

# 2024 SUSTAINABILITY REPORT

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# MASHWA®

## 2024 SUSTAINABILITY REPORT

**"Mining Today, Sustaining Tomorrow"** continues to be the guiding principle behind all of our operations at Mashwa Minerals Ltd. In 2024, we achieved significant milestones in environmental stewardship, community engagement, and operational innovation. This report reflects our progress, highlights challenges, and outlines our continued commitment to building a sustainable future.

This report reflects our achievements, the challenges we faced, and our roadmap for continuing to lead the way in sustainable mining.

**"2024 was a year of action, growth, and reflection for Mashwa Minerals. We not only met many of our sustainability goals but also set new benchmarks for the mining industry. From advancing our carbon neutrality efforts to strengthening community partnerships, our achievements this year reaffirm our belief that responsible mining is the path forward. Thank you to all our employees, partners, and stakeholders for being part of this journey"**



**MR. PHILIP WATERMAN**

**Founder & Director of Projects**

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# 2024 HIGHLIGHTS

## Carbon Emission Reductions



Achieved a 10% reduction in greenhouse gas emissions across all sites combined compared to 2023, bringing us closer to our 2035 carbon neutrality goal.

## Renewable Energy Integration



Successfully transitioned 50% of our energy consumption at major projects to renewable sources, including solar, wind, and hybrid systems at Madsen Vale and Delta Amacuro.

## Land Rehabilitation



In 2024, we successfully restored over 600 hectares of mined land, focusing on reforestation and wetland restoration to enhance biodiversity.

## Delta Amacuro & Madsen Vale Project Success

The Delta Amacuro Project in Venezuela became fully operational in 2024 and exceeded production and sustainability targets. Renewable energy systems now power 60% of the site's operations, significantly reducing its carbon footprint. Additionally, the project created 400 local jobs and funded healthcare and education programs that have improved quality of life in the region.

Madsen Vale continued to lead as a model for mining sustainability. The site achieved a 50% reduction in diesel use by expanding solar and wind energy infrastructure. Rehabilitated areas around the site are now home to increased wildlife populations, highlighting the success of our biodiversity initiatives.

# LOOKING AHEAD

## (2025 GOALS)

As we move forward, Mashwa Minerals Ltd. is doubling down on its commitment to sustainability, innovation, and community development. Our goals for 2025 and beyond reflect the lessons learned and progress achieved in 2024, and they establish a clear roadmap for further reducing our environmental footprint, fostering socio-economic growth, and leading the mining industry toward a more sustainable future.

### **A Step Closer to Net Zero**

We remain on track to achieve carbon neutrality by 2035, with concrete goals for 2025:

1. Reduce greenhouse gas (GHG) emissions by an additional 10%, building on the 10% reduction achieved in 2024. This will include expanding renewable energy use at all major sites and integrating energy-efficient mining technologies.
2. Begin testing carbon capture and storage technologies at the Madsen Vale and Delta Amacuro sites, aiming to offset remaining emissions.
3. Accelerate the transition to electric and hybrid mining vehicles, replacing 30% of diesel-powered machinery across all operations.

### **Operational Innovation**

As a leader in sustainable mining, we recognize the need for continuous innovation. In 2025, we will:

1. Roll out fully autonomous mining equipment at the Flin Flon and Black Ridge Basin sites, reducing operational emissions and improving safety.
2. Expand the use of AI-driven resource management systems to optimize extraction, reduce waste, and improve energy efficiency across all sites.
3. Implement next-generation water filtration and recycling technologies to achieve 98% water recycling rates at all major projects.

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