

What CBAM adds to a tonne of imported hot-rolled steel in 2026, by origin

CBAM cost per tonne of hot-rolled coil (heading 7208). Working paper.

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Views are the authors' own, based on public information, and do not represent any current or former employer.

1. The question a steel buyer asks

The question is no longer whether CBAM is coming. It is what it adds to the landed cost of a tonne this quarter, from this supplier, and what it would take to bring that down. This paper answers for one common product, hot-rolled flat steel of heading 7208. It works first on the default values that apply when the supplier gives no verified figures, then on verified plant data (section 3a).

2. The four numbers the charge is made of (2026 imports)

- Default embedded emissions per tonne, by country of origin: Annex I to Implementing Regulation (EU) 2026/1740. A country not listed for the good takes the "Other countries and territories" value (Annex I intro). Heading 7208 falls in Chapter 72, which Annex II lists, so only direct emissions count (Regulation (EU) 2023/956, Article 7(1)).
- The 2026 mark-up on default values, 10 % for steel (IR 2026/1740 Annex I; fertilisers 1 %).
- The free-allocation adjustment, the same for every origin on a given route: CBAM factor 97.5 % for 2026 (Directive 2003/87/EC, Article 10a(1a)) × cross-sectoral correction factor 100 % for each year 2026 to 2030 (Commission Implementing Decision (EU) 2026/1862, Article 1) × the CBAM benchmark for the good's route (IR 2025/2620, Annex, Equation 6 and point 5). For 7208 on the BF/BOF route (C), Column B = 1.370 tCO₂e/t, so the deduction is 0.975 × 1.370 = 1.33575 tCO₂e/t.
- The certificate price, the Commission's quarterly average for the quarter of import (Regulation (EU) 2023/956 Article 21(1a); IR 2025/2548). Published so far: Q1 2026 €75.36, Q2 €75.28, Q3 €82.32 (published 5 Oct 2026).

Charge per tonne = (default × 1.10 – 1.33575) × quarterly price.

3. The table the paper is built around (heading 7208, route C, default values)

The paper follows three lanes: Türkiye, India and Viet Nam. **Why Viet Nam.** It is the counter-case to India: in Tabrez Ahmad's assessment, a typical Vietnamese plant's verified emissions sit close to its default, so verification is worth far less there (section 3a). South Korea, with the lowest charge in the table (about €82/t in Q3), stays as context with the other rows.

Türkiye is shown as two cases. In Tabrez Ahmad's assessment, integrated BF/BOF (Erdemir, İsdemir) and scrap-based EAF (Çolakoğlu, Habaş, Tosyalı) differ by a factor of four to five in verified direct emissions, so a single Turkish figure would mislead buyers. On default values both cases carry the same Türkiye value for 7208 (2.428, Annex I to IR 2026/1740). They only separate on verified data (section 3a).

Origin	Default tCO ₂ e/t	After 10 % mark-up	Net of free allocation	Q2 2026 (€75.28)	Q3 2026 (€82.32)
Türkiye	2.428	2.6708	1.3351	€100.50	€109.90
Ukraine	2.483	2.7313	1.3956	€105.06	€114.88
United Kingdom	2.420	2.6620	1.3262	€99.84	€109.18
South Korea	2.118	2.3298	0.9941	€74.83	€81.83
Viet Nam	2.350	2.5850	1.2493	€94.04	€102.84

Origin	Default tCO ₂ e/t	After 10 % mark-up	Net of free allocation	Q2 2026 (€75.28)	Q3 2026 (€82.32)
China	3.187	3.5057	2.1700	€163.35	€178.63
Egypt (Other countries value applies)	4.049	4.4539	3.1182	€234.73	€256.69
India	4.280	4.7080	3.3723	€253.86	€277.60

Egypt has no 7208 value of its own in Annex I to IR 2026/1740, so the "Other countries and territories" value applies (Annex I intro). Deduction 1.33575 tCO₂e/t (route (C), CBAM factor 97.5 %, cross-sectoral correction factor at 100 %).

Because the deduction is flat, the charge climbs much faster than the default does: in Q3 a Turkish tonne pays about €110, an Egyptian tonne, priced on the Other-countries value, about €257, and an Indian tonne about €278. Section 3a sets the cost on verified plant data beside these figures and reads each as a share of a typical landed HRC price.

3a. Verified plant data and share of the landed price

Verified emissions remove the 10 % mark-up and replace the default with the plant's actual intensity. For the three lanes this cuts the Q3 2026 charge by 25 % to over 70 %, depending on route. The deductions use the route benchmarks for 7208 in Column B of IR 2025/2620 (Annex, point 5): 1.370 (BF/BOF, route (C)), 0.481 (DRI/EAF, route (D)) and 0.072 tCO₂e/t (scrap/EAF, route (E)), each multiplied by the 97.5 % CBAM factor, with the cross-sectoral correction factor at 100 % as in the default table. Ranges are direct emissions including precursors, consistent with the Annex II scope.

On actual (verified) data the act builds the deduction up from the plant (IR 2025/2620, Annex, Equations 2 to 4): the process benchmark for 7208 in Column A (0.044 tCO₂e/t) plus the plant's precursors. The Column B route values stand in for that bottom-up sum here, so the verified figures below are **approximated with the Column B route benchmark**.

Lane and route	Typical direct emissions on verified data, in Tabrez Ahmad's assessment (tCO ₂ e/t HRC)	Q3 2026 charge, verified (approximated, Column B route benchmark)	Q3 2026 charge, default	Reduction
India, BF/BOF (large integrated mills)	2.3 to 2.7	€79 to €112 (mid €96)	€278	about 65 %
India, coal-based DRI (DRI/EAF route)	2.8 to 3.2	€192 to €225 (mid €208)	€278	about 25 %
Türkiye, BF/BOF	2.0 to 2.3	€55 to €79 (mid €67)	€110	about 39 %
Türkiye, scrap/EAF	0.3 to 0.6	€19 to €44 (mid €31)	€110	about 72 %
Viet Nam, BF/BOF	2.0 to 2.3	€55 to €79 (mid €67)	€103	about 35 %

Route note. A scrap EAF is deducted only 0.070 tCO₂e/t (0.975×0.072), so its verified charge (€19 to €44/t) is lower than the default but well above zero.

A coal DRI producer is deducted 0.469 tCO₂e/t ($0.975 \times$ the DRI/EAF value of 0.481), not the BF/BOF deduction, so verification saves only about 25 %. The act gives coal no route of its own: Implementing Regulation (EU) 2025/2547 (Annex I, point 3.14.1) defines a single DRI route whatever the reducing agent ("natural gas, diverse fossil fuels or biomass, hydrogen"), the DRI step has a single process benchmark (0.295 for heading 7203) with no split by reducing agent, and IR 2025/2620 labels route (D) "Carbon Steel based on DRI/EAF", with no split by fuel.

On default values the route is not the producer's choice: Annex I to Implementing Regulation (EU) 2025/2621, as replaced by IR 2026/1740, gives India's 7208 default with route (C), BF/BOF, and point 5.1 of the Annex to IR 2025/2620 says the benchmark follows that route. So an Indian coal DRI mill on default

values is deducted against the 1.370 route (C) benchmark (1.336 after the 97.5 % CBAM factor), the same as an integrated mill.

Benchmarks are due to be revised on the final EU ETS benchmarks, with the updated values applying to goods imported from 1 January 2027 (IR 2025/2620, recital 10). The final EU ETS benchmarks were set on 26 June 2026 (Implementing Regulation (EU) 2026/1412), so the 2027 to 2030 rows may move.

Implications by lane.

- **India** has the most to gain. On defaults, Indian HRC carries a gap of about €170/t against Turkish or Vietnamese material. With verified data from a large integrated mill, the gap to verified Turkish or Vietnamese BF/BOF material narrows to about €30/t.
- **India coal DRI** gains much less. Its lower route deduction keeps the verified charge above €190/t, about €140/t above verified Turkish or Vietnamese BF/BOF material.
- **Türkiye** splits in two. EAF producers gain the largest share from verifying: their default overstates actual emissions several times over. BF/BOF producers gain less.
- **Viet Nam** sits close to its default. Verification is worth about €36/t, so data quality matters less than for India.

CBAM as a share of the landed price. At an illustrative landed HRC price of €550/t CIF EU, the default charge equals 15 % to 50 % of the price. Verified data brings the main routes of the three lanes into a 6 % to 17 % band; coal DRI stays near 38 %.

Lane	Default charge, % of €550/t	Verified charge, % of €550/t (approximated)
India	50 %	17 % (BF/BOF), 38 % (coal DRI)
Türkiye	20 %	12 % (BF/BOF), about 6 % (EAF)
Viet Nam	19 %	12 %
South Korea (reference)	15 %	not assessed

For reference, HRC CIF Italy averaged about €530/t in 2025 (€530.39/t for the year to mid-December; Argus, "CBAM verification to redefine Italian HRC pricing", 17 December 2025, <https://www.argusmedia.com/news-and-insights/latest-market-news/2766811-cbam-verification-to-redefine-italian-hrc-pricing>). In Tabrez Ahmad's experience, import offers typically compete within a band of €20 to €40/t, and a default-value supplier cannot absorb the CBAM charge and keep a margin, so it loses orders to verified suppliers. At these levels CBAM is a cost that decides the price.

Interaction with the EU tariff quota regime. Since 1 July 2026, hot-rolled coil (7208 10 00 to 7208 39 00) falls under the EU steel tariff quotas (Regulation (EU) 2026/1384 of the European Parliament and of the Council of 17 June 2026 addressing the negative trade-related effects of global overcapacity on the Union steel market and amending Regulation (EU) 2020/2170, OJ L, 2026/1384, 24.6.2026, Article 2 and Annexes I and II, product category 1A "Non Alloy and Other Alloy Hot Rolled Sheets and Strips"; applicable from 1 July 2026, Article 14). Where a tariff quota is exhausted, or where imports do not benefit from one, an out-of-quota duty of 50 % ad valorem applies (Article 2(3)): about €275/t at €550/t, just below the highest default CBAM charge in the table (India, about €278/t in Q3) and above every other. So the buyer's priorities run: secure quota access for the origin first; within quota, rank suppliers by CBAM cost, which depends mainly on verified data; only then compare base prices.

Origin under the two systems. CBAM takes the customs non-preferential origin (Regulation (EU) 2023/956, Article 2(5), pointing to Article 59 of the Union Customs Code, Regulation (EU) No 952/2013): goods made in two countries originate where they underwent their "last, substantial, economically-justified processing or working" (UCC Article 60(2)). For the goods it lists, Annex 22-01 to Delegated Regulation (EU) 2015/2446 decides where that happened (Article 32 of that Regulation). Its primary rule for heading 7208 is "CTH", a "change to the heading in question from any other heading" (Annex 22-01, Introductory note 3 and Chapter 72). Slab is classified in heading 7207, so slab hot-rolled into coil changes heading, and the coil originates in

the country where it was hot-rolled, wherever the slab was cast. Two limits come from the same texts: a change of classification resulting only from cutting is not origin-conferring (Chapter 72, Chapter Note), and an operation whose purpose was to avoid the measures referred to in UCC Article 59 is not economically justified, in which case the Chapter residual rule applies, the country "in which the major portion of the materials originated, as determined on the basis of the value of the materials" (Delegated Regulation (EU) 2015/2446, Article 33; Annex 22-01, Chapter 72). (Consolidated version of Delegated Regulation (EU) 2015/2446 of 1 July 2026.)

In the CBAM figures this works out as follows. On default values the coil country's 7208 default covers the whole good, and the slab plays no separate part. On actual data the slab enters as a precursor, with the slab plant's actual figure or the default for the slab's own country (IR 2025/2547, Articles 11(2) and 15, Annex III section B and Annex IV point 22(c); for the deduction, IR 2025/2620, Annex, points 3.3 and 5.1). A slab from the EU counts as zero (IR 2025/2547, Annex III, section B). The texts do not settle how the free allocation embedded in an EU slab enters the deduction: Equation 4 of IR 2025/2620 (Annex, point 3.3) adds the specific embedded free allocation (SEFA) of each precursor; where the slab producer gives no verified SEFA, it is taken from Column B by the precursor's country of origin and default route (point 3.3, method (2); point 5.1), and Annex I to IR 2025/2621, as replaced by IR 2026/1740, gives no route for the Union.

For the tariff quotas, importers must also provide, from 1 October 2026, verifiable evidence such as a mill test certificate of the country where the steel was first produced in liquid form and cast into its first solid state, the country of "melt and pour" (Regulation (EU) 2026/1384, Article 4(1); Article 14, point (b)). That Regulation does not itself say which origin rules apply to its quotas. The implementing act that distributes the quotas states it: origin is determined under the Union's non-preferential origin rules of the UCC (Commission Implementing Regulation (EU) 2026/1457, Article 4(1)), which the UCC applies to Union measures relating to the origin of goods (UCC Article 59(a) and (c)). A rerolled coil therefore has the same origin for the quota as for CBAM, the country of hot rolling. The Regulation treats melt and pour only as a possible future basis: the Commission is to assess by 30 June 2028 whether the country of melt and pour should become the basis for benefiting from the quotas (Article 12(5); recital 32). Before that, from 1 October 2027, the Commission is also to take into account, as applicable, the "information gathered in application of Article 4", the melt-and-pour evidence, when it lays down the country distribution of the tariff quotas (Article 5(1), point (j); Article 14, point (c); recital 24).

4. What moves the number (the buyer's levers)

- Verified actual emissions from the supplier replace the default and drop the 10 % mark-up; the deduction is then worked from the actual-data benchmarks (IR 2025/2620 Annex, Equations 2 to 4). For an EAF/DRI producer this is where the gap between the Other-countries default and the real plant can be largest.
- A carbon price paid in the country of origin is deducted (Regulation (EU) 2023/956 Article 9), with evidence. On default-value figures the deduction is only by reference to yearly default carbon prices, which the Commission may make available from 2027 (Article 9(4)); none is available yet. The declaration for 2026 imports is due by 30 September 2027 (Article 6(1)).
- The quarter of import sets the price: the same tonne cost about 9 % more in Q3 than in Q2.
- What does not move it: the CN code follows the good; the route for defaults is the act's, not the buyer's choice (IR 2025/2620, Annex, point 5.1).

4a. How CBAM is written into contracts

- **Allocation of the cost.** The cost sits with the importer, which must hold the status of authorised CBAM declarant, or with an indirect customs representative acting as one (Regulation (EU) 2023/956, Articles 3(15), 4 and 5(1) to (2a)). In Tabrez Ahmad's experience, under CIF and CFR terms the importer is normally the EU buyer. In Tabrez Ahmad's experience, more buyers now ask for CBAM-inclusive offers, or a separate CBAM line in the price, so they can compare offers on landed cost.

- **Verified data delivery.** The supplier commits to deliver verified emissions data by a set date. If it does not, the default applies and the supplier compensates the difference.
- **Emissions guarantee.** The supplier declares a maximum intensity per tonne; if the verified figure is higher, the price is adjusted for the excess.
- **Certificate price risk.** Either a fixed CBAM charge per tonne for the contract period, or indexation to the quarterly certificate price. In Tabrez Ahmad's experience, buyers prefer a fixed charge and mills prefer indexation.
- **Regulatory step-ups.** Contracts running into 2027 need a reopener or an agreed split of the mark-up increase to 20 % (IR 2026/1740, Annex I intro), and of any change to free allocation (the CBAM factor, Directive 2003/87/EC, Article 10a(1a); see the proposal in section 6).

What we observe in the market. In Tabrez Ahmad's experience, high-default suppliers, India in particular, are discounting to stay competitive in the EU. With large EU buyers, verified emissions data is becoming a condition for entering a tender rather than a point of difference. Suppliers that cannot provide it are moving volume to markets outside the EU.

4b. Outlook 2027 to 2030

The charge on default-value tonnes rises much faster than on verified tonnes: the mark-up rises to 20 % in 2027 and 30 % from 2028 (IR 2026/1740, Annex I intro), while the CBAM factor falls from 97.5 % to 51.5 % by 2030 (95 % in 2027, 90 % in 2028, 77.5 % in 2029; Directive 2003/87/EC, Article 10a(1a)). For India, the gap between default and verified grows from €182/t in 2026 to €252/t in 2030. Figures below hold the certificate price at €82.32 (Q3 2026), the 7208 benchmarks at their 2026 values and the cross-sectoral correction factor at 100 %.

Year	India, default	India, verified BF/BOF (approximated)	Türkiye, default	Türkiye, verified BF/BOF (approximated)	Viet Nam, default
2026	€278	€96	€110	€67	€103
2027	€316	€99	€133	€70	€125
2028	€357	€104	€158	€75	€150
2029	€371	€118	€172	€90	€164
2030	€400	€148	€202	€119	€193

At the analysts' consensus of about €109/t for 2030 (€109.11/t, the average of nine analysts surveyed by Reuters after the Commission's ETS proposal of 17 July 2026: Reuters, "Analysts lower EU carbon price forecasts for 2026, 2027 on market reform proposals", 31 July 2026, as carried by Euronext, <https://live.euronext.com/en/financial-news/analysts-lower-eu-carbon-price-forecasts-2026-2027-market-reform-proposals>), the Indian default charge would be about €530/t and the verified charge about €196/t. Each €10/t move in the certificate price shifts the 2030 Indian default charge by about €49/t.

5. Next in the series

Slab for rerollers (7207) is the next product, with the reroller economics. If this paper proves useful, 2 to 3 more follow: rebar 7214, coil 7209, tubes 7306.

6. Caveats to print

- The 7208 route (C) benchmark carries one value through 2030 in IR 2025/2620 as adopted, with no separate 2028-30 column.
- The verified figures are approximated with the Column B route benchmark (section 3a), so a plant's own figure can differ.

- The acts do not say where DRI/EAF ends and scrap/EAF begins for a mixed charge, or how induction furnaces are treated.
- The Commission proposal for a Directive amending Directive 2003/87/EC and Decision (EU) 2015/1814 as regards driving competitiveness and cost-effective decarbonisation, COM(2026) 616 final, 2026/0212(COD), of 17 July 2026, would slow the phase-out of free allocation for CBAM goods: a CBAM factor of 91.5 % in 2028, 81 % in 2029 and 59 % in 2030, and 0 % from 2038 (Article 1, point (15)(b)(i), replacing the second subparagraph of Article 10a(1a) of Directive 2003/87/EC). If adopted, it slows the increase from 2028 but does not affect the mark-up on defaults, which is set in IR 2026/1740.
- The verified emission ranges are typical-plant ranges from Tabrez Ahmad's assessment, not data for named producers; the €550/t landed price is illustrative.