BRIEFING

Last chance to get it right: The Industrial Accelerator Act will make or break Europe's battery industry

How the Franco-German auto deal, a wide Made-with-EU scope, and carmakers abandon Europe's battery value chain to foreign competitors

Lead author: Franziska Grüning, franziska.gruning@transportenvironment.org
Lead analysts: Jordane Faizant, Jeanne André
Contributors: Xavier Sol, Yoann Gimbert

Summary

As negotiations on the Industrial Accelerator Act (IAA) continue, T&E assessed the policy options on the table: the Franco-German deal's weaker battery requirements, a broad Made-with-EU scope, and carmaker demands like the "fleets booster". T&E analysis finds only a robust IAA with strong battery criteria, a well-calibrated timeline and a Made-in-EU scope can deliver tangible benefits. No other policy option guarantees the demand European projects need to scale.

Key findings

Only 13%

Of announced EU cell production in 2030 secured by the Franco-German deal

100 GWh & 250 GWh

Of cell and CAM demand could leak abroad because of a wide Made-with-EU scope

Kill 247 GWh of production

EU cells from 2027-2032 with weakened Car CO_2 standards. **3x the annual capacity of EU largest battery plant (LG ES in PL)**

The IAA marks a major shift in EU industrial policy. It introduces Union content incentives to ensure scarce public subsidies and corporate tax incentives are used to support European manufacturing. This demand-side pull is crucial if the energy transition is to deliver high-value industrial jobs and lessen critical geopolitical dependencies. There is a growing consensus that Europe must reduce its reliance on Chinese cleantech, especially batteries. But several proposals currently before co-legislators risk severely undermining that overarching goal. Diluting battery criteria in the IAA means giving up on a strategic value chain for Europe, leaving it to China only.

T&E's assessment shows that **only an IAA with a calibrated timeline, robust battery requirements and a strict geographical scope will deliver substantial benefits for Europe.** Without secured demand, announced industrial capacity will simply not materialise.

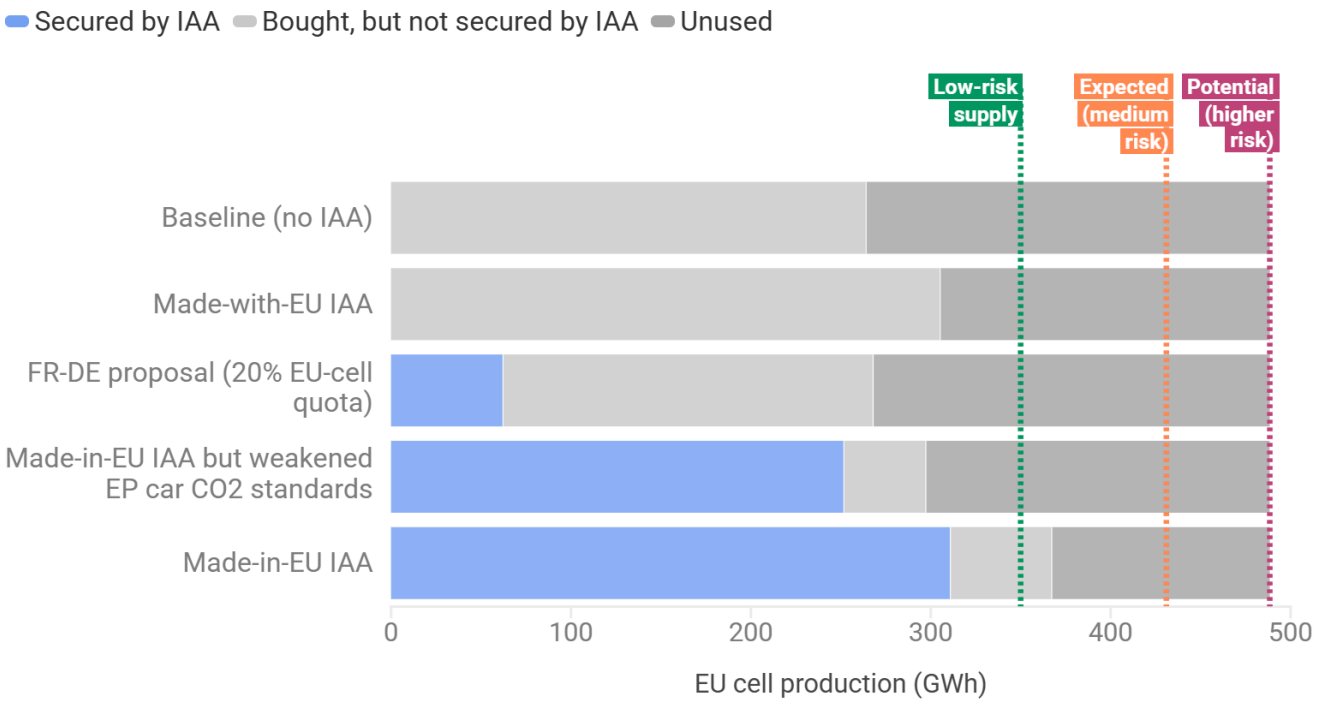
The Franco-German automotive deal from 16 October 2026 is a major blow for Europe's battery industry as it severely dilutes incentives for batteries. It suggests battery sourcing requirements for eligible vehicles of 10% in 2028-2029, 20% in 2030-2031 and 70% from 2032 on. This is far below what the market already does: over 50% of cells in electric vehicles (EVs) sold in

the EU are already Made-in-Europe. By 2030, the deal would only secure 13% (62 GWh) of Europe's announced cell production: a further 206 GWh would likely find European buyers, though with no guarantee, while 220 GWh would find no demand at all. Even in 2032, the 70% would still not secure a substantial share of potential cell capacity (only 45%).

Another major risk is applying a wide Made-with-EU geographical scope to battery criteria. Compared to a strict EU-only scope, including free trade agreement (FTA) partners puts around 100 GWh of cell demand and 250 GWh of cathode active materials (CAM) demand at risk of leakage in 2030. Limiting the scope to trusted partners only helps to a limited extent. Since Europe can produce enough cells to meet demand under a Made-in-EU IAA, adding partner countries risks leaving EU production without offtakers: even with trusted partners only, a third of potential EU cell supply could be affected. For CAM, around 30% of expected EU supply could be left without a buyer under a trusted-partners scope, rising to 50% under an extended one.

Only a Made-in-EU IAA secures offtake for EU cell production

EU cell production in 2030, per scenario



Source: T&E analysis • Supply from T&E Gigafactory database • Demand: EVs sold in the EU • Secured = cells the rule obliges carmakers to buy in the EU (quotas per carmakers on eligible vehicles): FR-DE 20%, EU only 100%. Same geographical scope applied for corporate and private vehicles. Applying car CO_2 standards based on the 2025 Commission proposal (except scenario 4)

The midstream, CAM and their precursors (pCAM), is the weakest link in Europe's battery value chain. Boosting this key segment and diversifying away from China is essential for resilience as it shields European industry from supply disruptions and export controls. Under a strict Made-in-EU scope, reaching IAA CAM requirements is technically and commercially viable by 2030, requiring only limited sourcing from trusted partners (33 GWh cell-equivalent). From

2032, EU production can cover demand from EVs under support schemes. A Made-in-EU IAA would generate 323 GWh of extra EU CAM demand in 2032, around the output of six mid-sized EU CAM plants, bringing total EU-made CAM to 407 GWh (securing 94% of expected EU supply).

pCAM is just as vital for resilience and to establish local offtake for European refiners and recyclers. A 28% EU pCAM requirement in 2032 applied to a carmaker's entire fleet sales (not only for vehicles eligible for public support) creates enough demand for expected EU supply to materialise and projects to reach Final Investment Decision (FID). **Onshoring CAM and pCAM adds only a modest cost of $10.6/kWh for Nickel Manganese Cobalt (NMC) and $6.5/kWh for Lithium Iron Phosphate (LFP) batteries.** This is a necessary sovereignty premium that will fall as the EU supply chain matures.

The car CO_2 standards are as critical to industrial delivery as the IAA. Even under a strict Made-in-EU scope, the **European Parliament's position** as approved by the leading committee in November 2026 would sharply cut expected EV sales and **reduce EU cell demand by 247 GWh between 2027 and 2032, which equals 3.7 million EU made EVs.**

Finally, the proposed fleet booster mechanism fails to drive industrial onshoring and relocation if its compliance trigger is set below 85%. Carmakers' efforts to lower that threshold aim at getting a stamp of approval on their sourcing strategy in China. A major risk for public subsidies ending up benefiting imported cars with Chinese batteries. Attempts to lower the Booster below a 85% threshold should be rejected, especially if combined with weaker battery criteria.

Key recommendations

01	**Reject the Franco-German deal proposal on batteries:** Battery criteria in this deal are too weak to create additional demand and undermine the IAA's core purpose.
02	**Maintain the Commission's core timeline and cell/cathode criteria: enforce cell requirements by 2027/28 and CAM by 2030.** Retain Article 13 in full to guarantee a strict EU scope for corporate fleets, securing offtake for ~60% of the EV market.
03	**Include trusted partners only where justified:** Set EU27 + European Economic Area (EEA) and the UK as the default baseline. The UK should be included given its integration into the EU battery value chain via the Trade and Cooperation Agreement (TCA) and the scale of investments already committed. If trusted partners are included, strict selection criteria are needed to alleviate circumvention and offshoring.
04	**Add minimum thresholds for midstream:** at least 20% for pCAM and 10% for Anode Active Material (AAM) for 2032 to build domestic midstream capacity to diversify from China. Include a 20% threshold for lithium, nickel, cobalt and graphite.
05	**Reject weakened fleet booster proposal**: anything below a 85% fleet-wide compliance trigger removes the incentives to onshore production in Europe and ends up subsidising imported vehicles.

01

The Franco-German deal risks wiping the EU battery industry off the global map

The Franco-German deal's battery requirements are too low to create additional demand and defeat the IAA's core purpose. Left intact, they will stall industrial scale-up.

On 16 October, Germany and France agreed a joint position on the automotive package that weakens the car CO_2 standards and dilutes core IAA provisions on batteries. The deal proposes sourcing just 10% of cells in Europe in 2028-2029, rising to 20% in 2030-2031 and 70% from 2032. This erodes protection for European manufacturing and sets ambition well below the status quo: over 50% of cells in EVs sold in the EU in 2025 were already European-made.

By accommodating carmakers' lobbying for cheap Chinese batteries' imports, the deal guts the Battery Booster strategy from December 2025 - which relied on IAA local content requirements as its main tool. While key Member States still can't agree on how to support an industry that matters for mobility, jobs and defence, the US Department of Energy (DOE) is updating its 2035 strategy for battery leadership to build a domestic battery value chain, from mining to production, an end-to-end approach the IAA still lacks.

T&E's updated modelling assumes the deal's requirements apply only to "eligible vehicles" under the IAA, not as a fleet-wide sourcing requirement - which further lowers demand. Before 2032, the deal creates almost no additional demand (one to five GWh a year), and even at 70% in 2032 it remains below what carmakers would source voluntarily anyway.

EVs assembled in the EU already run on roughly two-thirds EU cells: 69% in 2028 and 67% in 2030 - three to seven times higher than the deal's threshold. Without the IAA, carmakers would already buy 175 GWh of EU cells in 2028 by choice, though none of it is legally locked in. **The Franco-German deal mandates less than a quarter of existing purchases until 2031.** Even after the 70% step in 2032, it stays below what carmakers would buy anyway. A strict Made-in-EU scope would make more than that compulsory from the start: 200 GWh in 2028 and 311 GWh in 2030, before any voluntary purchases.

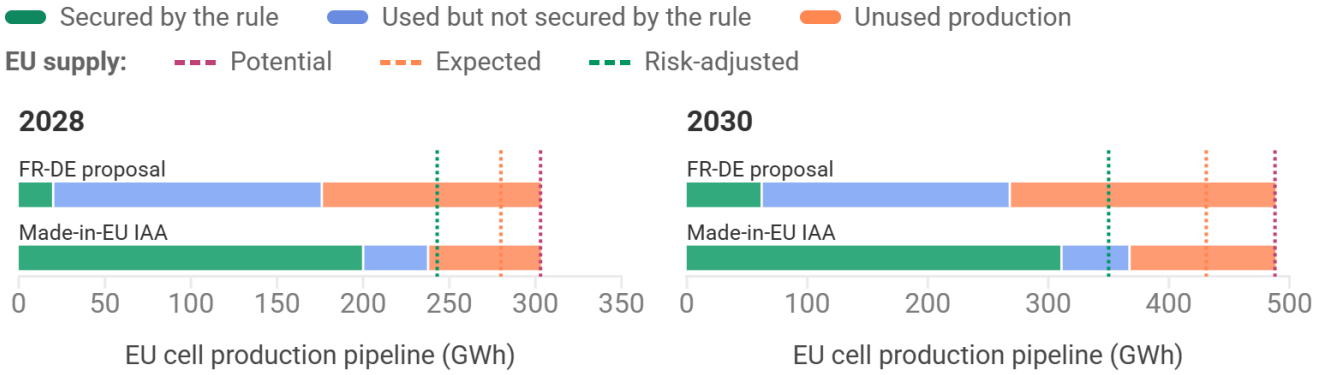
From a supply perspective, the deal leaves much of Europe's planned cell production without a buyer. T&E's analysis divides announced EU27 cell capacity into three categories:

- Secured: cells the IAA criteria oblige carmakers to buy in the EU;

- Used but not secured: EU cells carmakers buy voluntarily today, which remain vulnerable to import substitution;
- Unused: Capacity left with no European EV buyer (forced toward stationary storage or export).

The FR-DE proposal would secure only 13% of EU cell production in 2030

A strict Made in EU requirement would secure five times more demand for European cells.



Source: T&E analysis • Supply from T&E Gigafactory ramp-up model, EU27 scope. Demand covers EVs sold in the EU only (excl. storage and exports) and is aligned with EC CO2 standards. Quotas apply per carmaker to **eligible** EU-assembled EVs:10% (2028) and 20% (2030) for DE-FR, 100% for Made in EU.

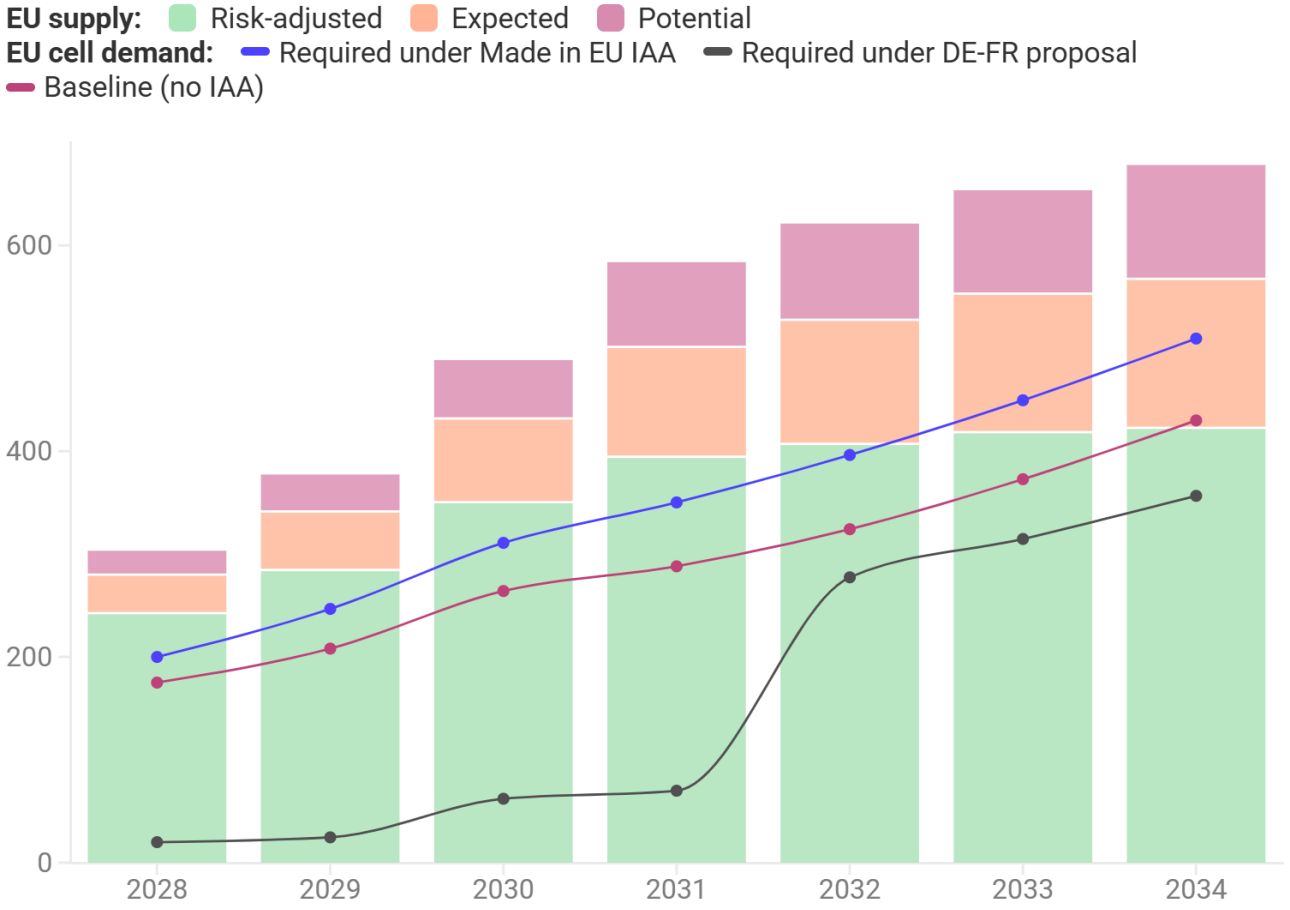
In 2030, the Franco-German deal locks in only 13% (62 GWh) of 488 GWh of potential EU27 production, leaving 220 GWh (45%) with no demand in the EU at all. The remaining 206 GWh is used voluntarily but not secured against future offshoring. These are EU-made cells that carmakers already buy today and would keep buying, either above their own 20% quota or in vehicles outside the IAA's scope (not subsidised, or assembled outside the EU). This volume comes from the No IAA baseline: it reflects current sourcing choices, which the IAA does not lock in. EU demand under the deal would not even fill risk-adjusted (very likely) production: around 80 GWh of it would be left without a buyer. The Commission's proposal tied with a strict Made-in-EU scope (for private and corporate vehicles) on the other side would secure 311 GWh, enough to de-risk around 90% of the most advanced projects (risk-adjusted).

In 2030, total EU cell demand (including cells carmakers buy voluntarily) under the Franco-German deal reaches 268 GWh and hence stays below risk-adjusted EU production (351 GWh), while a strict Made-in-EU scope goes beyond it (367 GWh). Compared to the Commission's proposal (cells required six months after entry into force) combined with a strict Made-in-EU scope, **the Franco-German deal would put around 100 GWh of EU cell production at risk of finding no buyer.** These figures include EU cells that carmakers would buy anyway but that the IAA does not lock in, such as EU cells in cars sold without a subsidy or assembled outside the EU. Only accounting for legal requirements under the IAA, the gap rises to almost 250 GWh. This matters most for projects whose future is less certain, such as Verkor Dunkirk in France (20 GWh

of capacity) or VW PowerCo Salzgitter in Germany (also 20 GWh). These are the projects the IAA was meant to help scale through demand security.

In 2028, the Franco-German deal would lock in only a tenth of the EU-made cells carmakers already buy

EU-made battery cells required by each rule vs baseline demand, and EU cell production, GWh/year



Source: T&E IAA impact assessment model (GlobalData market, EC CO2 standards), T&E Gigafactory database (EU27) • Required = cell demand (GWh) each carmaker must source in the EU for its subsidised, EU-assembled EVs. DE-FR deal: 10% in 2028-29, 20% in 2030-31, 70% in 2032-34. Strict EU: 100% • Baseline = EU-made cells carmakers would buy without the IAA.

02

Geographical scope matters: wide Made-with-EU risks offshoring EU production

While trusted partners are vital for building resilient supply chains, the IAA should carefully select partners to avoid subsiding offshoring to lower-cost countries.

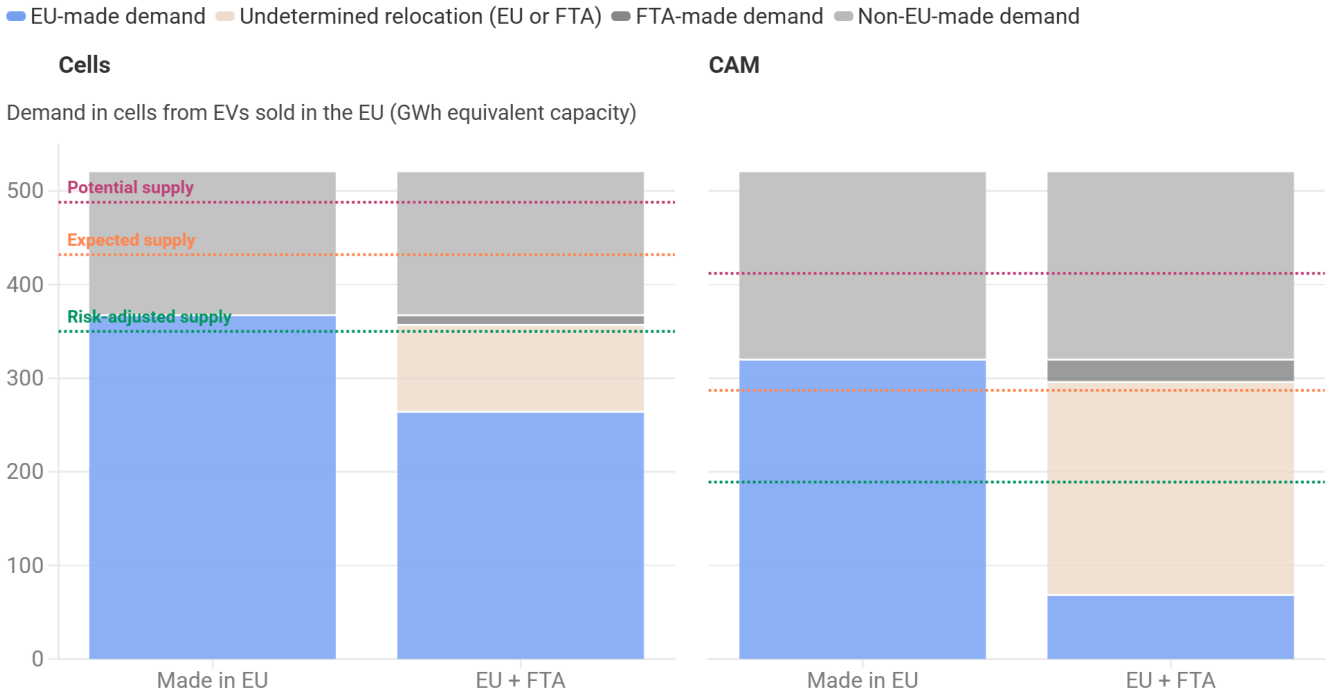
2.1 IAA-driven demand benefits FTA partners first

T&E modelled the impact of opening the IAA's geographical scope to FTA partner countries. Under a wide FTA scope, incremental demand created by the IAA - representing the share of cells and CAM currently sourced mostly from China that must relocate to qualify for subsidies - can shift either to the EU or to FTA partners.

Any demand absorbed by third countries is industrial capacity lost to Europe, depriving domestic projects of guaranteed offtake. **Compared with a strict EU-only scenario, opening the IAA to FTA partners could divert 100 GWh of cell demand and 250 GWh of CAM demand away from EU producers in 2030.**

Made-with-EU can be detrimental to EU cell and cathode producers

Cell and cathode (CAM) demand by origin under different IAA scenarios, **2030**



Source: T&E analysis based on GlobalData and Benchmark Minerals Intelligence.
FTA countries: South Korea, Canada, Japan, UK, EFTA, Morocco, Turkey, Indonesia, Vietnam, Serbia. Geographical scope is applied to corporate and private cars.

2.2 Made-with-EU benefits the lowest-cost producers

T&E analysed where relocated Chinese cell and CAM production is most likely to land, assuming investment follows production costs and available supply: capacity moves first to the cheapest eligible country until its supply is exhausted, before shifting to the next cheapest option. **A broad FTA scope is therefore risky, as it brings low-cost jurisdictions into the perimeter that absorb relocated capacity first.** If lower-cost FTA countries divert more of their output to the European market, leakage could become total - absorbing all relocated demand and leaving none for EU-based plants (see Methodology).

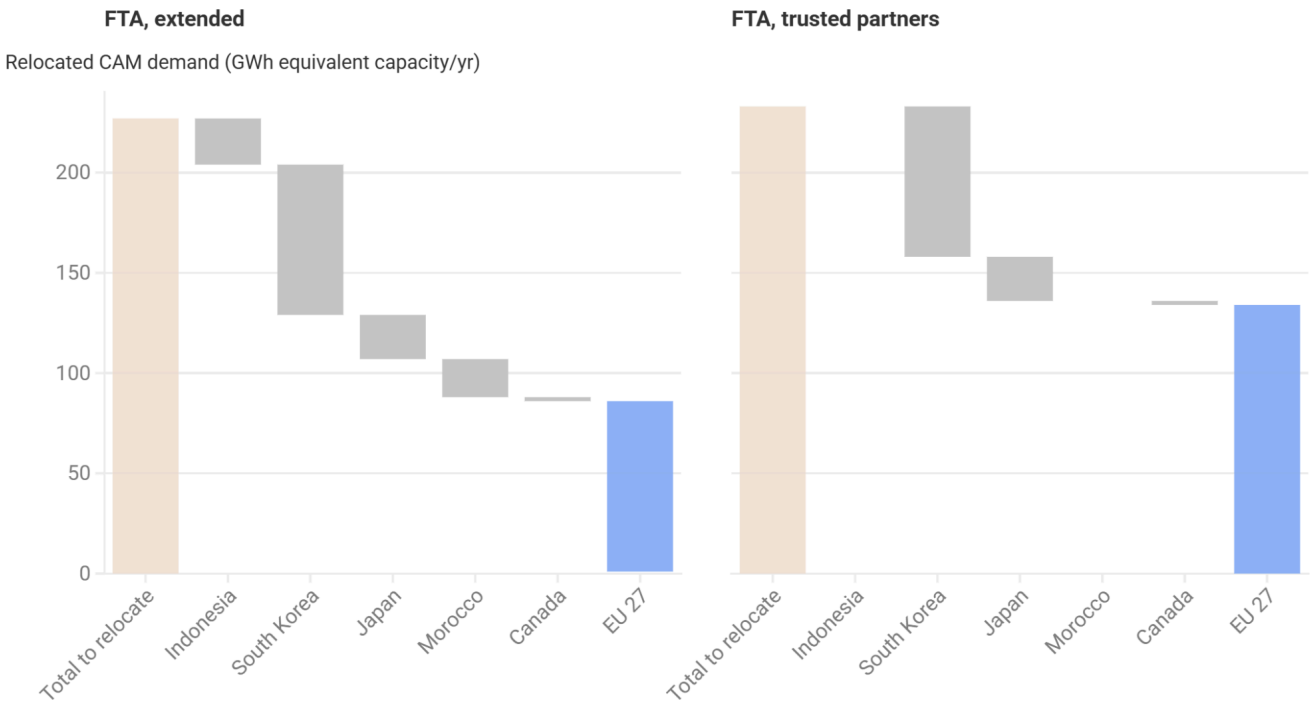
Regarding cells, T&E finds that **limiting the geographical scope to trusted partners only - South Korea, Japan, Canada, EFTA countries and the UK - would bring 14 GWh more cell production capacity to Europe** than an extended scope (incl. Indonesia, Morocco, Turkey, Vietnam and Serbia).

However, because Europe already has sufficient planned cell capacity to supply supported vehicles on its own, any FTA inclusion risks leaving domestic plants underutilised: **a narrow trusted-partner scope still puts 169 GWh (out of 488 GWh) of potential EU cell production could be left without an offtaker, rising to 183 GWh under an extended scope**.

The leakage risk for CAM production is even higher. The list of FTA countries mainly affects where the capacity leaks to. **Out of 287 GWh of expected EU27 CAM capacity, 85 GWh remains spare under a narrow FTA scope whereas 133 GWh remains unused if the IAA adopts an extended FTA scope.**

Limiting strategic partners could create 50 GWh extra cathode production in the EU

Cathode demand relocated from Chinese suppliers, by destination, **2030**



Source: T&E analysis based on Benchmark Mineral Intelligence (Cathode Active Material Cost Calculator, Q2 2026 and Cathode Supply Forecast, September 2026) •
FTA, trusted partners includes South Korea, Canada, Japan, UK + EFTA
FTA, extended includes trusted partners + Morocco, Turkey, Indonesia, Vietnam, Serbia
Illustrative scenario based on T&E assumptions about the share of FTA production available to the EU. Demand is allocated to the cheapest countries first. UK and EFTA, costlier than the EU27 (average), receive none, as EU capacity covers the remainder under both geographical scopes.

03

Midstream targets (CAM and pCAM) are essential and reachable

The IAA has to focus on strategic components beyond cells: CAM and pCAM are key to build strategic resilience and capture where most of the battery's value lies.

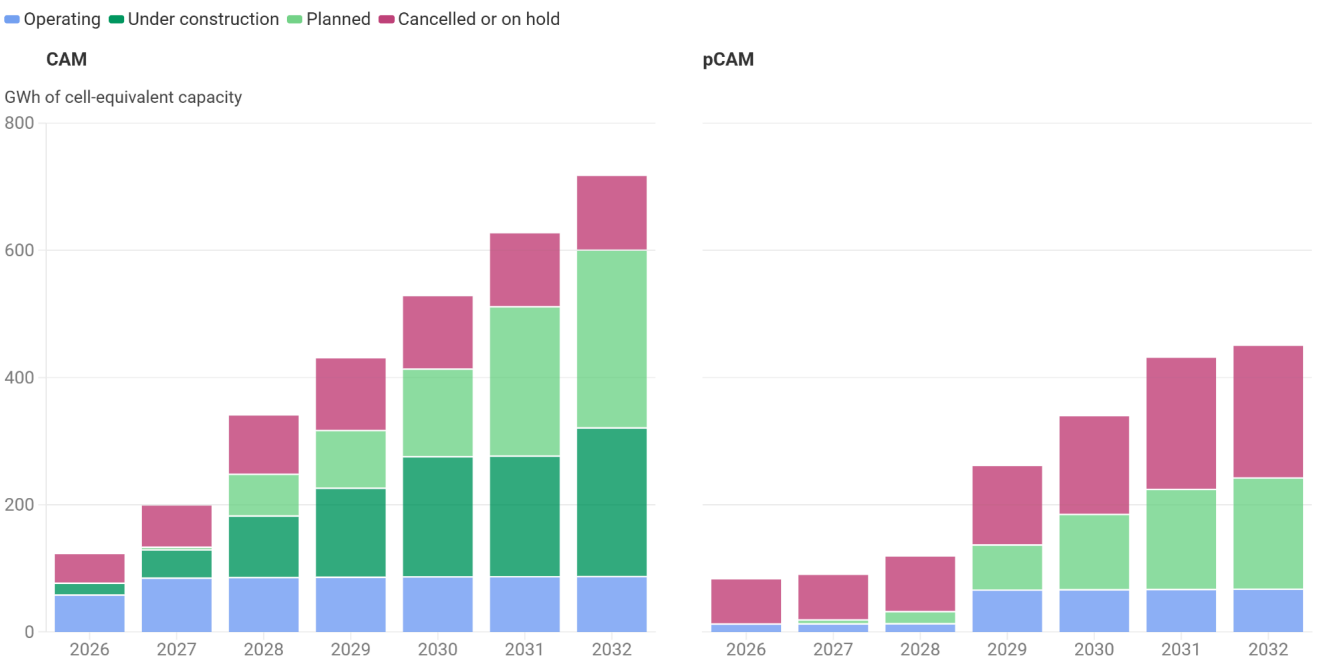
Supply chain resilience needs domestic capacity in the midstream: CAM, but also its precursor pCAM and Anode Active Materials (AAM). CAM, processed from pCAM, forms the positive side of a battery cell. It determines how much energy the cell holds, how fast it charges and how long it lasts, and makes up 40% of the cost of an NMC cell made-in-Europe.

CAM and pCAM production is the key step between raw minerals and finished batteries, but Europe imports most of these materials today. This exposes Europe to supply risks, price spikes and carbon-intensive transport. **Without intervention, China is projected to keep over 80% of global CAM manufacturing in 2035, while Europe holds just 3%.**

Europe has a sizable pipeline of CAM projects, but over 50% have yet to break through. CAM producers need large, stable offtake contracts with EU cell makers and carmakers to ramp up. Without demand from the IAA, the business case for EU-made CAM collapses.

Over 50% of Europe's cathode capacity has yet to break ground

All announced European CAM and pCAM capacity by the current status of the project.

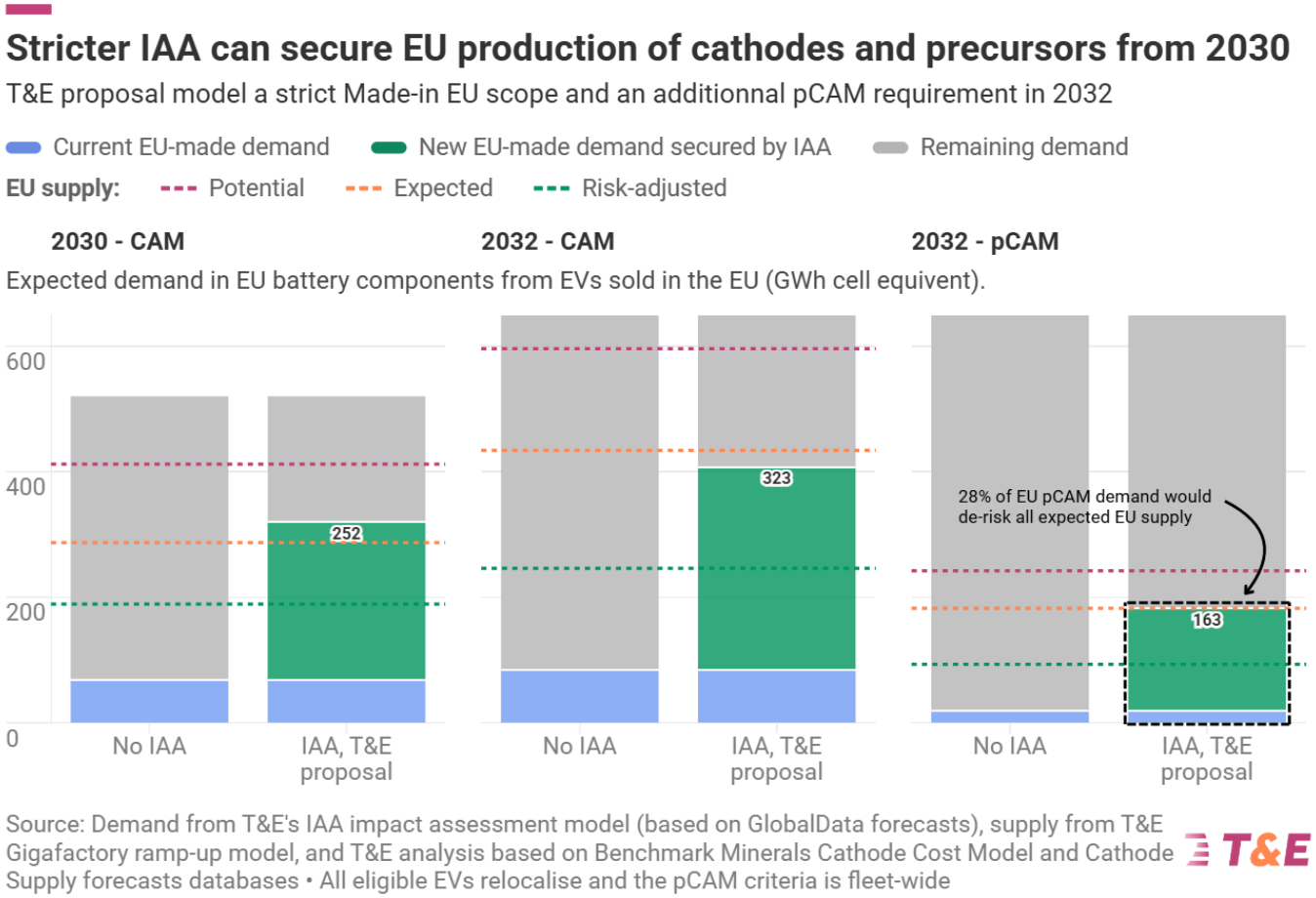


Source: Benchmark Minerals Intelligence cathode forecasts, September 2026. Cancelled values adjusted by T&E. • Status is the project's position today, applied across its whole capacity schedule.

T&E's updated modelling confirms that **under a strict Made-in-EU scope, binding CAM criteria are achievable by 2030 with modest supplementary supply from trusted partners.** Because EU CAM demand exceeds expected domestic supply by just 11% in 2030, only 33 GWh (cell-equivalent) of additional cathodes would need to be sourced from trusted partners. **From 2032 onward, projected EU CAM production alone could cover demand from EVs under support schemes:** a Made-in-EU IAA would create 323 GWh (cell-equivalent) of additional EU CAM demand in 2032 - reaching 407 GWh of total EU-made CAM and securing 94% of expected EU supply. Looking at EU's total CAM demand, EU CAM production would cover 29% in 2027 and 55% in 2030. Without the IAA, there would be no specific demand for EU-made CAM. With EU CAM requirements in 2030, the IAA would create this demand, 88% of which EU production could cover.

The IAA should also add pCAM to its Annex. China controls 95% of global pCAM capacity. Without pCAM production in Europe, EU refiners and recyclers will have no local buyers, as foreign pCAM producers prefer cheaper imported raw materials. Europe won't reach its diversification and industrial goals unless it de-risks existing and planned pCAM projects. As with CAM, the potential is there, but demand security is crucial.

A 28% sourcing requirement for EU pCAM applied to a carmaker's entire fleet, not just eligible vehicles, would create enough demand for expected EU pCAM supply to materialise - and can be met with EU supply only.



Source: Demand from T&E's IAA impact assessment model (based on GlobalData forecasts), supply from T&E Gigafactory ramp-up model, and T&E analysis based on Benchmark Minerals Cathode Cost Model and Cathode Supply forecasts databases • All eligible EVs relocalise and the pCAM criteria is fleet-wide

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Onshoring costs remain limited: a sovereignty premium worth paying

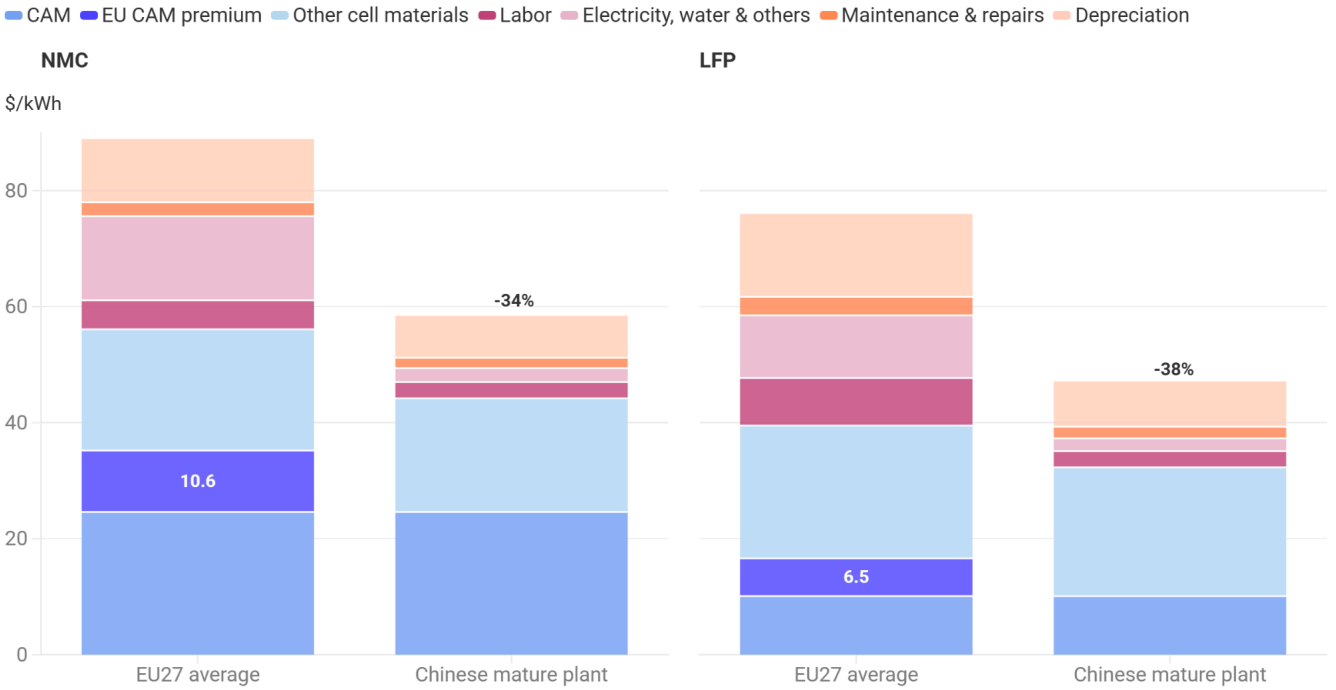
Producing CAM and pCAM in Europe adds $10.6 per kWh to an NMC cell and just $6.5 per kWh to an LFP cell. This price increase is a sovereignty premium that is far outweighed by the cost of inaction. Comparing EU and Chinese prices reveals that this gap is largely driven by electricity and water but also depreciation costs and labour. The product itself is not the main barrier. Importantly, as Europe's battery ecosystem matures, prices will further decrease.

This cost gap is an upper bound comparing two extremes: a European plant still ramping up, sourcing all its cathode material locally, against a mature Chinese plant. **Rather than a cost passed on to consumers, this figure measures the competitive pressure European producers face from China.** Closing this gap is precisely the role of targeted production support.

In practice, the gap carmakers would face is much smaller. The cost differential will narrow as European plants scale, and over 50% of cells in EVs sold in the EU were already produced domestically in 2025. Comparing carmakers' current sourcing with a Made-in-EU battery (cathode aside) once plants have scaled up, we estimate the extra cost falls to around €500 per EV on average in 2030, a 5-9% increase in battery pack cost depending on the carmaker. As the IAA's midstream requirements phase in, onshoring cathode production would add a premium to this baseline. Ultimately, the impact of potential cost increases would be alleviated by the public support (e.g. tax incentives and purchase subsidies) Made-in-EU EVs will benefit from.

Onshored cell production with EU CAM and pCAM adds a premium of $30.5/kWh for NMC and $28.9/kWh for LFP

Cell cost by component in 2030, production-weighted European average against a mature Chinese plant



Source: T&E analysis based on T&E Gigafactory database, BloombergNEF (BattMan battery cost model) and Benchmark Mineral Intelligence Cathode Cost Model Q3 2026.

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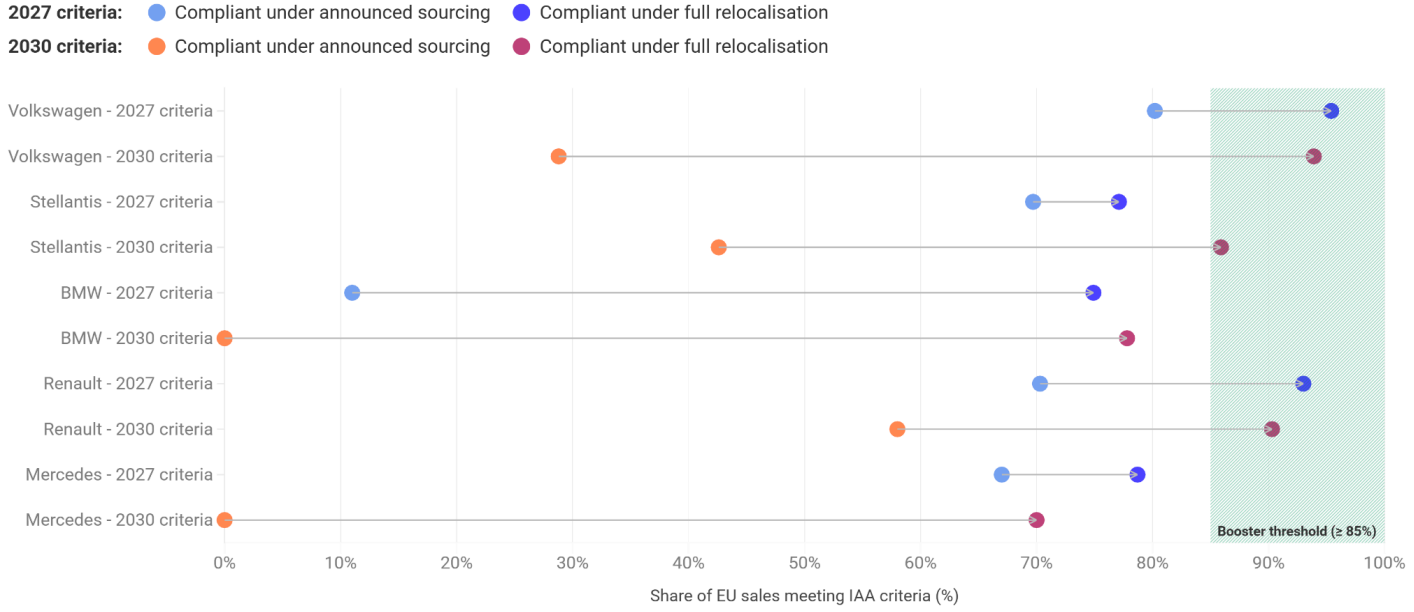
A Low ambition fleet booster means more Chinese batteries

Setting the fleet booster below 85% gives carmakers a free pass to claim public subsidies without increasing European battery sourcing.

The IAA sets incentives for EVs benefiting from purchase subsidies, corporate tax incentives or publicly procured. Under the Commission's fleet booster mechanism, a carmaker can qualify all its cars (imports included) for these benefits if 85% of its fleet meets the IAA criteria.

While diluting the eligibility criteria on batteries would already make this threshold easier to hit, lowering the booster threshold itself poses a severe risk. **Below 85%, the mechanism loses its industrial pull and no longer pushes carmakers to relocate production: major OEMs would automatically qualify their entire fleet. At a 70% threshold, Volkswagen, Stellantis and Renault would already be eligible.** Public funds would then directly support their imported cars with Chinese batteries too, hence depressing Made-in-EU EV sales.

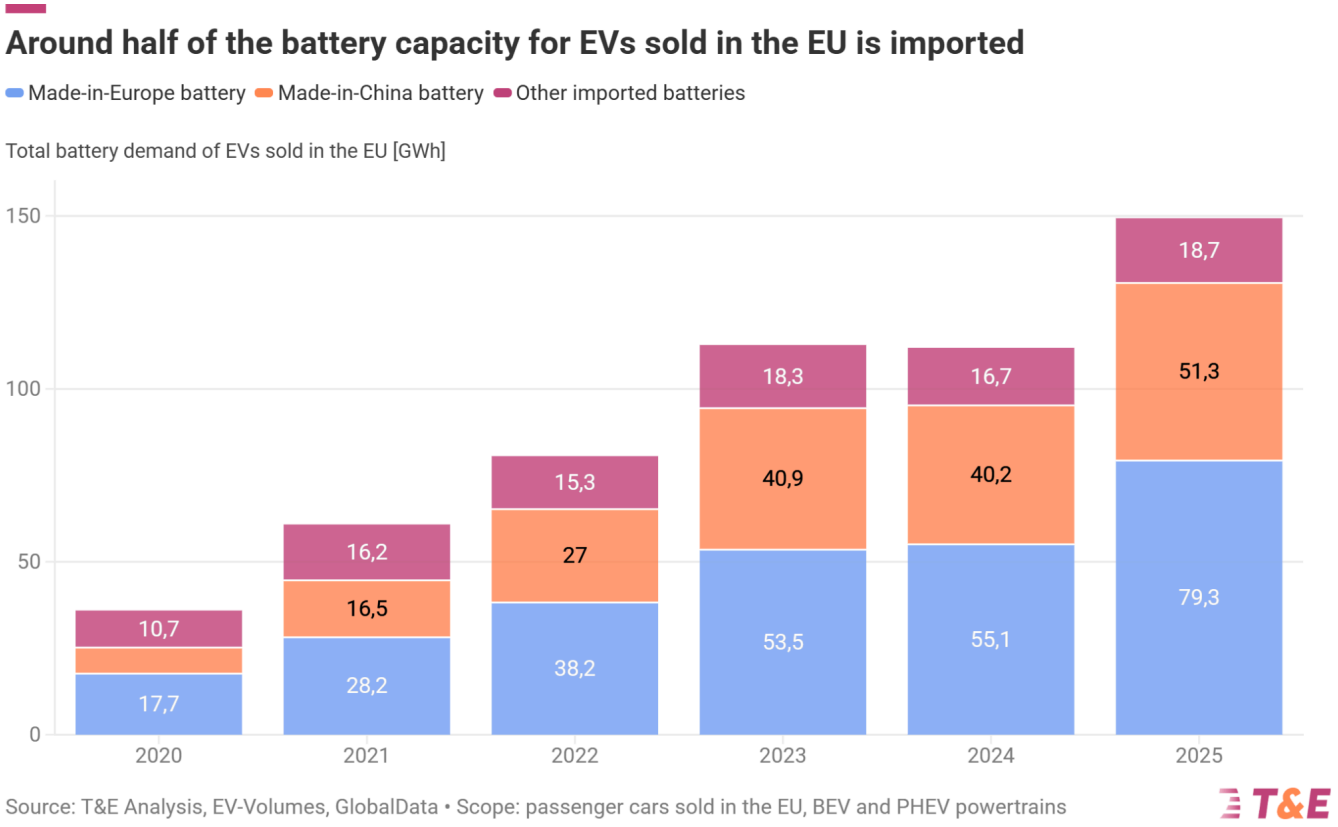
A low fleet booster provides little incentive for OEMs to source locally



Source: T&E's IAA impact assessment model (based on GlobalData forecasts). Full relocalisation assumes all EU-assembled EV models meet the IAA criteria.
Note: **2027 IAA criteria:** ≥70% EU value in non-battery components, ≥3 EU-made battery components (incl. cell). **2030 criteria:** ≥70% EU value in non-battery components, ≥5 EU-made battery components (incl. cell, CAM, BMS) and ≥50% EU-made e-powertrain & electronics.

Across every scenario T&E tested, 85% is the lowest level at which the booster drives relocation enough to increase Made-in-EU EV sales.

Carmakers' reliance on Chinese batteries remains high. In 2027, 40% of Stellantis' EU-assembled battery electric vehicles (BEVs) sales are still projected to run on Chinese-made batteries. Overall, Europe keeps relying heavily on ultra-low tariff battery imports from China. While the **anti-subsidy investigation on Chinese EVs has successfully led to some relocation** of EV manufacturing to Europe - e.g. Volvo EX30, BYD Dolphin Surf and other Chinese BEV (Battery Electric Vehicle) models - **trade measures against Chinese battery imports are still missing.**



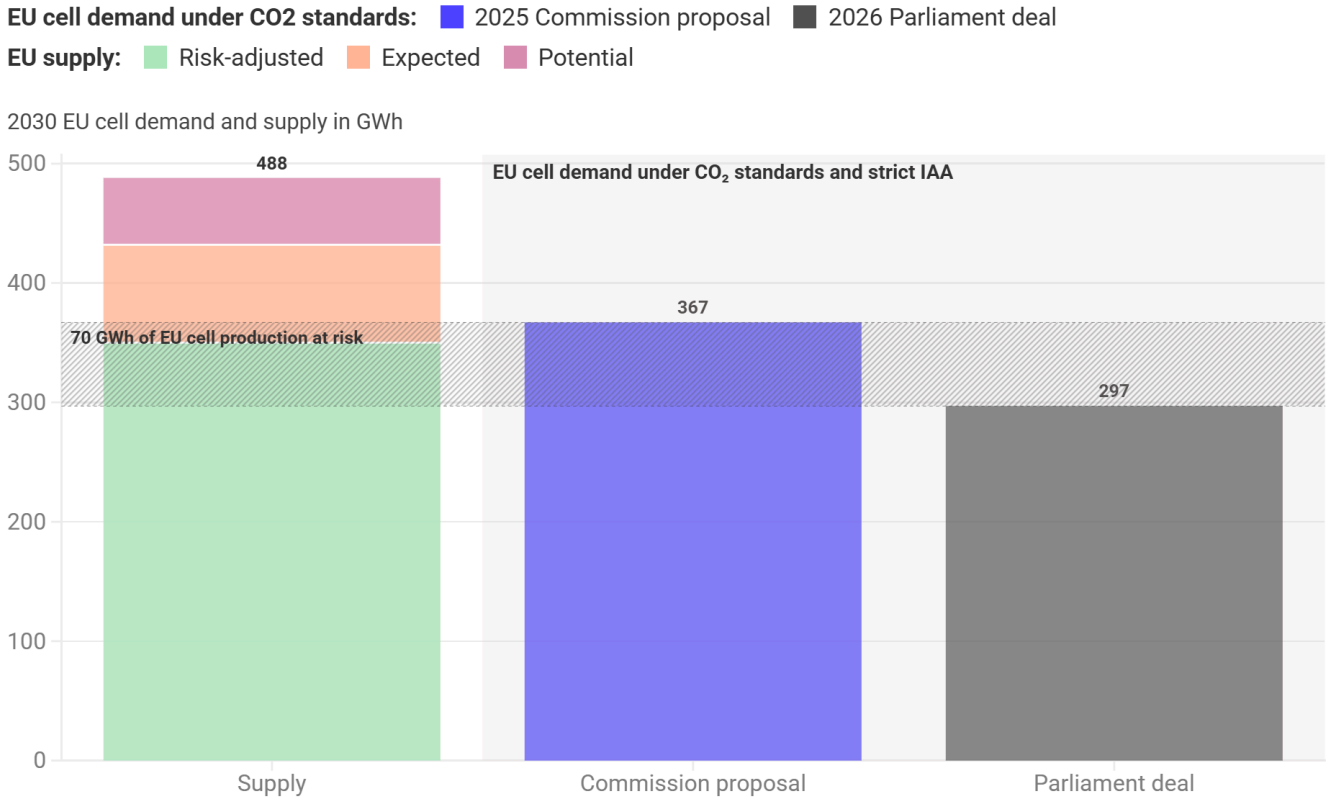
06

Weak CO_2 targets cancel out IAA gains

The European Parliament's proposal on Car CO_2 standards would inflict deep damage on EU battery cell demand.

T&E analysis shows that the 2025 Commission's proposal puts demand for EVs, and therefore EU batteries, at risk. However, the European Parliament's proposal weakens the standards even further. **Even paired with a strict Made-in-EU scope, the Parliament's proposal puts 70 GWh of EU cell production at risk in 2030 compared to the Commission's text.** That volume equals more than ¾ of the annual (nameplate) capacity of Europe's largest battery plant, LG Energy Solution in Poland (90 GWh), and translates to about 1.15 million fewer BEVs sold in the EU in 2030.

Weak Car CO_2 proposals endanger demand for EU cells, even under a strict Made-in EU scope

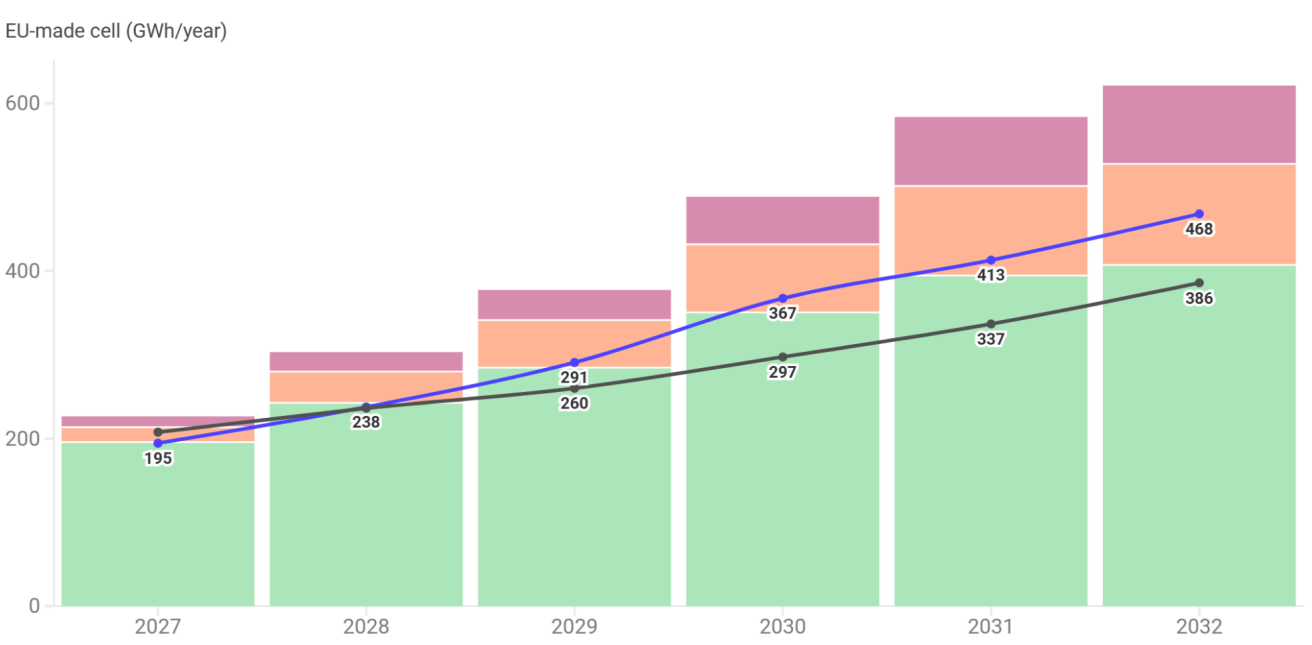


Source: Demand from T&E's IAA impact assessment model (based on GlobalData forecasts), supply from T&E Gigafactory ramp-up model, and T&E analysis based on Benchmark Minerals Intelligence Cathode Cost Model and Cathode Supply forecasts databases

Consequently, even an ambitious IAA cannot fully boost industrial capacity if the CO_2 standards are weakened to this extent. **From 2027 to 2032, EU cell demand would drop by 247 GWh in total** - equivalent to 2.7 times the annual capacity of the LG Energy Solution plant. **Expected EU supply would exceed demand under the Parliament's proposal by 572 GWh** over the same period (a surplus that the Commission's proposal would also fail to secure). Every planned project rated medium or high risk ("expected" and "potential" supply), alongside 151 GWh of low-risk production ("risk-adjusted") would likely be shelved.

Weaker CO_2 standards risk stranding 247 GWh of cell production

EU cell demand over 2027 to 2032, under the Parliament deal and a strict IAA Made-in EU scope compared to the Commission proposal



Source: Demand from T&E's IAA impact assessment model (based on GlobalData forecasts), supply from T&E Gigafactory ramp-up model, and T&E analysis based on Benchmark Minerals Intelligence Cathode Cost Model and Cathode Supply forecasts databases

Recommendations

01 **Maintain the Commission's core timeline and cell/cathode criteria: enforce cell requirements by 2027/28 and CAM by 2030.** Retain Article 13 in full to guarantee a strict EU scope for corporate fleets, securing offtake for ~60% of the EV market.

02 **Include trusted partners only where justified:** set EU27 + European Economic Area (EEA) and the UK as the default baseline. The UK should be included given its integration into the EU battery value chain via the Trade and Cooperation Agreement (TCA) and the scale of investments already committed. If trusted partners are included, strict selection criteria are needed to alleviate circumvention and offshoring (e.g. **exclude projects in third countries operated by a country holding more than 40% of global manufacturing capacity**).

03 **Add minimum thresholds for midstream:** at least 20% for pCAM and 10% for Anode Active Material (AAM) for 2032 to build domestic midstream capacity to diversify from China. Include a 20% threshold for lithium, nickel, cobalt and graphite.

04 **Reject the Franco-German deal proposal on batteries:** suggested battery criteria are too weak to create additional demand and undermine the IAA's core purpose.

05 **Make batteries in small BEVs mandatory Made-in-EU from 2029/2030 onwards**, as Europe's LFP capacity will be fully sufficient to cover this segment.

06 **Reject weakened fleet booster proposal**: anything below a 85% fleet-wide compliance trigger removes the incentives to onshore production in Europe and ends up subsidising imported vehicles.

Methodology

1. EU vehicle market and cell, CAM and pCAM demand

T&E's impact assessment of the IAA modelled the EU registrations market over the period 2027-2035. It is built on GlobalData production (August 2026) and sales (Q3 2026) forecasts. Sales and electrified share are then scaled based on T&E calculations of the CO_2 standards revisions proposed by the European Commission in December 2025, and by the European Parliament's position as approved in leading Committees in November 2026.

- To meet the targets of the Commission's car CO_2 proposal, BEV sales are expected to reach 25% in 2027, 47% in 2030 and 85% in 2035. Under the Parliament's (ENVI) position, BEV sales are expected to reach 25% in 2027, 38% in 2030 and 69% in 2035 (Section 6).

2. Eligible vehicles and sourcing rules

Eligibility: not all EVs on the EU market are subsidised, hence EU cell production only needs to cover those that are. Using the Joint Research Centre assumption that 84% of all EVs sold in the EU are under a subsidy scheme, we considered that 55% of EVs are EU-assembled EVs benefiting from financial support in 2027, rising to 58% in 2030 as the share of EU-assembled EVs grows from 64% to 69% over the same period.

Application of the rules: unless stated otherwise (pCAM in Section 3, fleet booster in Section 5), sourcing requirements apply per OEMs and to its eligible vehicles, not as a fleet-wide requirement.

3. EU supply of cells, CAM and pCAM

Cell production capacity is estimated from T&E's Gigafactory database and analysis. All risk categories are counted without weighting.

- Production is *nameplate capacity × utilisation rate × (1 − scrap rate)*. Both rates follow ramp-up curves restarting for each new production phase and depend on whether the manufacturer is experienced. Utilisation reaches 85% within three to four years.
- Scrap assumptions: taken from the IEA, reflecting best-in class manufacturers for each region - Europe and China. Scrap falls to 5-10%. On sites expanding with new phases, with the same chemistry, the scrap learning is kept.

CAM and pCAM data come from Benchmark Mineral Intelligence's Cathode Capacity, Supply, Demand and Price Forecast (September 2026). T&E applied its own ramp-up to Benchmark's nameplate capacity: utilisation starts at 50% and reaches 85% from the third year - same steady state as in the cell model.

- Capacity is converted to GWh of cell equivalent using Benchmark's CAM energy density by chemistry and year. For pCAM, tonnages are first converted to CAM tonnes, accounting for their chemical reaction and a 2% conversion loss. Cathode material is also lost in scrapped cells, so CAM and pCAM supply is compared with cell demand net of cell scrap. Supply is reduced by that year's average EU cell scrap rate (7.7% in 2030).
- Risk-adjusted supply is the expected supply weighted by Benchmark's confidence factor - depending on each plant's status.

- Three supply levels are defined. For cells, all levels use the same production assumptions and differ only by project risk: risk-adjusted covers low-risk projects, expected adds medium-risk projects and potential adds high-risk projects. For CAM and pCAM, potential is nameplate capacity, which plants never reach; expected applied ramp-up and utilisation; and risk-adjusted also applies Benchmark's confidence factor.

4. Franco-German deal (section 1)

For eligible electric vehicles, each carmaker would have to source 10% of its batteries with EU-made cells in 2028-2029, rising to 20% in 2030-2031 and 70% in 2032. The quotas are applied at the level of each OEM and only to its eligible EVs. T&E distinguished the EU cell demand expected without the IAA, based on OEMs' expected cell sourcing (GlobalData forecasts), from the additional cell demand under different IAA targets: here a strict EU scope is compared to the Franco-German requirement.

5. Impact of the FTA geographical scope on cell and CAM demand (section 2)

Demand to relocate: we identified where the non-EU share of demand is currently produced, since this is what would have to relocate (only subsidy-covered, EU-assembled vehicles). Demand already made-in an FTA country is assumed not to move and counted as compliant.

- Cells: GlobalData reports the production region of each model's cells. It has no separate region for non-EU European countries (UK, EFTA, Turkey, Serbia), so their output falls under "Europe" and is counted as EU. This understates mainly UK-made cells built into EU-assembled vehicles. Morocco and Vietnam do not appear as production regions, and North American production is assumed to be split 50/50 between Canada and the US.
- CAM:The non-EU share of CAM is allocated across countries in proportion to their 2030 non-EU CAM production (Benchmark), on the assumption that each country's exports to Europe follow its production.

Allocation and costs: relocated demand follows a cost-merit order. It is first assigned to the lowest-cost compliant country, up to the share of its supply available for Europe. It continues to the next lowest-cost country and so on until cheaper compliant supply is exhausted. For both cells and CAM, the cost order reflects production costs only and excludes transport, customs duties, margins and subsidies.

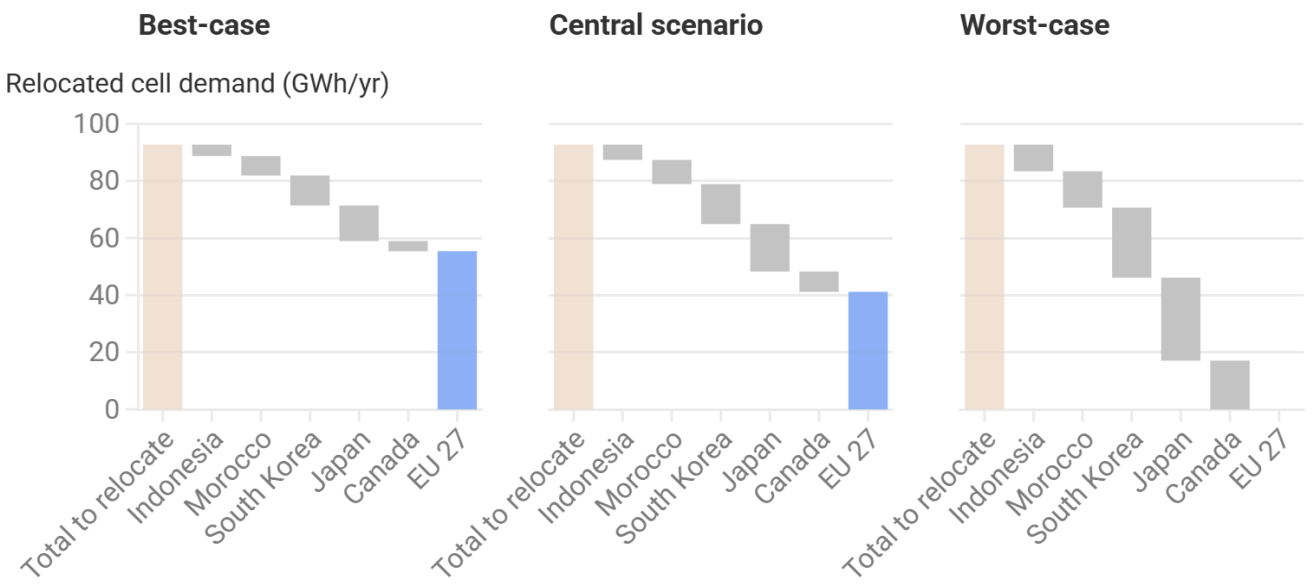
- Cells: costs come from BattMan 3.2.0 for NMC811 cells. Countries not covered (Switzerland, Norway, Serbia, Turkey, Indonesia, Vietnam) are estimated from a comparable BattMan country, labour and electricity inputs are adjusted using Eurostat, GlobalPetrolPrices and Benchmark data. EU is the average of EU countries covered by BattMan. Non-EU supply comes from Benchmark Gigafactory Database (February 2026).
- CAM: costs derived from the Benchmark Cathode Active Material Cost Calculator (Q2 2026), which works at regional level. Country-level costs are a T&E estimate based on electricity tariffs and wages (Eurostat, GlobalPetrolPrices). The EU is a simple EU27 average. Supply comes from the Benchmark Cathode Forecast (September 2026).

Export shares and sensitivity: Each FTA country is assumed to supply Europe only up to a fixed share of its production: **20% for Asia** (South Korea, Japan, Indonesia, Vietnam), **50% for Morocco** and **10% for Canada**. These shares are simplifying assumptions reflecting the order of magnitude of current trade links with Europe. They are likely conservative, particularly for Morocco - given its proximity to Europe and the export orientation of its battery projects, a larger share of Moroccan supply could reach the EU than assumed here.

Because they drive the results, we tested alternative scenarios for cells under the extended FTA scope: a worst case, where partners send more to Europe (35% / 75% / 20%), and a best case, where they send less (15% / 40% / 5%). The central scenario is used as the reference throughout this report, but it rests on simplified assumptions and actual export flows could move in either direction as the market develops.

The more FTA partners export to Europe, the less relocated cell demand reaches the EU

Relocated cell demand by destination under the **extended FTA scope** , 2030, by export-share scenario



Source: T&E analysis based on BloombergNEF (BattMan battery cost model) and Benchmark Mineral Intelligence Gigafactory Database. Share of each country's cell capacity assumed available for export to Europe (Asia / Morocco / Canada): best case 15% / 40% / 5%; central scenario 20% / 50% / 10%; worst case 35% / 75% / 20%. These are illustrative parameters, not trade-flow forecasts.

6. CAM and pCAM (section 3)

T&E's proposal estimated the EU CAM demand of vehicles assembled in the EU and eligible for financial support. For 2032, we then calculated the minimum fleet-wide EU pCAM threshold such that all expected EU pCAM supply is secured.

7. EU cell and cathode costs in 2030 (section 4)

Cell costs are modelled with BloombergNEF's Bottom-Up Battery Cost Model (BattMan 3.2.0). The European cost covers every NMC and LFP plant phase expected to produce in the EU27 in 2030, based on announced capacity in the T&E Gigafactory database. Each phase is costed at its own location, with the utilisation rate, scrap rate and workforce it reaches on its ramp-up path in 2030. The EU27 average figure is the average across phases, weighted by their 2030 production. The Chinese benchmark is BattMan at the China location for a mature plant, at the end of its ramp-up.

BattMan prices cathode active material (CAM) at a single global price, wherever the cell is made. To cost a cell made in the EU with pCAM and CAM also made in the EU, we added a European CAM premium from Benchmark Mineral Intelligence's Cathode Cost Model (Q3 2026). The EU-China gap compares production costs of fully localised value chains. It excludes transport, customs duties, producer margins and public subsidies on either side.

8. Fleet booster (section 5)

To assess compliance at OEM level, we estimated the maximum compliance a carmaker can reach without moving assembly of its passenger cars, since carmakers cannot tell in advance which vehicles will be subsidised. This differs from the other sections, which evaluate cell demand under the IAA and therefore count only EU-assembled subsidised vehicles. We assumed that carmakers relocate all models assembled in the EU, bringing each failed content criterion up to its threshold. Imported vehicles are conservatively assumed not to relocate. This is rather conservative: as observed in past years and in recent announcements following the tariffs, some carmakers do move assembly of some of their models to the EU.

The compliance of each electric vehicle model is determined following the IAA criteria on EU sourcing of non-battery and battery components:

- Non-battery components (chassis, body, interior, electronics): fixed EU value share from CLEPA (2025).
- Battery, e-powertrain, cell origin: GlobalData production data (August 2026).
- Other battery components: we estimated the share of EU-made cells that can be supplied with an EU-made version. For simplification, we assumed that all EU CAM goes into EU cells, using the ratio of EU CAM and pCAM production to EU cell production and holding it constant to 2030. This assumption is kept fixed so that, in this scenario, the degree of material localisation neither improves nor worsens, with EU cathode and precursor growing at the same pace as EU cell output.

We tested different thresholds against their effect on sales of made-in-EU EVs. 85% is the lowest tested (70%, 75%, 80%) compliance rate where the fleet booster increases made-in-EU EV sales in 2030 and thus where relocation is large enough to outweigh the unlocked imports via the subsidy.

9. Car CO_2 standards (section 6)

Projected EU sales are scaled based on the expected battery electric (BEV) and plug-in hybrid (PHEV) share of total sales. The BEV and PHEV distribution varies across different levels of ambition for the revision of the CO_2 standards.

Data acquired

We have acquired global vehicle sales and production forecasts supplied by GlobalData; Copyright © Global Hybrid and EV sales Forecast (Q3 2026) and Global Light Vehicle Powertrain Forecast (August 2026). All rights reserved; GlobalData is an independent provider of industry information. The sales forecast is based on GlobalData's model of the macro-environment, including economic and competitive developments. GlobalData uses industry contacts, press and media coverage, direct automotive manufacturer and supplier contacts, investment analysts, and other Globaldata assets. Permission to use GlobalData copyrighted reports, data and information does not imply endorsement by GlobalData of the manner, format, context, content, conclusion, opinion or viewpoint in which GlobalData reports, data and information or their derivatives are used or referenced herein.

Benchmark Mineral Intelligence: Gigafactory Database (February 2026), Cathode Active Material Cost Calculator (Q2 2026), Cathode Supply Forecast (September 2026).

BloombergNEF: Battman 3.2.0 model.

Annex - Share of Made-in-China batteries in EU-assembled vehicles

OEM	2027	2030
Volkswagen	2%	1%
Stellantis	40%	73%
BMW	36%	19%
Renault	9%	6%
Mercedes	14%	16%
Tesla	77%	66%
BYD	100%	100%
Leapmotor	63%	61%

Source: T&E analysis of GlobalData forecasts