

More Allowances, More Revenue? The Industrial-Policy Stakes of the EU ETS Reform

Europe cannot out-subsidise China or reproduce the United States' energy endowment. It nevertheless has a distinctive asset in its carbon market capable of creating both an investment signal and an industrial policy financial resource. The Commission's ETS reform proposal therefore raises a strategic question: will Europe convert its carbon rent into clean industrial capacity, or weaken and divide it before the transition is financed?

Highlights

- **Carbon revenue is precious because it is temporary.** A successful ETS erodes its own tax base as emissions fall. Europe must turn this finite rent into durable productive assets before auction volumes contract.
- **The reform expands gross financial capacity but pre-commits more of it.** The €598.1bn Commission figure is a fixed-price valuation at a constant €150 per tonne, not a forecast or a national budget, and sits alongside EU funds, free allocation, removals and international credits.
- **This paper uses corrected IMF scenarios to discuss the impact of this reform proposal on revenues.** It shows a strategically large revenue range. Under the modelled proposed allocation path, revenue is €51.8–104.1bn in 2030 and €0.99–1.68tn over 2031–2040. The

carbon-price path matters more than the free-allocation timetable.

- **Yet slower auctioning still carries a real fiscal opportunity cost.** Against the modelled current timetable, it reduces 2031–2040 revenue by €59.6bn on the €150 price path and €106.6bn on the €240 one.

- **Weakening the ETS creates a double industrial-policy loss.** It worsens the private business case for clean production while shrinking the common financial resource available to close the investment gap, pushing Europe back towards unequal national subsidies.

Europe's third industrial-policy model

The global clean-industrial competition is structurally asymmetric. China combines subsidised capacity, control of strategic supply chains, rapid innovation and continent-wide scale. The United States benefits from abundant domestic energy, lower industrial energy costs and greater federal fiscal capacity. European firms, by contrast, [face](#) electricity prices that have often been two to three times those of the United States and China.

Europe cannot reproduce either model. Its advantages are different: a large internal market, regulatory power, increasingly low-carbon electricity and the world's most developed carbon market. **The ETS can underpin a specifically European model by making carbon-intensive production more expensive, improving the relative economics of clean production and recycling part of the resulting carbon rent into investment.**

In that sense, **Europe's carbon rent is a self-created industrial resource.** China has state-directed planification and the United States has resources and federal fiscal capacity. Europe has a common carbon market. **Its value lies not only in pricing emissions, but in financing the industrial response to that price.**

The Double Loss risk

Carbon revenues are precious precisely because they cannot become a permanent fiscal base. Auction revenue is the product of the number of allowances sold and their market price. As the cap falls, emissions decline and the auction base contracts. Prices may rise, but the volume is designed to disappear.

The relevant objective is therefore not to maximise revenue by issuing more pollution rights. Climate ambition determines the cap; **the industrial-policy question is how much transformation each euro can achieve during the finite revenue window: productive capacity, grids, electrification, CO₂ infrastructure, clean-production capability, skills and lead markets.**

A weaker ETS can deepen the financing gap while degrading the instrument that bridges it. If fossil-based production remains artificially

cheap, clean projects require more subsidy. If auction receipts also become smaller or less predictable, Europe must finance that larger gap through national budgets, reinforcing fiscal fragmentation and risking a subsidy race.

How the reform proposal changes the revenue window

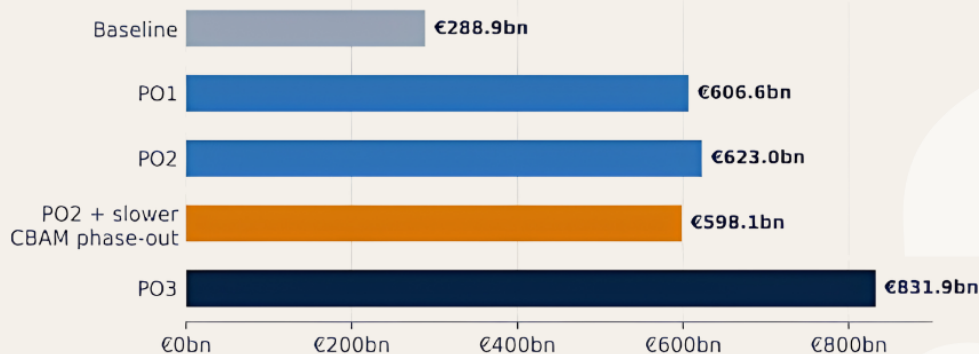
The Commission is explicit about the problem it wants to correct. **Since 2013 the ETS has generated more than €270bn, yet only around 5% of revenues directly supports industrial decarbonisation,** although industrial sectors account for about 47% of ETS emissions. The [reform](#) therefore tries to make the ETS an investment engine as well as an emissions cap.

The ETS has three economic functions: it limits emissions, creates an investment signal and generates public revenue. The reform changes all three at once. Under the current-law [baseline](#), the 4.4% linear reduction factor from 2028 drives the 2040 cap to 69 Mt. The proposal instead sets an LRF of 3.7% for 2031–2035 and 1.7% from 2036. If sufficient high-quality, cost-effective international credits are unavailable, the post-2035 factor reverts to 2.7%.

This change permits issuance of carbon credits well into the 2040s and creates allowance-backed financing for permanent removals, international credits and industrial investment. It may create more gross carbon value than the unchanged trajectory because more allowances remain available. But the net revenue effect is not mechanical: a looser supply path can increase volume while weakening price. What is certain is that the reform creates more claims on the carbon rent.

**Figure 1- The Reform Creates a Larger Carbon-Value pool,
Not a €598bn Industrial Budget**

Potential auction value in 2031–2040 at a fixed €150 per tonne (2023 euros), Policy Option (PO)



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Source: European Commission, Impact assessment report SWD(2026) 616, Part 4, Table 22. The figures do not allocate receipts between EU-level funds and national treasuries

Potential auction [value](#) in 2031–2040 at a fixed
€150 per tonne (2023 euros), Policy Option (PO)

A financing engine built on a political trade-off

The [impact assessment](#) multiplies 3,987.5m auctioned allowances in its Policy Option 2 (PO2) slower CBAM variant by a constant €150 per tonne, producing €598.1bn for 2031–2040. It calls this potential value for public authorities at EU or Member-State level. It is not a price forecast, an auction calendar or a projection of net national receipts. Actual cash will depend on the final cap, the MSR, free allocation, scope, EUA price evolution and the allocation of allowances across funds and treasuries.

However, **the same table makes the cost of slower CBAM implementation** (and thus the gradual phasing out of free allocation) visible. Standard PO2 contains 4,153.5m auctioned allowances; the CBAM variant contains 3,987.5m. **The 166m difference is worth €24.9bn at €150 per tonne.** This is a modelled gross opportunity cost, not a realised loss. Politically, it is carbon

value transferred to covered industry through additional free allocation. **That protection may be justified, and it should be reported like an industrial-policy expenditure with conditions, beneficiaries and an exit date.**

How much carbon value is at stake?

Using data provided by the Carbon Pricing Revenue Model of the International Monetary Fund, this paper combines two exogenous carbon-price paths with two industrial free-allocation schedules. The lower path reaches approximately €150 per tonne in 2035; the higher path reaches approximately €240 in 2030 and then continues rising. The current schedule auctions 48.5% of modelled industrial emissions in 2030 and reaches 100% in 2034; the proposed schedule auctions 33.5% in 2030 and reaches 100% in 2038 (as proposed in the reform for CBAM sectors).

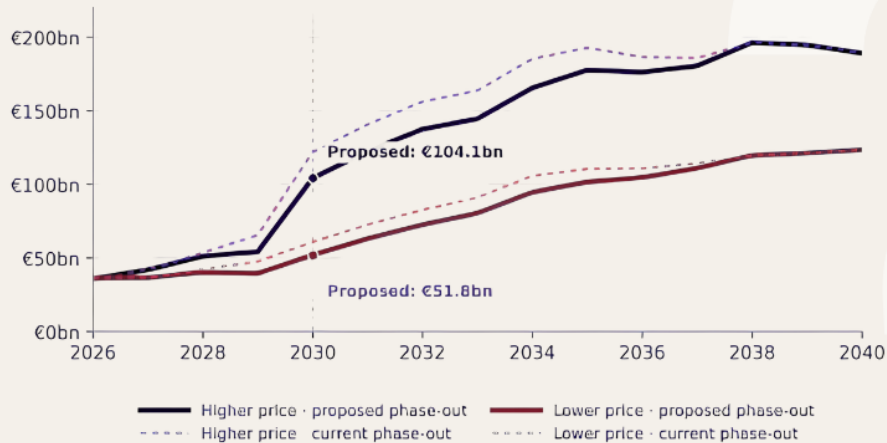
This is a useful reform experiment, not a literal replication of the legal text proposal. This paper applies full auctioning to all modelled industries from 2038. The proposal is differentiated: CBAM

sectors reach zero free allocation in 2038, while free allocation for other carbon-leakage sectors can continue until the end of 2040. The scenarios therefore isolate the revenue effect of a slower

stylised phase-out rather than forecast the precise legal proposal.

Figure 2- The ETS Can Generate Industrial-Policy Scale Revenues

Author's mechanical proxy, €bn per year; proposed phase-out emphasised



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Source: Author's calculations from IMF-modelled ETS revenue (July 2026).

Four revenue scenarios, one wide range (EU27+Iceland, Norway)

IMF scenario	Auction share (industry)	2030 gross proxy	2031-40 cumulative gross proxy
≈€240 in 2030 · current ETS	48.5% (100% in 2034)	€121.6bn	€1 789bn
≈€240 in 2030 · proposed reform	33.5% (100% in 2038)	€104.1bn	€1 682bn
€150 in 2035 · current ETS	48.5% (100% in 2034)	€60.6bn	€1 051bn
€150 in 2035 · proposed reform	33.5% (100% in 2038)	€51.8bn	€991bn

Note: 2031–2040 totals are mechanical gross-payment proxies.

Three results matter:

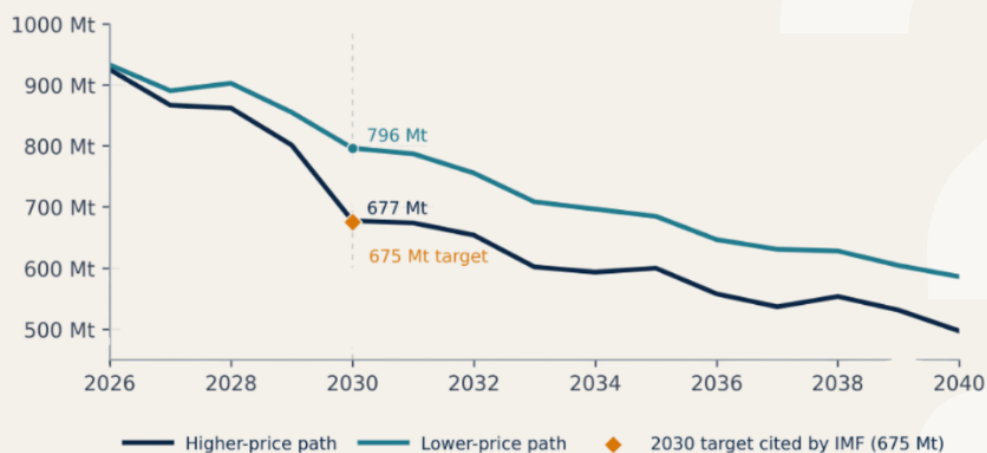
- **Price dominates:** Under the current allocation schedule, the higher-price path raises modelled 2030 revenue by €60.4bn and the 2031–2040 total by €731.8bn relative to the lower path.
- **The slower phase-out proposed in the reform is still material:** It lowers modelled revenue in 2030 by €8.8bn on the lower-price path and €17.6bn on the higher path. Over

2031–2040, the differences are respectively €59.6bn and €106.6bn.

- **This is a fiscal transfer, not an emissions result.** Within each price pair, the data holds identical emissions across allocation schedules. It therefore cannot estimate leakage, output or behavioural effects from extended free allocation.

Figure 3- An Industrial-Finance Strategy Cannot Substitute For an Abatement Strategy

ETS 1 power and industrial emissions, MtCO₂



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Source: IMF data (July 2026).

The higher-price path produces 677 Mt in 2030—close to the 675 Mt target—while the lower path leaves emissions at 796 Mt. The 119 Mt difference is mostly power-sector abatement. In this scenario, the high path contains a sharp price increase between 2029 and 2030. This should be read as a target-consistent stress case, not a market forecast. **Politically, carbon revenue must remain a consequence of a credible cap, not a reason to issue more allowances or tolerate weaker scarcity.**

The data used here enables us to separate cleanly the price effect from the free-allocation effect, while omitting the LRF, MSR, EU set-asides, scope changes, ITMOs and removals. The proxy was reconstructed from emissions, prices and auction shares.

Carbon revenues as an Industrial Policy Test

A successful ETS is self-eroding: as emissions decline, the allowance base contracts. The relevant question is therefore whether today's finite revenue pool builds the technologies,

infrastructure and markets that make tomorrow's European Industry competitive.

Carbon revenue is not simply a fiscal dividend from climate policy. How it is recycled affects the investment response to the carbon price itself. The modelling is useful here as analytical evidence: **when a larger share of carbon-pricing revenue supports green investment rather than financing broader fiscal policies, clean investment is higher and the carbon price needed to reach the same emissions target is lower.** Price and revenue recycling are [complementary](#): one changes relative economics, while the other addresses innovation, infrastructure, deployment and coordination failures.

This is why the corrected revenue scenarios matter strategically. The €59.6–106.6bn modelled effect of the slower auction timetable is not only a public-finance difference. It is a foregone capacity to de-risk first-of-a-kind plants, bridge temporary green-production cost gaps and build the networks on which private investment depends. **Free allocation may protect exposed production during the transition, but its value should be understood as implicit industrial expenditure, not as costless climate policy.**

Europe's New Carbon Rent Under the ETS Reform's Proposal

In essence, the ETS reform proposal is aiming at more ETS-backed financial firepower, and less uncommitted national carbon revenue. In 2025, EU ETS auctions [raised](#) more than €43bn, of which about €24bn went directly to Member States; the rest supplied EU-level funds and facilities. The reform deepens that architecture.

The move towards greater EU-level management is good policy for Europe. A genuine EU industrial policy needs common

risk-bearing capacity; national auction receipts follow heterogeneous emissions and allocation rules, while national budgets vary widely. The capacity of EU instruments to finance shared infrastructures and select European priorities rather than purely national ones only depends on fiscal capacity. The condition is that centralisation produces additional investment, not merely another layer of earmarking.

Legal sequence matters:

Specified allowances are assigned or reserved. These include EU-level instruments and adjustments provided by the Directive. They reduce or reshape the quantity that enters the ordinary auction architecture.

Member States auction at least 57% of the residual quantity. This is a quantity floor after specified allocations and adjustments, it is not 57% of the original cap.

Some resources inside the Member-State auction channel remain earmarked. The Modernisation Fund's 2% of the cap and the 0.5% reserved IDB envelope are financed from the quantity auctioned by Member States. The 10% solidarity rule redistributes that channel.

Own-resources proposal calls 30% of eligible national auction revenue into the EU budget. The money would finance the EU budget without automatic clean-industry earmarking.

Article 10(3) governs the revenues left under national control. Except for amounts established as EU own resources, at least 50%, or an equivalent amount, must support priority decarbonisation in ETS sectors, subject to the indirect-cost-compensation exception. The rest remains linked to a wider climate and social list.

This reform, however, has many implications.

The Commission aims to control a larger EU-level stack. The Innovation Fund receives 200m allowances. The Industrial

Decarbonisation Bank receives 400m for its 2028–2030 booster (around €40bn) and another 400m auctioned in 2031–2040. A separate facility adds 250m allowances, plus up to 10m more, to procure domestic permanent removals.

EU-Level and Reserved Allowance-backed Capacity Under the Proposed Reform

Notional value under the IMF ‘€150 in 2035’ price path, for EU 27, in €bn.

Instrument	Allowance volume	Notional value	Revenue character
Innovation Fund (2031–2040)	200m	€30.7bn	EU-managed industrial support
IDB phase II (2031–2040)	400m	€61.5bn	EU external assigned revenue
Domestic permanent removals	250m + up to 10m	€38.4bn	EU external assigned revenue; first 250m added to cap
Possible additional removals (2031–2040)	Up to 10m	up to €1.5bn	Existing-cap assigned revenue
International-credit facility (2036–40)	Up to 260m	Up to €45.3bn	External climate-finance expenditure or fallback IDB capacity
Union Registry	Up to 5m	Up to €0.8bn	EU administrative assigned revenue
Maximum total	Up to 1125m	Up to 178.2bn	

Source: Authors' calculations based on European Commission ETS review proposal COM(2026) 616 and IMF-modelled ETS revenue. Multi-year allowance stocks are valued at the average price for the stated period.

The EU's own resources remain a separate political decision. The reform proposal would

transfer 30% of Member-State auction revenue to the EU budget if adopted. This would enable more collective EU clean industrial policy actions but still remain far below the leverage given to Member States, as pictured by the below table.

Member States retain the residual auction channel. They auction at least 57% of the quantity left after specified set-asides and adjustments. The 57% threshold is not a fixed allocation key or an expected auction share. It operates primarily as a safeguard for auctioning and, symmetrically, as an implicit ceiling on the ordinary free-allocation envelope. As free allocation declines, notably through the CBAM factor, the effective auction share can rise substantially above this floor. **At least 50% of their receipts, or an equivalent amount, must support priority decarbonisation in ETS sectors; the remainder remains tied to a broader climate and social list.**

Lower-income Member States benefit without receiving general-purpose cash. Using this paper assumption of the IMF “€150 in 2035” path, the Modernisation Fund's 2% cap allocation and the additional 0.5% reserved IDB envelope would represent approximately €24.9 billion over 2031–2040. A further €55.9 billion would be redistributed within the national auction channel for solidarity purposes. Modernisation Fund beneficiaries must channel their solidarity allocations through the Fund, while other recipients must use them for priority climate and decarbonisation expenditure.

Figure 4- One Gross Envelope, Four Different Forms of Control

Allocation of IMF-modelled EU-27 revenue under Commission proposal, 2031–2040, ‘€150 in 2035’ price path, in €bn



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Source: author's overlay of the IMF workbook and allowance volumes in COM(2026) 616.

ETS Revenue Potentials Under the Proposed Reform (2031-2040)

Under the IMF “€150 in 2035” price path; EU-27, €bn

	Amount (€bn)	Description
IMF-modelled EU-27 revenue	981.5	Total country-attributed auction revenue under the proposed path.
Added-cap removals auction revenue	+38.4	Value of the 250m allowances added to the cap and assigned to purchasing domestic permanent removals
Adjusted gross sources	1019.9	IMF-modelled revenue plus the removal cap addition
EU-level and external assigned uses	-178.2	Innovation Fund, IDB phase II, other removals, maximum ITMO facility, and Registry
Residual revenue before other legal allocations	841,6	Accounting remainder before maritime reservations, the Modernisation Fund, MSR effects, the possible free-allocation buffer and EU own-resource call
Conditional EU own resource	Up to 252,5	30% of remaining eligible national receipts.
net national receipts	589.1	Revenue remaining under direct national control
50% priority-decarbonisation benchmark	294,5	Mechanical benchmark for priority decarbonisation spending.

Selected €178.52bn claims: Innovation Fund, IDB phase II, the maximum ITMO facility, up to 10m additional removals allowances, the Union Registry, and estimated 2031–2040 maritime/LDC reservations. The bridge excludes the first 250m removals allowances because they are added to the cap. It also excludes unresolved MSR effects, cancellations, scope adjustments and any use of the possible free-allocation buffer. The 30% own-resource line assumes the 2.5% Modernisation Fund/reserved-IDB envelope is outside the call-rate base; the final treatment of the new 0.5% envelope requires legislative alignment.

Scaling of IMF-Modelled Country Revenue, EU-27, 2030 and 2031–2040

Member State	Gross Revenue 2030	Net Receipts 2030	Gross Revenue 2031–40	Net Receipts 2031–40
Germany	12.17	8.52	234.7	134.5
Italy	7.44	5.21	143.2	82.0
Poland	7.10	4.97	106.3	60.9
France	3.81	2.67	104.7	60.0
Spain	5.64	3.95	95.8	54.9
NL	2.56	1.79	51.4	29.4
Belgium	1.54	1.08	38.1	21.8
Czechia	2.20	1.54	35.1	20.1
Romania	1.28	0.90	25.0	14.3
Hungary	0.66	0.46	18.6	10.6
Ireland	0.83	0.58	18.5	10.6
Greece	1.04	0.73	16.7	9.6
Austria	0.62	0.43	14.7	8.4
Portugal	0.83	0.58	12.5	7.1
Bulgaria	0.89	0.62	10.4	6.0
Denmark	0.47	0.33	9.4	5.4
Slovakia	0.29	0.20	7.5	4.3
Croatia	0.33	0.23	7.2	4.1
Estonia	0.41	0.28	5.6	3.2
Lithuania	0.20	0.14	4.4	2.5
Cyprus	0.32	0.22	4.4	2.5
Sweden	0.14	0.10	4.4	2.5
Finland	0.12	0.09	4.3	2.5
Latvia	0.13	0.09	3.2	1.8
Slovenia	0.12	0.09	2.2	1.2
Lux.	0.06	0.04	1.9	1.1
Malta	0.08	0.06	1.2	0.7
EU-27	51.27	35.89	981.5	562.2

Source: Authors' calculations based on IMF-modelled ETS revenue. The scaling preserves the IMF country shares within each period. It does not reproduce historical-emissions allocation, the 10% solidarity redistribution, Annex IIb, the country distribution of the Modernisation Fund or indirect-cost-compensation exceptions. The corresponding aggregate 50% priority-decarbonisation benchmarks

are €17.95bn in 2030 and €281.1bn in 2031–2040. Totals may differ slightly because of rounding.

International Credits: a €45 billion financing choice

From 2036 to 2040, up to 260 million allowances could be assigned to financing the purchase of up to 260 Mt of [international credits](#). Under the “€150 in 2035” price path, **those allowances would have a notional auction value of approximately €45.3 billion**, assuming that the full volume is auctioned evenly over the period.

These amounts represent a potentially substantial diversion of European carbon-finance capacity from domestic industrial investment towards mitigation outside the Union. Article 9b makes the opportunity cost explicit by allocating allowances unused by the international-credit facility to the Industrial Decarbonisation Bank. The 2033 review therefore puts up to €45 billion of domestic clean-industrial financing at stake under this paper's central price scenario.

International credits would not be introduced into the ETS for use by operators. Rather, **their availability would permit the lower post-2035 linear reduction factor and create additional domestic emissions space for sectors considered critical.** This could still weaken allowance scarcity and reduce receipts across the entire ETS, it is nevertheless difficult to quantify that effect.

Nor does the €45.3 billion necessarily equal payments to foreign projects. The actual amount leaving Europe will depend on the number and price of credits purchased and on how many of the 260 million allowances the Commission ultimately auctions. Until the procurement rulebook specifies these elements, €45.3 billion should be understood

as the maximum gross domestic industrial-policy capacity potentially redirected abroad.

Hoping 'High quality' will not be an empty phrase, it is still not yet an operational standard. At principle level, the [Climate Law and Article 6 framework](#) point to no double counting, additionality, permanence, transparent governance, robust monitoring, reporting and verification, environmental and social safeguards, human-rights protection, and ambitious shares for adaptation and host-country mitigation benefits.

What is still missing is the rulebook that turns those principles into procurement: eligible methodologies and activities, baselines, host-country authorisations and corresponding adjustments, crediting periods, reversal liability, registries, prices, audit rights and the precise adaptation and host-country shares. The Commission's report due by January 2033 will therefore be a fiscal and environmental decision point that has a genuine impact on EU revenue capacity.

Can the ETS finance Europe's clean industrial transition?

Although not covering the full amount the corrected figures show that the ETS can finance a significant public risk-bearing layer. Under the modelled proposed allocation schedule, revenue ranges from €51.8bn to €104.1bn in 2030 and from €0.99tn to €1.68tn over 2031–2040. For scale, the Commission has estimated industrial energy-system investment needs of about €40bn per year in 2021–2030. **These figures do not form a coverage ratio but the comparison nevertheless makes the central point that carbon revenue is macroeconomically meaningful, but only a fraction will be available for clean-industry investment.**

The ETS is best suited to catalytic uses: first-of-a-kind risk, carbon contracts for difference, temporary production premia, grids, CO₂ networks, electrification and skills. Private balance sheets must still finance most capital expenditure, and stable EU and national budgets remain necessary. Against the backdrop of a weakened revenue stream, the reform proposal lays the foundations for a common industrial-finance architecture, but falls short of a bankable plan. **It presents allowance volumes by instrument without a consolidated annual net-revenue envelope, leverage targets, project pipeline or distribution framework.**

A weaker carbon price deteriorates the private business case for low-carbon production. Public support must then compensate for a larger operating-cost and investment gap. If the same reform also prolongs free allocation, makes auction revenue less predictable or directs proceeds outside Europe, the common instrument available to close that gap is weakened as well. **Europe would socialise more of the transition through general taxation and national state aid.**

That is particularly dangerous in the context of the global industrial competition. China can sustain capacity through coordinated state finance; the United States combines resources, lower energy costs and federal spending thanks to the Dollar dominance. If Europe abandons the common financing function of the ETS, industrial decarbonisation will depend more heavily on the deepest national pockets. The likely outcome is not less subsidy, but a more fragmented and less European subsidy race.

Europe's clean-industry advantage depends on both the carbon price and the carbon

rent. The reform proposal can finance a meaningful common risk-bearing layer while strengthening the private investment signal. But prolonged free allocation, new earmarks and external credit purchases reduce what remains deployable inside Europe. In the next EU industrial-policy debate, the decisive number should be net revenue available for clean productive capacity and the decisive safeguard should be the scarcity that creates both the signal and the revenue.

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