



JAGDAMBA STEEL

Jagdamba Steels Establishing a Robust **CBAM** Compliance System with CleanCarbon.ai

Case Study



Cleancarbon.ai



Client Overview

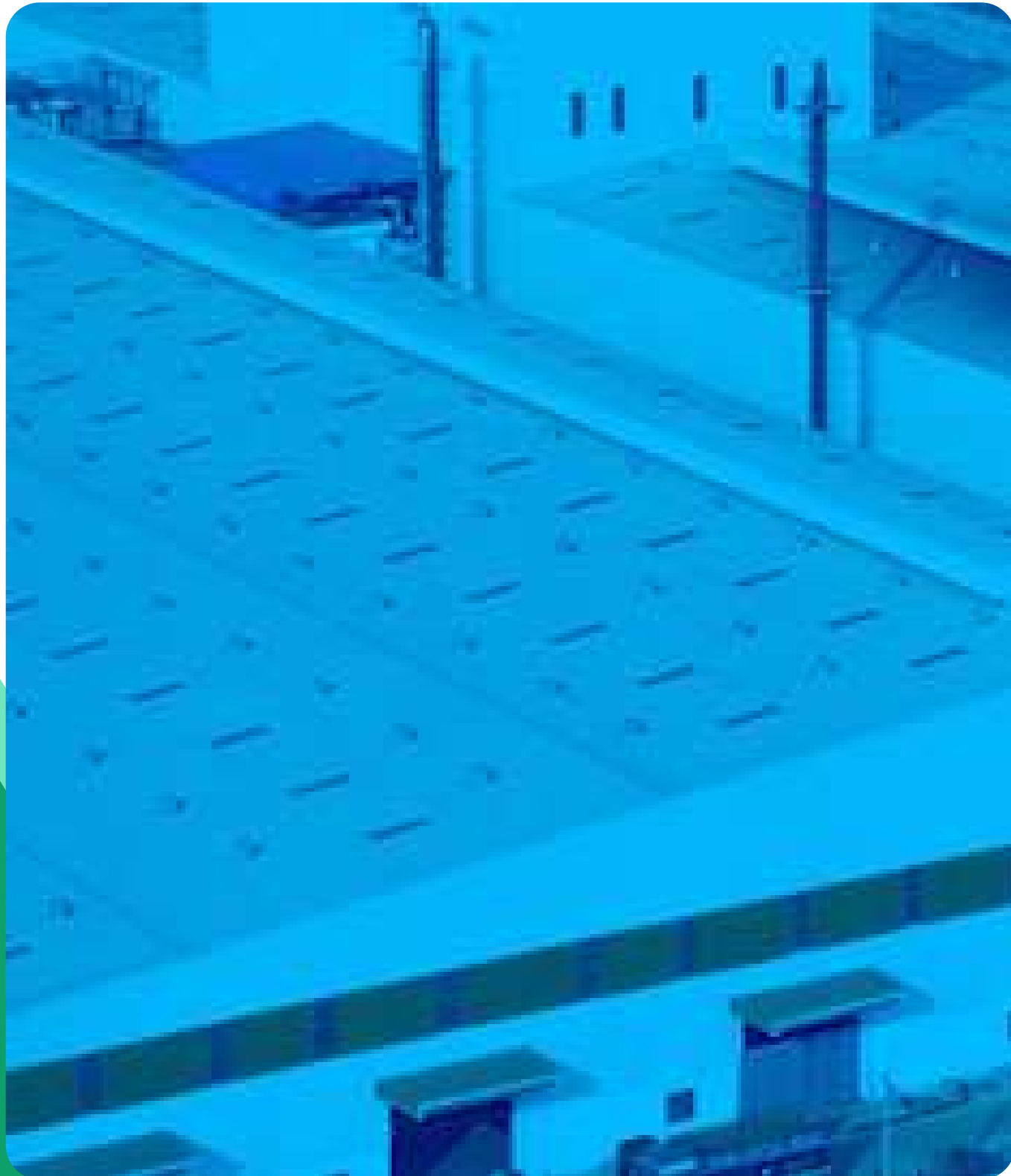
Jagdamba Steels Limited, established in 1994, is Nepal's largest and one of South Asia's biggest steel manufacturers. With a rolling mill capacity of 3000 MT per day, the company produces a wide range of high-quality steel products, including TMT bars (Jagdamba E & Rhino 500D), MS Angles, Channels, Beams, HR/CR Coils & Sheets, Chequered Plates, MS Black Pipes, Galvanized Wires, and coated products like Jagdamba Super Shine and Galva.



Committed to innovation, quality, and sustainability, Jagdamba Steels has achieved notable environmental improvements — including a 20% reduction in carbon emissions, 25% reduction in particulate emissions, and planting over 10,000 trees. With growing exports to international markets (including third-country exports), the company's steel products fall under the EU's Carbon Border Adjustment Mechanism (CBAM). When a 203-ton shipment of steel products was held at EU customs due to missing CBAM documentation, Jagdamba Steels partnered with CleanCarbon.ai to resolve the crisis and establish reliable, long-term compliance.

Business Challenges

- 1. Shipment Delay Due to Missing CBAM Report:** A 203-ton shipment of steel products (including TMT bars, coils, and structural sections) was detained at EU customs, risking financial losses, demurrage charges, and strained customer relationships.
- 2. Complex Supplier & Production Data Coordination:** Aggregating accurate Scope 1, 2, and 3 emissions data across large-scale steel production processes, despite strong internal records and sustainability initiatives.
- 3. Supplier Engagement:** Convincing multiple raw material and intermediate suppliers to share emissions data required education and trust-building around CBAM requirements.
- 4. High-Volume Reporting:** The diversity and volume of steel products created significant administrative overload for quarterly CBAM reporting.
- 5. Timely Compliance & Carbon Cost Management:** Ensuring on-time submissions to avoid penalties while accurately calculating embedded carbon costs for competitive EU pricing.



Solution Delivered by CleanCarbon.ai

CleanCarbon.ai provided a comprehensive, tailored CBAM compliance solution for Jagdamba Steels' large-scale steel manufacturing:

- **Rapid Emergency Response:** Quickly analyzed existing data to generate and validate a compliant CBAM report, enabling swift release of the 203-ton shipment.
- **Supplier Onboarding & Training:** Conducted targeted CBAM tool demonstrations and workshops to educate suppliers, build trust, and streamline Scope 1, 2, and 3 emissions data collection.
- **User-Friendly Data Platform:** Implemented secure, easy-to-use tools integrated with production systems for efficient supplier data submission.
- **Automated Reporting Engine:** Deployed ERP-linked automation to produce EU-compliant XML and Excel reports, handling high product volumes with minimal manual effort.
- **Real-Time Emissions Dashboards:** Provided live visibility into carbon emissions and costs, supporting Jagdamba Steels' existing sustainability goals.
- **Audit-Ready Support:** Offered on-field guidance and validated reports for EU audits, with full GDPR-compliant data handling and precise carbon tax calculations.

Result

CleanCarbon.ai delivered strong, measurable outcomes for Jagdamba Steels. The detained 203-ton shipment was released within a few days, avoiding significant demurrage costs and restoring supply chain momentum. Supplier emissions data submission rates improved substantially through targeted training and user-friendly tools. Quarterly CBAM reporting effort was reduced dramatically, allowing the team to focus on core manufacturing and innovation. Late submissions were eliminated, and over-declaration of embedded emissions was minimized, leading to more accurate carbon cost management. The company achieved full audit readiness with validated, GDPR-compliant reports, reinforcing its reputation as a sustainable steel exporter. Overall, CBAM compliance shifted from a major operational risk to a well-controlled process that supports Jagdamba Steels' growth in international markets.



Conclusion

Through its collaboration with CleanCarbon.ai, Jagdamba Steels Limited successfully overcame a critical CBAM shipment delay and built a robust, automated compliance system. This partnership delivered cost savings, regulatory confidence, enhanced sustainability alignment, and stronger positioning in EU markets. CleanCarbon.ai continues to support Jagdamba Steels with quarterly reporting, regulatory updates, and ongoing optimization. For steel manufacturers and exporters seeking reliable CBAM solutions, CleanCarbon.ai offers a proven, efficient path forward.



+91 9529744969



Cleancarbon.ai



nb@Cleancarbon.ai

