scope 2	1,410.93 tCO2e
Combined Scope 1 + Scope 2	2,245.28 tCO2e

9. SBTi-Methodology-Aligned CY-2030 Milestone

The CY-2030 milestone has been derived using the dynamic methodology described in the SBTi V1.3.1 Method Appendix, using CY-2024 as the baseline year and CY-2025 as the most recent inventory year.

9.1 Scope 1 - CY-2030

Parameter	Value
CY-2024 baseline	834.35 tCO2e
CY-2025 most recent emissions	1,132.79 tCO2e
SBTi minimum annual rate applied	4.2%
CY-2030 target emissions	624.09 tCO2e
Reduction from CY-2024 baseline	210.26 tCO2e
Reduction from CY-2024 baseline	25.20%

9.2 Scope 2 - CY-2030

Parameter	Value
CY-2024 baseline	1,410.93 tCO2e
CY-2025 most recent emissions	1,549.77 tCO2e
SBTi dynamic annual rate	4.462% approx.
CY-2030 target emissions	1,033.18 tCO2e
Reduction from CY-2024 baseline	377.75 tCO2e
Reduction from CY-2024 baseline	26.77%

9.3 Combined Scope 1 + Scope 2 - CY-2030

Scope	CY-2024 Baseline	CY-2030 Target	Reduction
Scope 1	834.35	624.09	25.20%
Scope 2	1,410.93	1,033.18	26.77%
Scope 1 + Scope 2	2,245.28	1,657.27	26.19%

Therefore, for transition-planning purposes, Melzer will target combined Scope 1 and Scope 2 emissions of approximately 1,657.27 tCO2e or below by CY-2030, representing an approximately 26.19% reduction from the CY-2024 baseline.

Reference basis: SBTi Corporate Net-Zero Standard V1.3.1 Method Appendix V1.0, Method Adjustment Description and Equations 1-8 (April 2026).

10. Melzer's 2035 Corporate Target

Melzer's existing corporate commitment remains a 50% reduction in combined Scope 1 and Scope 2 GHG emissions by CY-2035 from the CY-2024 baseline.

Parameter	Value
CY-2024 Scope 1 + Scope 2 baseline	2,245.28 tCO2e
Target reduction	50%
Absolute reduction required	1,122.64 tCO2e
CY-2035 target level	1,122.64 tCO2e or below

Calculation: 2,245.28 x 50% = 1,122.64 tCO2e reduction; 2,245.28 - 1,122.64 = 1,122.64 tCO2e target level.

10.1 Scope-Wise 2035 Planning Values

Scope	CY-2024 Baseline	2035 Planning Reduction	2035 Planning Level
Scope 1	834.35	417.18	417.18 tCO2e
Scope 2	1,410.93	705.47	705.46 tCO2e
Scope 1 + Scope 2	2,245.28	1,122.64	1,122.64 tCO2e

The Scope-wise values above are internal planning allocations of the Company's combined 50% commitment and are not presented as individually SBTi-validated target values.

11. Scope 3 Transition Target

11.1 Scope 3 Baseline

Metric	CY-2024
Scope 3 emissions	21,151.11 tCO2e
Total emissions	23,396.40 tCO2e
Scope 3 share of total	90.40%

Because Scope 3 is above the SBTi 40% threshold, a Scope 3 target is required for an SBTi-aligned corporate net-zero pathway. Near-term Scope 3 targets require at least 67% coverage, while long-term coverage increases to 90% of material Scope 3 emissions.

11.2 Scope 3 CY-2030 Planning Benchmark

The SBTi V1.3.1 Method Appendix provides a representative 2.88% linear annual reduction rate for Scope 3 under the well-below-2°C pathway for a CY-2024 base year. Applying this reference rate over six years from CY-2024 to CY-2030 gives an indicative 17.28% reduction benchmark.

Parameter	Indicative CY-2030 Planning Benchmark
CY-2024 Scope 3 baseline	21,151.11 tCO2e
Reference annual reduction rate	2.88%
Reference period	6 years
Indicative cumulative reduction	17.28%
Indicative reduction amount	3,654.91 tCO2e
Indicative CY-2030 emissions	17,496.20 tCO2e

This is an SBTi-methodology-based planning benchmark and not a validated SBTi Scope 3 target. The final Scope 3 target will be confirmed through the applicable target-setting methodology and target boundary assessment.

12. Scope 3 Priority Categories

Scope 3 Category	CY-2025 Emissions
Purchased Goods & Services	16,075.03 tCO2e
Downstream Transportation & Distribution	4,530.00 tCO2e
Other Scope 3 Categories	Remaining emissions
Total Scope 3	23,171.67 tCO2e

Purchased goods and services includes domestic and imported raw materials, packaging materials, services and other purchases. Downstream transportation includes local and export transportation.

13. Long-Term Net-Zero Pathway

The SBTi Corporate Net-Zero Standard requires companies to reduce Scope 1, Scope 2 and Scope 3 emissions to zero or residual levels consistent with eligible 1.5°C pathways and neutralize residual emissions at the net-zero target date.

Scope / Target Type	Long-Term Pathway Parameter
Scope 1	90% net-zero ambition by 2050
Scope 2	100% net-zero ambition by 2040
Scope 3 - 1.5°C pathway	90% net-zero ambition by 2050
Scope 3 - WB2C pathway	75% pathway ambition where applicable

For company-wide long-term planning, Melzer will use deep physical reduction as the primary pathway and treat only genuinely residual emissions as candidates for neutralization at net zero.

14. Long-Term Transition Pathway

Year	Milestone	Planning Position
CY-2024	Baseline	2,245.28 tCO2e Scope 1 + Scope 2
CY-2030	SBTi-methodology-aligned milestone	1,657.27 tCO2e Scope 1 + Scope 2
CY-2035	Melzer corporate target	1,122.64 tCO2e Scope 1 + Scope 2
CY-2040	Deep decarbonization	Continue reduction; align Scope 2 with 2040 pathway
CY-2045	Near-zero operational pathway	Minimize remaining avoidable emissions
CY-2050	Net zero	Deep reduction + appropriate neutralization of residual emissions

15. Decarbonization Levers

15.1 Renewable Energy

- On-site solar generation
- Renewable electricity procurement
- Assessment of long-term renewable-energy arrangements
- Monthly renewable-energy monitoring
- Maintenance and performance optimization of renewable assets

Parameter	Detail
Abatement Potential	**~392.92 tCO_2e/year** by 2035 – internal CTP planning estimate
Implementation Approach	Phase 1: Solar feasibility and rooftop assessment; Phase 2: installation of on-site solar and renewable electricity procurement; Phase 3: expansion of renewable electricity through additional solar / appropriate renewable-energy arrangements
Capital Investment	**~₹2.99 Crore** – preliminary planning estimate; to be replaced by EPC/vendor quotation
Operating Cost Impact	Expected reduction in purchased electricity cost. Preliminary annual financial benefit: **~₹0.40 Crore/year**
Simple ROI	**~13.3%** preliminary planning estimate
Key Risk	Solar generation variability; available rooftop/land area; regulatory and grid-integration requirements
Mitigation	Detailed feasibility study; structural assessment; performance guarantees; preventive maintenance; combine on-site generation with suitable renewable procurement
Co-benefits	Reduced electricity-cost exposure; improved energy security; reduced Scope 2 emissions; enhanced renewable-energy share

15.2 Energy Efficiency

- Energy audits
- High-efficiency pumps
- VFD implementation
- Electrical equipment optimization
- Operating schedule optimization
- Reduction of energy losses
- Monitoring of significant energy-consuming equipment

Parameter	Detail
Abatement Potential	**~280 tCO_2e/year** by 2035 – internal CTP planning estimate
Implementation Approach	Energy audits; VFD optimization; replacement of inefficient pumps; equipment-level monitoring; operating optimization; reduction of avoidable energy losses
Capital Investment	**~₹1.50 Crore** – preliminary planning estimate
Operating Cost Impact	Electricity-cost reduction through lower kWh consumption; preliminary annual benefit **~₹0.22 Crore/year**
Simple ROI	**~14.9%** preliminary planning estimate
Key Risk	Actual savings may vary with production load and operating hours
Mitigation	Establish equipment-level baseline; measure kWh before/after implementation; use project-level M&V
Co-benefits	Reduced electricity consumption; improved equipment efficiency; reduced maintenance; improved process reliability

15.3 Process Optimization

Melzer is considering MVR or FFE technology to reduce the time required for product distillation. The CY-2025 report identifies an expected reduction in distillation time of at least 60%. Actual GHG savings will be quantified after implementation using baseline and post-implementation energy data.

Parameter	Detail
Abatement Potential	**~198 tCO_2e/year** by 2035 – internal CTP planning estimate
Implementation Approach	Conduct MVR/FFE feasibility assessment; establish product/process energy baseline; pilot the technology; deploy to suitable distillation processes; progressively optimize operating parameters
Capital Investment	**~₹1.25 Crore** – preliminary planning estimate
Operating Cost Impact	Expected reduction in process energy and distillation-related operating cost; preliminary annual benefit **~₹0.15 Crore/year**
Simple ROI	**~12.2%** preliminary planning estimate
Key Risk	Technology may not be suitable for all products/processes; process-performance risk
Mitigation	Pilot testing; technical feasibility study; vendor performance guarantee; product-wise energy benchmarking
Co-benefits	Reduced distillation time; improved process efficiency; lower energy consumption; potential production-capacity improvement

15.4 Electrification

Melzer has replaced a diesel-operated forklift with an electric forklift. The CY-2025 GHG report estimates approximately 9.71 tCO2e of annual reduction from this initiative.

Parameter	Detail
Abatement Potential	**~132 tCO_2e/year** by 2035 – internal CTP planning estimate
Implementation Approach	Continue replacement of diesel material-handling equipment; assess EVs for company vehicles; evaluate electrification of technically suitable process equipment; deploy charging infrastructure
Capital Investment	**~₹1.25 Crore** – preliminary planning estimate
Operating Cost Impact	Reduced diesel consumption and maintenance costs; preliminary annual benefit **~₹0.28 Crore/year**
Simple ROI	**~22.4%** preliminary planning estimate
Key Risk	Charging infrastructure; battery performance; electricity availability
Mitigation	Charging assessment; dedicated charging points; appropriate battery technology; renewable-electricity integration
Co-benefits	Zero tailpipe emissions at point of use; lower noise; lower maintenance; improved indoor air quality

15.5 Thermal Energy Decarbonization

Stationary combustion is the major Scope 1 source. Priority measures include boiler efficiency improvement, thermic-fluid-heater optimization, heat recovery, process-heat optimization, electrification of suitable thermal loads and assessment of lower-carbon technologies.

Parameter	Detail
Abatement Potential	**~295 tCO_2e/year** by 2035 – internal CTP planning estimate
Implementation Approach	Boiler optimization; economizer/condensate recovery; thermic-fluid-heater optimization; heat recovery; process-heat optimization; electrification of suitable thermal loads; assessment of lower-carbon thermal technologies
Capital Investment	**~₹2.00 Crore** – preliminary planning estimate
Operating Cost Impact	Reduced fuel consumption and thermal-energy cost; preliminary annual benefit **~₹0.57 Crore/year**
Simple ROI	**~28.7%** preliminary planning estimate
Key Risk	Technology limitations for high-temperature process heat; fuel availability; production continuity
Mitigation	Energy audit; pilot testing; phased technology deployment; performance guarantees; maintain backup thermal capacity
Co-benefits	Lower fossil-fuel consumption; improved boiler efficiency; reduced operating costs; lower local air emissions

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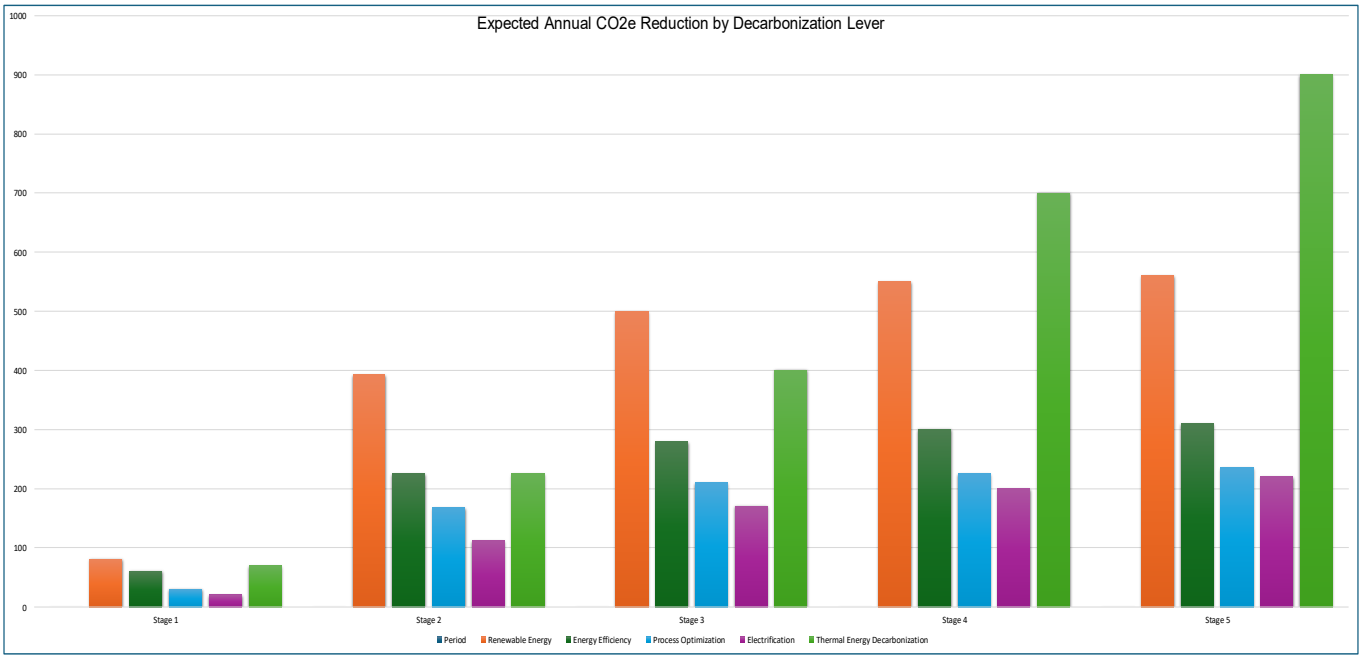
15.6 Summary Table

Decarbonization Lever	Key Initiatives / Actions	CY-2025 Status	Expected Reduction by 2030*	Expected Reduction by 2035*	Long-Term Direction
Renewable Energy	On-site solar generation; renewable electricity procurement; long-term renewable-energy arrangements; renewable-energy monitoring	Solar listed as proposed; renewable transition to be developed	**~80 tCO_2e/yr**	**~393 tCO_2e/yr**	Progressive transition towards very high/100% renewable electricity
Energy Efficiency	AODD pump replacement; VFDs; high-efficiency pumps; energy audits; equipment optimization; operating optimization	**4.15 tCO_2e/yr actual saving** from AODD pump; VFDs and pump upgrades implemented	**~60 tCO_2e/yr**	**~225 tCO_2e/yr**	Continuous efficiency improvement
Process Optimization	MVR/FFE technology; process-energy optimization; process intensification	MVR/FFE under consideration; expected distillation-time reduction ≥60%	**~30 tCO_2e/yr**	**~168 tCO_2e/yr**	Further process intensification and low-energy production
Electrification	Electric forklift; electrification of suitable vehicles/equipment/process loads	**9.71 tCO_2e/yr actual saving** from electric forklift	**~20 tCO_2e/yr**	**~112 tCO_2e/yr**	Progressive replacement of fossil-fuel equipment
Thermal Energy Decarbonization	Boiler efficiency; economizer/condensate recovery; thermic-fluid-heater optimization; heat recovery; thermal electrification	Economizer implemented; minimum **3% fuel saving** reported	**~70 tCO_2e/yr**	**~225 tCO_2e/yr**	Major fossil-fuel phase-down and low-carbon thermal technologies



16. Scope 3 Decarbonization Programme

16.1 Purchased Goods and Services

- Obtain supplier-specific GHG data
- Identify high-carbon raw materials
- Introduce climate criteria in supplier evaluation
- Encourage supplier energy efficiency and renewable-energy adoption
- Assess lower-carbon material alternatives
- Establish supplier climate engagement

Parameter	Detail
Abatement Potential	**~2,375.69 tCO_2e/year by 2030** – internal CTP planning estimate
Implementation Approach	Supplier mapping; identify high-carbon raw materials; collect supplier-specific GHG data; introduce climate criteria in supplier evaluation; supplier energy-efficiency and renewable-energy engagement; assess lower-carbon material alternatives
Capital Investment	**~₹0.75 Crore** – preliminary estimate for supplier-data systems, assessments, engagement programme and procurement integration
Operating Cost Impact	Potential savings through material efficiency, supplier optimization and lower-carbon procurement; preliminary annual financial benefit **~₹0.10 Crore/year**
Simple ROI	**~13.3%** preliminary planning estimate
Key Risk	Limited supplier-specific GHG data; supplier willingness; availability of lower-carbon raw materials; potential material-cost premium
Mitigation	Supplier climate questionnaire; prioritize low-emission suppliers; supplier capacity building; phased data requirements; dual sourcing where required
Co-benefits	Better Scope 3 data quality; supply-chain resilience; improved procurement transparency; reduced raw-material carbon intensity

16.2 Transportation and Distribution

- Improve transportation activity data
- Optimize routes
- Improve vehicle/load utilization
- Consolidate shipments where feasible
- Assess lower-emission modes
- Engage logistics providers on emission reduction

Parameter	Detail
Abatement Potential	**~730.98 tCO_2e/year by 2030** – internal CTP planning estimate
Implementation Approach	Improve distance and weight data; establish carrier baselines; optimize routes; improve vehicle/load utilization; consolidate shipments; assess lower-emission transport modes; engage logistics providers
Capital Investment	**~₹0.60 Crore** – preliminary estimate for logistics data systems, route optimization and implementation support
Operating Cost Impact	Lower transport cost through route optimization, improved load factor and shipment consolidation; preliminary annual benefit **~₹0.12 Crore/year**
Simple ROI	**~20.0%** preliminary planning estimate
Key Risk	Logistics-provider capability; service-level requirements; limited availability of lower-emission modes
Mitigation	Include climate criteria in logistics contracts; pilot selected routes; use preferred low-carbon carriers; track shipment-level emissions
Co-benefits	Lower logistics cost; improved fleet utilization; better shipment data; supply-chain resilience

16.3 Packaging

- Track packaging intensity per tonne of product
- Increase reusable packaging where feasible
- Increase recycled content
- Quantify avoided packaging emissions
- Expand IBC and ISO tank usage where technically and commercially appropriate

Parameter	Detail
Abatement Potential	**~365.49 tCO_2e/year by 2030** – internal CTP planning estimate
Implementation Approach	Establish packaging intensity baseline; increase IBC and ISO tank use where feasible; reduce single-use packaging; increase reusable packaging; assess recycled content; quantify avoided packaging emissions
Capital Investment	**~₹0.40 Crore** – preliminary estimate for packaging-system changes, reusable-container infrastructure and process modifications

Operating Cost Impact	Savings from reduced packaging-material purchases and reduced handling/disposal requirements; preliminary annual benefit **~₹0.08 Crore/year**
Simple ROI	**~20.0%** preliminary planning estimate
Key Risk	Product compatibility; customer requirements; transportation and handling constraints; regulatory considerations
Mitigation	Product-wise feasibility assessment; customer engagement; phased conversion; packaging safety validation
Co-benefits	Lower material consumption; lower waste generation; improved material efficiency; circularity improvements

16.4 Green Chemistry

- Lower-energy processes
- Improved process yield
- Reduced material consumption
- Reduced waste
- Lower-carbon raw materials
- Process intensification
- Lifecycle emission improvement

Parameter	Detail
Abatement Potential	**~182.75 tCO_2e/year by 2030** – internal CTP planning estimate
Implementation Approach	Identify product/process hotspots; lower-energy processes; improve yield; reduce material consumption and waste; assess lower-carbon raw materials; process intensification; lifecycle-based evaluation
Capital Investment	**~₹1.00 Crore** – preliminary estimate for R&D, pilot-scale trials, process modification and implementation
Operating Cost Impact	Potential savings from reduced energy, raw-material consumption and waste; preliminary annual benefit **~₹0.12 Crore/year**
Simple ROI	**~12.0%** preliminary planning estimate
Key Risk	Product-quality requirements; customer approval; process-performance uncertainty; scale-up risk
Mitigation	Laboratory screening; pilot trials; lifecycle assessment; customer validation; staged scale-up
Co-benefits	Resource efficiency; lower waste; improved product sustainability; process innovation; potential competitive advantage

16.5 Summary Table

Lever	Key Actions	CY-2025 Status	2030 Allocation	Expected Reduction by 2030 (tCO_2e)	Long-Term Direction
Purchased Goods & Services	Supplier GHG data, low-carbon materials, supplier engagement	**16,075.03 tCO_2e**	65%	**2,375.69**	Deep supplier decarbonization
Transportation & Distribution	Route optimization, load utilization, lower-emission transport	**4,530.00 tCO_2e**	20%	**730.98**	Low-carbon logistics
Packaging	Packaging reduction, reusable/recycled materials, IBC/ISO tanks	Included in Cat. 1	10%	**365.49**	Circular, low-carbon packaging
Green Chemistry	Lower-energy processes, material efficiency, lower-carbon inputs	Initiative identified; saving not quantified	5%	**182.75**	Lifecycle-based low-carbon processes
Total	—	—	**100%**	**3,654.91**	Progressive Scope 3 decarbonization

17. Climate Governance and Accountability

Function	Key Responsibility
Board / Director	Climate commitment and strategic oversight
Sustainability / ESG	Transition plan, GHG inventory, target management and reporting
EHS / Environment	Environmental data, monitoring and implementation
Engineering / Operations	Energy efficiency, projects and technology implementation
Procurement	Supplier engagement and Scope 3 reduction
Customer Support	Coordinate with Operations, Supply Chain, Quality, Compliance, Risk, Sustainability, and other relevant functions where climate-related issues impact downstream processes.
Finance	Climate-related CAPEX/OPEX and investment evaluation
HR	Training, awareness and workforce engagement
R&D	Green chemistry and lower-carbon process development

18. Climate Risk and Opportunity Management

18.1 Physical Climate Risks

- Extreme heat
- Water availability
- Flooding
- Extreme weather
- Supply-chain disruption
- Utility and infrastructure reliability

18.2 Transition Risks

- Energy-price volatility
- Evolving environmental requirements
- Customer decarbonization expectations
- Supplier requirements
- Technology transition
- Future carbon-related costs

18.3 Climate Opportunities

- Renewable-energy investment
- Energy-cost reduction
- Process innovation
- Green chemistry
- Supply-chain resilience
- Improved market access
- Sustainability-linked financing opportunities

19. Climate Finance and Investment

Melzer will incorporate climate considerations into major investment decisions. Projects will be evaluated using GHG reduction potential, energy savings, renewable-energy contribution, operating-cost savings, capital investment, payback period, technology maturity, operational feasibility, climate resilience and Scope 3 implications.
Where appropriate, the Company may use a cost-of-abatement metric: Cost of abatement = Project investment / Lifetime tCO2e reduction.

20. Monitoring and Performance Management

KPI	Baseline / Reference	Frequency
Scope 1 emissions	834.35 tCO2e	Annual
Scope 2 emissions	1,410.93 tCO2e	Annual
Scope 1 + Scope 2	2,245.28 tCO2e	Annual
Scope 3 emissions	21,151.11 tCO2e	Annual
CY-2030 Scope 1 target	624.09 tCO2e	Annual
CY-2030 Scope 2 target	1,033.18 tCO2e	Annual
CY-2030 Scope 1 + Scope 2 target	1,657.27 tCO2e	Annual
CY-2035 Scope 1 + Scope 2 target	1,122.64 tCO2e	Annual
Renewable electricity share	To be established	Monthly / Annual

21. Data Quality and Continual Improvement

Melzer will continue to maintain its GHG inventory using documented activity data and appropriate emission factors. The CY-2025 inventory states that the GHG inventory uses measured and documented activity data, reliable emission factors and a materiality threshold of ±10%.

- Strengthen source-level data
- Increase supplier-specific Scope 3 data
- Improve activity-based calculations
- Maintain emission-factor documentation
- Review organizational and operational boundaries
- Document methodological changes
- Improve data traceability
- Continue independent assurance where appropriate

22. Workforce and Just Transition Considerations

- Training on new technologies
- Energy-management capability building
- Renewable-energy system training
- EV and electrification training
- Employee involvement in energy-saving initiatives
- Communication of material operational changes
- Assessment of workforce implications of automation and technology change
- Protection of occupational health and safety during transition

23. Implementation Roadmap

Period	Major Focus	Key Actions
2026-2030	Establish & accelerate	SBTi methodology alignment, CY-2030 milestone, Scope 3 target development, solar, energy audits, process optimization, supplier engagement
2031-2035	Deliver 50% Target	Thermal decarbonization, electrification, renewable-energy expansion, green chemistry, logistics and supplier reduction
2036-2040	Deep Decarbonization	Fossil-fuel phase-down, Scope 2 pathway, process electrification, low-carbon technology and value-chain transformation
2041-2045	Near-Zero	Minimize remaining avoidable operational and value-chain emissions
2046-2050	Net Zero	Deep reduction, residual-emission assessment, appropriate neutralization and maintenance of net-zero balance

24. Net-Zero Approach

Melzer will follow a reduction-first hierarchy towards net zero.

1. Avoid unnecessary emissions
2. Improve energy and resource efficiency
3. Increase renewable and low-carbon energy
4. Electrify suitable processes and equipment
5. Decarbonize the value chain
6. Minimize unavoidable residual emissions
7. Neutralize residual emissions at net zero

Carbon credits will not be counted as emission reductions toward near-term or long-term science-based targets. Any future use will be limited to appropriate residual-emission neutralization or additional climate mitigation beyond science-based targets.

25. Net-Zero Residual Emissions Strategy

- Annual assessment of residual emissions
- Documentation of why residual emissions remain
- Assessment of appropriate removal technologies
- Quality and permanence assessment
- Avoidance of double counting
- Independent verification where feasible
- Transparent disclosure

Residual emissions will not be used as a substitute for feasible emissions reduction.

26. Reporting and Review

- Baseline and reporting-year emissions
- Scope 1, Scope 2 and Scope 3 performance
- Target progress
- Emissions intensity
- Renewable-energy performance
- Major decarbonization initiatives
- Scope 3 progress
- Climate risks and opportunities
- Methodology changes and data limitations
- Planned actions
- Progress towards 2035 and 2050 objectives

The Climate Transition Plan will be reviewed periodically and updated where there are material changes in business operations, organizational boundary, GHG accounting methodology, climate science, SBTi requirements, regulatory requirements, technology availability or climate risks and opportunities.

27. Summary of Quantified Climate Targets

Target	Reference Baseline	Target Year	Target / Reduction	Target-Year Emissions
Scope 1 - SBTi methodology-aligned milestone	834.35 tCO2e	2030	~25.20%	624.09 tCO2e
Scope 2 - SBTi methodology-aligned milestone	1,410.93 tCO2e	2030	~26.77%	1,033.18 tCO2e
Scope 1 + Scope 2 - SBTi methodology-aligned milestone	2,245.28 tCO2e	2030	~26.19%	1,657.27 tCO2e
Scope 1 + Scope 2 - Melzer corporate commitment	2,245.28 tCO2e	2035	50%	1,122.64 tCO2e
Scope 3 - planning benchmark	21,151.11 tCO2e	2030	~17.28% benchmark	~17,496.20 tCO2e
Scope 1 - long-term pathway	834.35 tCO2e	2050	90% ambition	~83.44 tCO2e
Scope 2 - long-term pathway	1,410.93 tCO2e	2040	100% pathway	0 tCO2e pathway
Scope 3 - 1.5°C long-term pathway	21,151.11 tCO2e	2050	90% ambition	~2,115.11 tCO2e

28. Key Implementations in CY-2025

Key Implementation	Description / Action Taken	Quantified Energy/Fuel Saving	CO_2e Saving
Air-Operated Pump Replacement	Replaced an electrical 3 HP centrifugal pump with an air-operated pump system to reduce electricity consumption.	**5,840 kWh/year**	**4.15 tCO_2e/year**
Electric Forklift Replacement	Replaced diesel-operated forklift with an electric forklift for internal material handling, eliminating diesel consumption.	**3,650 L diesel/year**	**9.71 tCO_2e/year**
Boiler Economizer / Condensate Recovery	Recovered heated boiler condensate through an economizer to improve boiler efficiency and reduce LDO consumption.	**Minimum 3-6% fuel saving/year**	**Not quantified**
VFD Installation on Reactor	Installed Variable Frequency Drives (VFDs) on reactors to optimize motor operation and reduce electricity consumption.	Not quantified	**Not quantified**
Motion Sensors	Installed motion sensors in common areas and corridors to minimize unnecessary electricity consumption.	Not quantified	**Not quantified**

29. Key Implementation Priorities for CY-2026 to CY-2030

1. Formally approve the Climate Transition Plan.
2. Maintain CY-2024 as the baseline year.
3. Adopt the CY-2030 SBTi-methodology-aligned Scope 1 and Scope 2 milestones.
4. Formalize the Scope 3 target boundary and materiality assessment.
5. Improve Scope 3 activity data and supplier-specific information.
6. Complete renewable-energy feasibility and implementation planning.
7. Continue energy-efficiency projects.
8. Implement and quantify process-optimization projects.
9. Expand electrification of suitable equipment and vehicles.
10. Establish supplier and logistics climate-engagement programmes.
11. Integrate climate risks and opportunities into risk management.
12. Establish annual climate KPI review by management.
13. Continue independent GHG assurance.
14. Review the Plan against updates to SBTi criteria and methodology.

30. Conclusion

Melzer Chemicals Private Limited's Climate Transition Plan establishes a structured pathway from the CY-2024 GHG baseline towards the Company's existing 50% Scope 1 and Scope 2 reduction commitment by CY-2035 and its net-zero ambition by CY-2050.

The transition pathway uses the methodology contained in the current SBTi Corporate Net-Zero Standard V1.3.1 Method Appendix rather than relying solely on illustrative percentage reductions. The methodology applies dynamic annual reduction rates and considers the base year, most recent inventory year, target year and relevant net-zero pathway.

Using the CY-2024 baseline and CY-2025 latest inventory, the methodology-derived CY-2030 planning milestone is approximately 624.09 tCO2e for Scope 1, 1,033.18 tCO2e for Scope 2 and 1,657.27 tCO2e for combined Scope 1 + Scope 2. This represents an approximately 26.19% reduction from the CY-2024 combined baseline of 2,245.28 tCO2e.

Melzer's 2035 corporate commitment then requires a further reduction to 1,122.64 tCO2e or below, representing a 50% reduction from the CY-2024 baseline.
At the same time, the Company's Scope 3 footprint requires significant value-chain transformation. The initial Scope 3 pathway therefore focuses on purchased goods and services, downstream transportation, supplier engagement, logistics, packaging and green chemistry, with progressive expansion towards broader material Scope 3 coverage.

The transition to net zero will prioritize actual emissions reduction first, followed by appropriate treatment of genuinely residual emissions at the net-zero target date. This approach is consistent with the principles of the SBTi Corporate Net-Zero Standard, ISO IWA 42:2022 and ISO IWA 48:2024.
Overall transition pathway: CY-2024 Baseline -> SBTi-Methodology-Aligned CY-2030 Milestone -> 50% Scope 1 + Scope 2 Reduction by CY-2035 -> Deep Decarbonization -> Net Zero by CY-2050

31. Reference Documents

Reference Document	Use in this Plan
SBTi Corporate Net-Zero Standard V1.3.1, April 2026	Target boundaries, ambition, net-zero definition, Scope 3 requirements and reporting principles
SBTi Corporate Net-Zero Standard V1.3.1 Method Appendix V1.0, April 2026	Dynamic annual reduction-rate methodology and target-year calculations
Melzer Chemicals GHG Emission Report CY-2025	CY-2024 baseline, CY-2025 inventory, emissions sources and existing mitigation initiatives
ISO IWA 42:2022 - Net Zero Guidelines	Net-zero principles, mitigation, risk, residual emissions and reporting
ISO IWA 48:2024 - ESG Implementation Principles	Environmental risk/opportunity management, data, KPIs, stakeholder engagement and continual improvement

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