GHG Emissions & CBAM Data Report — 2025

Nile Rolling Mills S.A.E. (fictional) · Hot-rolled steel bars · 1 site

Illustrative sample. The company and all activity data are made up to show the format and method of a DoneInChat report. Fuel factors are IPCC 2006 defaults; the electricity factor is an example value — a real report uses the official factor for your grid and year.

1. Summary

68,432	18,000	86,432	0.288
Scope 1, t CO_2	Scope 2, t CO_2	Scope 1 + 2, t CO_2	t CO_2 per t product (site only)

Production in 2025: 300,000 t of hot-rolled bars. Natural gas in the reheating furnaces gives 78% of the site's emissions, grid electricity 21%, and diesel for on-site vehicles about 1%.

2. Boundary and method

- Standard: GHG Protocol Corporate Standard; ISO 14064-1 structure. Operational control boundary, 1 site.
- Gases: CO_2 only in this sample. A full report adds CH_4 and N_2O from combustion (usually under 0.5% here).
- Formula: emissions = activity data × emission factor. Every input is traced to an invoice or meter in the Excel workbook delivered with the report.

3. Calculation

Source	Scope	Activity	Unit	Factor	Factor unit / source	t CO_2
Natural gas, reheating furnaces	1	1,200	TJ (NCV)	56.1	t CO_2/TJ · IPCC 2006 Vol.2 Tab.2.2	67,320
Diesel, on-site vehicles	1	15	TJ (NCV)	74.1	t CO_2/TJ · IPCC 2006 Vol.2 Tab.2.2	1,112
Grid electricity	2	40,000	MWh	0.45	t CO_2/MWh · example value	18,000
Total Scope 1 + 2						**86,432**

Fuel quantities are converted from invoices (Sm³ / litres) to TJ with the net calorific values shown in the workbook.

4. CBAM data for your EU buyer

Hot-rolled steel bars are a CBAM good (iron and steel). Since 1 January 2026 the EU importer reports the **embedded emissions** per tonne. This table gives them the site part:

Item	Value	Note
Direct emissions attributed to the product	0.228 t CO_2/t	68,432 t ÷ 300,000 t
Indirect emissions (electricity)	0.060 t CO_2/t	18,000 t ÷ 300,000 t
Precursor: purchased steel billets	from supplier	Needed for the full value; we prepare the request letter to your billet supplier

The rolling step alone is a small share of steel's footprint. Without real precursor data the importer must use EU default values, which are usually higher — so good supplier data can lower your buyer's CBAM cost.

5. Where to cut emissions (top 3)

Measure	Est. saving	Payback
Recuperative burners / waste-heat recovery on reheating furnace	10–20% of furnace gas	2–4 years
Hot charging of billets where the route allows	up to 15% of furnace gas	< 2 years
VSDs on large fans and pumps	5–10% of their power	1–3 years

Ranges are typical industry values for illustration; a real report sizes each measure from your own data.

6. What a full report includes

- 12-month inventory (Scope 1 and 2), CH_4 and N_2O, data-quality notes.
- Product carbon intensity and CBAM embedded-emissions template for your EU buyer.
- Excel workbook with every calculation, plus a short method note an auditor can follow.

doneinchat.com · Send your task, get a fixed price in seconds.