CleanCarbon
Manage your carbon footprint

CASE STUDY

SHALCO INDUSTRIES SAVE MILLIONS WITH COMPREHENSIVE CBAM REPORTING

Empowering Shalco Industries to achieve CBAM compliance and remain a compliant supplier in global markets.

SHALCO
Industries Pvt. Ltd

An accurate analysis of CBAM products saves resources, lowers costs, and rejuvenates traditional business practices.

This case study examines how Cleancarbon.ai's Carbon Border Adjustment Mechanism (CBAM) software is implemented to improve operational efficiency and sustainability at Shalco Industries, a prominent player in the ERW Tube Plant and steel manufacturing industry. The initiative aimed at optimizing carbon steel production processes and enhancing emissions management, ensuring compliance with international environmental standards. With a robust dedication to quality and innovation, Shalco Industries has a strong export presence in global markets, including the European Union. The company’s commitment to sustainability aligns seamlessly with the objectives of the Carbon Border Adjustment Mechanism (CBAM).

Scope

The project targeted Shalco Industries' carbon steel production operations, which include three tube lines and a slitting line. The objective was to optimize production efficiency while minimizing carbon emissions and resource waste, leveraging advanced software solutions.

In-Depth Evaluation of Raw Material Inputs, Emissions, and Energy Use in Relation to CBAM

Performed a thorough assessment of raw materials utilized in production processes to pinpoint inefficiencies and areas for enhancement, ensuring compliance with CBAM regulations.

Leveraged CBAM software to monitor and simulate emissions throughout each production phase, offering a transparent overview of the carbon footprint and its implications under CBAM.

Examined energy consumption trends, identifying critical opportunities for optimization and reduction, in line with the requirements set forth by the carbon border adjustment mechanism.

Business Challenges

Shalco Industries faced multiple challenges, including:

- Emission Quantification: Accurate assessment of raw material inputs, process emissions, and energy consumption.
- Data Integration: Incorporating emissions data with supply chain processes to meet CBAM documentation standards.
- Operational Efficiency: Achieving sustainability goals without increasing operational costs or affecting output quality.

Solutions Provided by CleanCarbon.ai

Cleancarbon.ai collaborated with Shalco Industries to develop and implement a CBAM compliance strategy, which addressed the company's specific operational and environmental needs. Our solution included:

DETAILED EMISSIONS ANALYSIS:

- Conducted an in-depth evaluation of raw material inputs, process emissions, and energy consumption for carbon steel production.
- Identified areas for optimization in energy use and material efficiency.

CBAM COMPLIANCE FRAMEWORK:

- Developed a robust system to align operations with CBAM requirements, including detailed reporting for EU-bound exports.
- Integrated emissions data with Shalco Industries' supply chain to ensure seamless documentation and compliance tracking.

TECHNOLOGY IMPLEMENTATION

- Deployed CleanCarbon.ai's advanced emissions monitoring software for real-time tracking across the three tube lines and slitting line.
- Enabled data integration for transparency across production and logistics workflows.

OPERATIONAL INSIGHTS:

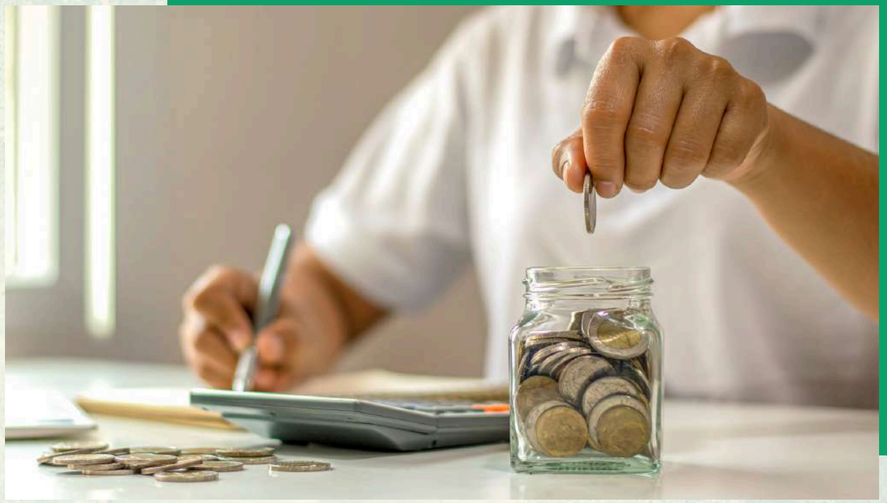
- Provided actionable recommendations to optimize resource efficiency while reducing emissions intensity.
- Suggested modifications in production processes to minimize energy waste and improve overall sustainability metrics.

Cost Structure

- **Software Licensing:** Subscription to CleanCarbon.ai’s advanced monitoring and reporting platform.
- **Consulting Fees:** Expert guidance for CBAM compliance, emissions analysis, and operational optimization.
- **Operational Costs:** Minimal investments in process improvements, leading to long-term cost savings.

Result

- Regulatory Compliance: Achieved full alignment with CBAM requirements, ensuring uninterrupted exports to the EU.
- Emission Reductions: Reduced emissions intensity across tube lines and slitting line operations while maintaining production efficiency.
- Optimized Resource Use: Enhanced energy efficiency and raw material utilization, resulting in significant cost savings.
- Competitive Edge: Strengthened Shalco Industries' reputation as a sustainable and compliant supplier in international markets.



Prateek Vipul,
Shalco Industries

CleanCarbon.ai has been an invaluable partner in helping us meet CBAM requirements. Their innovative tools and expert guidance have enabled us to align with global standards and enhance our sustainability practices.

Conclusion

CleanCarbon.ai’s partnership with Shalco Industries demonstrates the value of tailored CBAM solutions in driving regulatory compliance and operational sustainability. By leveraging advanced technologies and proactive strategies, Shalco Industries is now well-positioned to meet the challenges of an eco-conscious global market.