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sustainable
world



2021

MERCER INTERNATIONAL INC.

Sustainability Goals, Strategies, Tactics, and Targets



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2021

Continuous Improvement in Sustainability Performance through Goals, Strategies, and Tactics (GSTs)





Goal 1

Continuous Improvement in Environmental Performance

Mercer Operation	Goal	Strategy	Tactics	Target
Mercer Holz	Risk reduction of environmental damage.	Prevention of soil and water pollution.	Use biodegradable oils in the hydraulic systems for our trucks and harvesting equipment. Install spill kits for all harvesting equipment.	100% of our trucks and harvesting equipment operate with bio-hydraulic oil. All machines are equipped with spill kits.
Mercer Peace River	Minimize waste disposal to landfill	ASB Biosolids land application, Wood ash land application, Hot lime sales. Green Liquor Clarifier upgrades to reduce dregs to the landfill	Pursue circular economy beneficial reuse opportunities for waste streams	<ul style="list-style-type: none"> ASB Biosolids 2500 BDt/annum Wood ash land application 1000 Wet tonnes/ annum Hot lime sales from landfill 2000 Wet tonnes/annum Reduced volume of dregs to landfill 2300m3/yr starting H2 2021
	Reduce fresh water use	Eliminate NCCW return to the river	Conduct energy and water balance study to identify opportunities to reduce water use	Identify projects for a feasibility study
	Reduce odour complaints	Continuous daily focus on fugitive emission KPI's	Investigate opportunities to eliminate Flash steam from the Chip feed system and incinerate NCG's in the RB	Zero odour complaints for 2021. Project opportunities identified for a long-term capital plan
Mercer Rosenthal	Reduction of the COD load of a wastewater substream	Installation of a secondary condensate stripper	By cleaning condensate this can be reused and displace fresh water	Equipment Installation and start-up finalized by end of 2021. Reduction of COD in secondary condensate and water savings shall materialize in 2022.
Mercer Forestry Services	Decrease site disturbance in harvesting	Reduction on trail construction and track rutting on steep slopes	Utilize tools and methods to assist machine traction on steep slopes	Acquire and utilize a winch assisted harvest system in 2021
Santanol	Risk reduction in environmental damage	Assess the types and suitability of plantation/forest management certification	Identify the viable options for plantation/forest certification e.g. FSC, PEFC, UEBT	Full review of plantation/forest certification options complete by end of 2021
	Minimize waste disposal to landfill	Reduce the waste disposal to landfill by recycling where possible	Implement recycling for E-waste and plastic bottle programs	Implement a recycling program by end of 2021
Celgar	Improve waste quality and quantity to landfill	Review operation of existing lime and dregs circuit to optimize and achieve a reduction and quality improvement of waste	Benchmark to other Mercer mill operations, identify process improvements that would result in a higher quality dregs material. Increase stability and investigate process changes to recycle off quality lime	Collect baseline data Complete Process Review study Benchmark to other mills Identify project for a feasibility study
	Improve basin biology health	Minimize low pH effluent events	Implement an effluent pH controls project	Maintain Primary clarifier effluent discharge between 6.5-8.5 pH following a diversion
	Reduce venting emissions	Reduce chip bin DNCG venting	Process optimization and stability, engagement of the organization	Investigate and implement process improvements identified. Continuous daily focus on operations
Mercer Stendal	Reduce freshwater usage	Create messaging mill-wide on water savings	Implement a mill-wide freshwater savings initiative	Reduce fresh water usage by 1.7% (5% in 3 years) base-line past 5 years (2016-2019)
	Reduce waste disposal	Reduce the waste disposal of boiler ash	Implement a boiler ash separation project	Reduce waste disposal by 1.7% (5% in 3 years) base-line past 5 years (2016-2019)
Mercer Timber Products	Reduce freshwater usage	Reduce the water consumption of the kilns	Optimize spraying system of continuous kilns to reduce water consumption	Reduce water consumption in 2021



Goal 2

Mitigate Climate Change

Mercer Operation	Goal	Strategy	Tactics	Target
Mercer Corporate	Understand the water risk at each operation	Conduct study to evaluate the water risk at all Mercer operations	Develop a comprehensive understanding of water risk for each facility and plans for addressing potential issues	Water risk study complete in 2021 for each facility including adopting a measuring and monitoring risk process
	Prepare Science-Based Target Initiative (SBTi) for GHG 2030 Goal	Develop SBTi Methodology for enterprise target for 1.5 C pathway	Use SBTi Methodology for assessment of Scope 1 and Scope 3 Emission target	Complete SBTi methodology
Mercer Holz	Reduce GHG emissions along the whole wood supply chain.	Develop a process and calculate the CO2 emissions per solid cubic meter/km.	Continuation of adopting climate-friendly equipment, procedures, and behaviour.	Evaluation scheduled for 2021.
Peace River	Reduce GHG emissions.	Upgrade Recast operation	Complete upgrade to the Green Liquor Clarifier.	Project benefit to achieve 520t CO2e annual reduction
	Reduce Scope 3 GHG Emissions	Develop and implement Improved Chip plant project	Execute and commission Chip plant	31,000t CO2e annual reduction
	Reduce Scope 1 GHG emissions	Reduce natural gas burning in the recovery boiler and power boiler.		Reduce 2021 GHG emissions with a target of 340 kg CO2 per ADMT.
Mercer Rosenthal	Emission Free vehicles	Increase emission-free vehicles from 15 to 20 in 2021.	Sale or scrap of 5 more vehicles with conventional engines, procurement of electric or fuel-cell cars.	
	Reduce GHG emissions			Reduce 2021 GHG emissions with a target of 135 kg CO2 per ADMT.
	Renewable energy generation			2021 renewable energy generation of 407 GWh
Mercer Celgar	Reduce Scope 1 GHG emissions	Identify process changes and capital improvements that will reduce natural gas consumption	Further develop GHG Emissions Reduction Plan, process optimization and stabilization	Projects will be reviewed and the capital approval process engaged.
	Reduce Scope 3 GHG Emission related to harvesting, transporting and chipping of wood	Implement Upgraded Woodroom Project to increase the capacity of Celgar central woodroom	Eliminated diesel-based chipping operations and centralize chip to electric chip operations	Implement Celgar Woodroom Modernization Project
	Reduce GHG emissions			Reduce 2021 GHG emissions with a target of 260 kg CO2 per ADMT.
	Renewable energy generation			2021 renewable energy generation of 456 GWh

Mercer Operation	Goal	Strategy	Tactics	Target
Mercer Stendal	Reduce GHG emissions.	Minimize fossil fuel usage intensity	Reduction (2% kWh / t lime) in the specific use of fossil natural gas at the lime kiln by installing a stationary lime cooler	
	Reduce GHG emissions			Reduce 2021 GHG emissions with a target of 109 kg CO2 per ADMT.
	Renewable energy generation			2021 renewable energy generation of 870 GWh
	Reduction of CO2 emissions in transportation	Enhance e-mobility	Installation of 2 public charging stations where people can charge their cars with our green power. Replace 2 mill owned diesel cars with electric cars	Installation complete. Two vehicles replaced.
Mercer Corporate	Reduce supply chain GHG emissions.	Review Baseline Scope 3 GHG Emission Project completed in 2019 to identify improvement opportunities	Improve methodology for Mercer's Scope 3 GHG Emissions calculation for the 2020 year.	An improved methodology based on SBTi requirements.
Mercer Forestry Services	Reduce GHG emissions in operations	Upgrade mobile equipment and trucking fleet to a Tier 4 emissions standard	Change out heavy equipment and trucks without emissions after-treatment	Upgrade 10% of heavy equipment to Tier 4 emission standards in 2021.
Santanol	Reduce GHG emissions in operations	Expand the livestock plan, reducing the need for tractors	Purchase goats and necessary infrastructure to increase the use of goats to all applicable plantations	Minimum of 1500 goats purchased by end of 2021
	Reduce GHG emissions	Reduce burning of plantation waste post-harvest by trialling land remediation practices	Instead of windrowing and burning host trees, trial converting to biochar	Complete all trials by end of 2021
	Reduce GHG emissions	Use lower emission vehicles	Replace old work vehicles in Kununurra with new, lower-emission vehicles	Replace 20% of the old work vehicle fleet with lower emission vehicles
Mercer Timber Products	Reduce GHG emissions	Use emission-free vehicles instead of Diesel vehicles	Replace Diesel vehicles with emission-free ones where possible	Replace at least one forklift and one internal transport company car with an emission-free one.



Goal 3

Continuous Improvement in Resource Efficiency

Mercer Operation	Goal	Strategy	Tactics	Target
Mercer Corporate	Establish enterprise energy intensity and % of energy from renewable sources framework	Develop a process for each facility to determine the methodology to measure each facilities overall energy intensity and percentage of energy from renewable sources	Develop a methodology for determining key factors for energy measurement	Complete enterprise-level energy study to determine the methodology for energy calculations for each facility.
Mercer Holz	Develop wood terminals to improve access to competitive wood supply.	Develop a network of wood terminals to increase rail access to sustainable wood supply over the next 5 years	Implementation of up to 5 terminals. Organize new processes to feed these terminals. Optimize rail logistics to these terminals	Start of construction on two terminals planned in 2021. Further evaluation of other possible project sites.
	Optimization of the wood delivery process via truck through digitalization	Develop an app and terminals to digitalize the delivery process	Implementation of an app that transfers data between Mercer and delivery partners to optimize the delivery process of wood	Implementation of the app and construction of the needed infrastructure in 2021.
Mercer Peace River	Increase yield from the forest	Construct modern efficient Chipping plant	Improved debarking while reducing whitewood losses. Improved chip quality to increase cooking yields	8.5% yield improvement from HW forest
	Reduce Non Renewable energy use in our Fibre supply chain	Adopt 10 axle trucks for HW cut to length pulp logs	Gain approval from GOA 2021	Develop a migration plan for 10 axle trucks
Mercer Rosenthal	Reduction of specific wood consumption	Implement debarking drum supervisory controls to reduce wood losses to the bark fraction	Reduce wood losses through optimization of debarking	Improvement in yield from 5.2 m ³ /adt to below 5.1
Mercer Celgar	Increase stable Kappa % to increase yield	Improve Digester process controls	Work with vendors to install controls, train operators	Target kappa 30
	Reduce fibre losses in chip screening	Reduce the generation of pins & fines in Digester feed as well as rejects to waste.	Fully utilize and increase Chip Conditioner (Cracker) efficiencies	Reduction in pins & fines will be evaluated from this initiative. Chip supplier CQI program enhancements to be developed in Q1
	Stop wasting knots and rejects	Design and install new knots & rejects recycle systems	Fibre from knots and rejects will be re-cooked and captured back into the process	Waste reduction of 15t of fibre/day with improved housekeeping
Mercer Forestry Services	Improve transportation efficiency	Reduce pickup travel within the operation	Work with customers to establish camp accommodations in a strategic location.	Reduce daily travel by >30% when camp is in place.
Santanol	Reduce unnecessary tractor operations and chemical usage via the green access roads program	Expand the green access road program from a single plantation to all plantations	Cease spraying access roads with chemicals (pesticides) and perform manual slashing in access roads only when required (accessibility/safety), converting them to green access roads	Implementation of the green access roads program to all plantations by end of 2021
Mercer Stendal	Reducing energy consumption	Minimization of compressed air consumption and thus reduction of electrical energy consumption	Replacement of positioners with lower compressed air consumption on automatic valves	
	Resource conservation of wood - stabilizing of the wood usage factor	Overhaul of the chips screening plant, including the fine screen rolls	Achieve budget wood consumption factor	
Mercer Timber Products	Improve transportation efficiency	Reduce time for locking of lumber on trucks for internal transport (Train loading) to compensate for higher planer output	Quick locking system trailers can handle high volumes in a shorter time	Develop and order at least one quick-locking trailer for lumber transport for train loading.

A faint, blue-tinted image of a small seedling with three leaves growing out of a mound of soil. The background is a solid blue color with a green triangle in the top-left corner and a yellow triangle in the bottom-right corner.

Goal 4

Embrace Social Responsibility

Mercer Operation	Goal	Strategy	Tactics	Target
All Mercer Operations	Improve the Health & Safety performance of our operations including contractors working under our direction.	<p>Advance Road to Zero harm culture through well-managed process and behavioural safety prevention programs.</p> <p>Align industry best practices through collaboration with the workforce advancing the safety program elements at all operations.</p> <p>Support ill and injured workers through an effective return to work management</p> <p>Ensure adequate emergency response measures are in place.</p>	<p>Maintain compliance with all regulatory requirements. Implement, apply and embed Mercer standards at the local level.</p> <p>Define and apply industry best practices to continue to understand and manage risk in operations.</p> <p>Conduct Bradley Curve reassessments to understand the progression of culture.</p> <p>Expand return to work programs Support mental health programs</p> <p>Define Corporate Safety Management System Framework.</p> <p>Conduct audit of High-Risk Standards And emergency response drills.</p> <p>Advance Health and Hygiene aspects Advanced Process Safety Management</p>	<p>Near Miss - defined at the mill level</p> <p>Inspection/Observation - defined at mill level</p> <p>Expand leading KPI measuring TRIR < 2</p> <p>Severity < 60 - being further defined</p> <p>SFI philosophy</p> <p>Reduction in Claims Cost Experience</p> <p>Advancement on Bradley Curve</p>
	Increase employee engagement.	Increase employee engagement by better understanding motivation and values.	<p>Rollout results of Employee Engagement</p> <p>Survey by division to local management teams.</p> <p>Develop and initiate local-level action plans to address areas for improvement.</p> <p>Re-survey in 2022</p> <p>Design and implement a global communication and education campaign.</p>	<p>Results communicated to management teams.</p> <p># of divisions with action plans developed/executed</p> <p>Increase overall participation by 10% for the next survey administration (expected 2022).</p>
	Develop a culture that supports diversity, equity, and inclusion.	Develop a culture that supports diverse and inclusive teams to improve competitive advantage, increase our organizational talent, and improve our decision-making	<p>Reinforce the governance structure and integrate into our management systems.</p> <p>Train global council, local workgroup and SMT members on DE&I basics Understand and improve inclusion for women at Mercer.</p>	<p>Complete "Women in the Workplace" pipeline analysis for root cause and select and implement tactics designed to overcome bias in the talent system.</p> <p>Develop and implement DE&I action roadmap for 2021/2022.</p> <p>Conduct unconscious bias / conscious and inclusion training.</p>
	Train, develop, and enable employees to reach their full potential, keeping talented and highly-qualified employees within Mercer.	Accelerate leadership development. Improve employee development.	<p>Develop/implement pilot strengths-based performance management program at Celgar.</p> <p>Conduct an assessment of leadership development across Mercer for the purpose of identifying any gaps and standardizing.</p> <p>Resume Mercer Leadership Program when safe to travel with next MLP intake cohort for 2021</p> <p>Update and extend succession plans to mid-level leaders in mills</p> <p>Ensure development plans are in place for all levels of management across Mercer</p>	<p>Pilot performance management program in place</p> <p>Leadership Development Assessment completed</p> <p>MLP resumed with the new 2021 cohorts.</p> <p>Succession plans updated & extended</p> <p>Track % of target employees with a documented development plan</p>



Goal 5

Sustainable Forest Management





Mercer Operation	Goal	Strategy	Tactics	Target
Celgar	Implement full forest utilization strategy.	Educate & partner with regional stakeholders to transfer maximum fibre to Celgar.	Woodroom upgrade to small log processing line, transportation and handling assets.	Q2 Capital project approval, 1,000,000 m3 on-site chipping production (2022).
Peace River	Sustainable Forest Management and Protection of Biodiversity	Partnership with the many collaborators of the EMEND project (Ecosystem Management Emulating Natural Disturbance). EMEND is a world-class ecological forest land management research project consisting of over 1000 ha of experiments designed to monitor and evaluate a novel approach to forest management known as Ecosystem Based Management or EBM.	Continue leading this ecosystem based management approach backed by science that delivers the continual improvement of forest practices in Alberta through an adaptive management framework.	MPR continues to lead the partnership to maintain the EMEND project.
	Expand Indigenous partnerships in our Alberta forest management operations.	Effective consultation on Detailed Forest Management Plan (DFMP), GDP, completion of TLU projects with tier 1 communities.	Leadership and Team Member awareness training. MPR leadership engagement with Indigenous communities. Canadian Council for Aboriginal Business Progressive Aboriginal Relations Phase 1 submission.	Progress and achievement support towards Canadian Council for Aboriginal Business (CCAB) Progressive Aboriginal Relations (PAR) certification.
All Mercer Operations	Support sustainability in forest management and wood sourcing.	Sourcing of our wood based on our policy. Work to maintain long-term supplier relationships.	Increase the percentage of certified wood. Include, respect, and foster relationships with small landowners.	The percentage of certified wood is 80% by 2030. 2020 result was 66.2%.



Goal 6

Enhance Stakeholder Engagement

Mercer Operation	Goal	Strategy	Tactics	Target
All Mercer Operations	Improve local stakeholder engagement.	Offer activities/events that support the sustainable use of wood. Launch Growing Forests, Growing Future Campaign in Germany	Engage in dialogue with interested parties. Execute a minimum of 2 initiatives to support local community institutions. Organize 3 events with local communities. Support of school forest days and participation in forest fairs. Execution of mill tours with forest owners. Conduct forestry presentations.	Each Mercer operation will track local engagement initiatives.
	Enhance the availability of ESG information to investors	Prioritize Mercer's participation in questionnaires and assessments for the ESG index and rating schemes that are most material for our investors.	Publish our 2021 Sustainability report and increase the material information on our Mercer website.	Increased transparency and disclosure quality for our ESG information.
	Increase understanding of stakeholders priorities.	Publish our Mercer 2021 Sustainability Report	Review the completed 2020 Materiality Assessment and update for 2021 Sustainability Report.	Complete our comprehensive 2021 Sustainability Report for publishing with our annual report in March 2022
	Strengthen the sustainability of our supply chain.	Share our Wood & Fiber Procurement Policy and our Sustainable Procurement Policy with our key suppliers.	Share the policies and develop an audit process to ensure compliance	Supplier Audit process developed in 2021.
	Improve government engagement to support growth and innovation.	Increase government engagement level to support the key requirement for our growth and success.	Support our industry associations and present to all levels of government.	Assess government engagement for each of Mercer's operations.

