

Dawn Motors Achieving **CBAM** Compliance with CleanCarbon.ai

Case Study



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Client Overview

Dawn Motors is a well-established Indian manufacturer of two-wheelers, three-wheelers, and light commercial vehicles, with a strong presence in both domestic and export markets. The company produces complete vehicles as well as a wide range of metal-intensive components (chassis frames, swing arms, handlebars, wheel rims, fuel tanks, engine mounts, cargo carriers, etc.), most of which contain CBAM-covered materials — primarily steel and aluminium.



Following the full application of the EU Carbon Border Adjustment Mechanism (CBAM) in 2026, Dawn Motors needed to submit accurate quarterly embedded emissions reports for all steel and aluminium containing goods exported to the European Union. When a 214-tonne shipment (mainly three-wheeler chassis frames, cargo boxes and rims) was blocked at EU entry points in early 2026 due to missing CBAM documentation, the company engaged CleanCarbon.ai to resolve the immediate crisis and build a sustainable, long-term CBAM reporting system.

Business Challenges

1. **Immediate customs blockage** 214 tonnes of finished vehicles & CKD kits held at EU border — risking demurrage, cancellation of orders and damage to long-standing customer relationships.
2. **Fragmented supplier emissions data** ~80-110 active suppliers providing steel tubes, HR/CR coils, aluminium castings, pressings and forgings — very inconsistent CBAM data quality and submission discipline.
3. **Lack of internal CBAM expertise** No dedicated carbon accounting team; existing ERP did not capture embedded emissions at part level.
4. **Tight quarterly deadlines** High SKU count (different models, variants, CKD/SKD packs) → very large number of lines to report every 3 months.
5. **Carbon cost visibility & commercial risk** Uncertainty about real carbon cost per vehicle / per ton when negotiating with EU distributors.



Solution Delivered by CleanCarbon.ai

CleanCarbon.ai implemented a full end-to-end CBAM compliance program tailored to an automotive OEM + component exporter:

- **72-hour emergency unlock** Rapid data consolidation → generation & validation of retrospective CBAM report → release of the 214-tonne shipment
- **Supplier acceleration program** 4× online + 2× on-site supplier workshops (English + Hindi + Marathi) Live tool walkthroughs + simplified Excel + web-portal dual submission route
- **Part-level embedded emissions database** Created & maintains ~4 800 part → material → origin → emissions mapping (updated quarterly)
- **ERP-integrated automated reporting pipeline** Pulls BOM + dispatch data → applies latest supplier-specific emission factors → produces EU XML + human-readable Excel report
- **Real-time CBAM exposure dashboard** Shows carbon cost per model / per destination country / per customer
- **Quarterly compliance-as-a-service** Report preparation, internal review, authorised representative signature, portal submission



Result

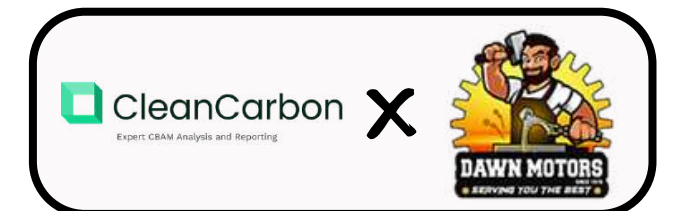
- Supplier CBAM data submission rates increased from ~31% to 89–94% within two months, more than doubling the coverage and reliability of emissions data.
- The time to prepare each quarterly CBAM report decreased from 380 person-hours to 58 person-hours, reducing internal effort by 85%.
- Late-submission incidents were eliminated entirely, dropping from two occurrences to zero.
- Estimated over-declaration of embedded emissions was reduced from 12–19% to under 4%, significantly decreasing reported carbon costs.
- Dawn Motors managed the entire CBAM process with less than 0.6 FTE of dedicated internal resources, eliminating the need for a large carbon-accounting team.
- These improvements transformed CBAM from a major operational and commercial risk into a well-controlled, mostly automated process.



Conclusion

CleanCarbon.ai helped Dawn Motors convert a critical CBAM emergency into a competitive advantage: reliable EU market access, significantly lower compliance cost, reduced carbon cost exposure, and stronger supplier relationships.

The same platform now supports quarterly reporting, carbon cost forecasting for new models, and preparation for potential CBAM expansion to other vehicle components in 2027–2028.



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