POSITION PAPER

Boosting Made-in-EU EVs and batteries with the Industrial Accelerator Act (IAA)

The IAA represents a shift in EU industrial policy, embedding Union preference and binding FDI conditions in law for the first time. The proposal is a solid start but many loopholes must be closed to effectively scale a European battery value chain.

Executive Summary

T&E supports strong Made-in-EU policies to build Europe's economic resilience, safeguard jobs and advance its climate and security objectives. The EU should ensure a significant and increasing share of the electric vehicle (EV) technology stack - batteries and their key components, electronics, e-motors, chips and software - is produced in Europe, including by non-European firms that onshore supply chains and enter genuine value-creating partnerships.

The IAA represents a shift in EU industrial policy, embedding Union preference and Foreign Direct Investment (FDI) conditions into law, while setting a framework for low-carbon industrial scaling. T&E welcomes the proposal but urges decision-makers to close loopholes to effectively scale a European battery value chain.

Key recommendations

1. **Consolidate robust Union origin incentives:** To create a solid business case, the IAA should have consistent rules across all vehicle categories. It should mandate that only EVs made with local batteries and components (Made-in-EU, not free trade partners - FTA) can benefit from purchase subsidies and tax incentives for corporate vehicles,

including small EVs. Several loopholes risk making the IAA an optional framework. It is key to remove cost and component availability exemptions and not allow EVs with Chinese batteries to qualify as Made-in-EU.

2. **Focus solely on strategic components:** Given the herculean task - industrially and politically - to secure Made-in-EU provisions, laser sharp focus on what is strategic from a supply chain weaponisation and resilience perspective is key. The IAA should prioritise key battery and EV components (the electric tech stack) instead of covering non-strategic parts (e.g. seats, bumpers).

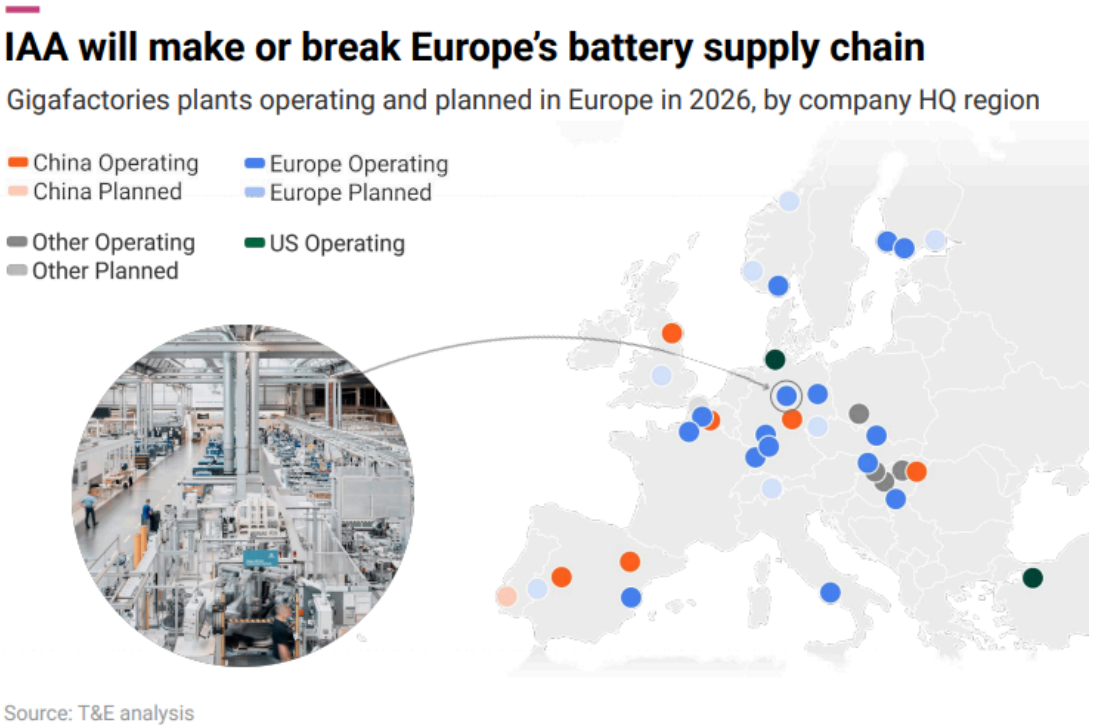
3. **Boost the battery value chain:** At least some local capacity must exist across the entire battery value chain. Notably, precursor cathode active material (pCAM) must be included to both ensure a robust battery component manufacturing and a competitive recycling industry. Incentives for pCAM, as well as anode active material (AAM), critical raw materials (CRMs) and recycled content should be added as third step from 2032.

4. **Foreign direct investments (FDI) provisions must cover all key investments in the automotive and battery value chain:** It is key to preserve FDI provisions and ensure foreign investors use local supply chains. Crucially, FDI conditions must apply to cumulative investments from the past 36 months to cover major investments announced but not yet built.

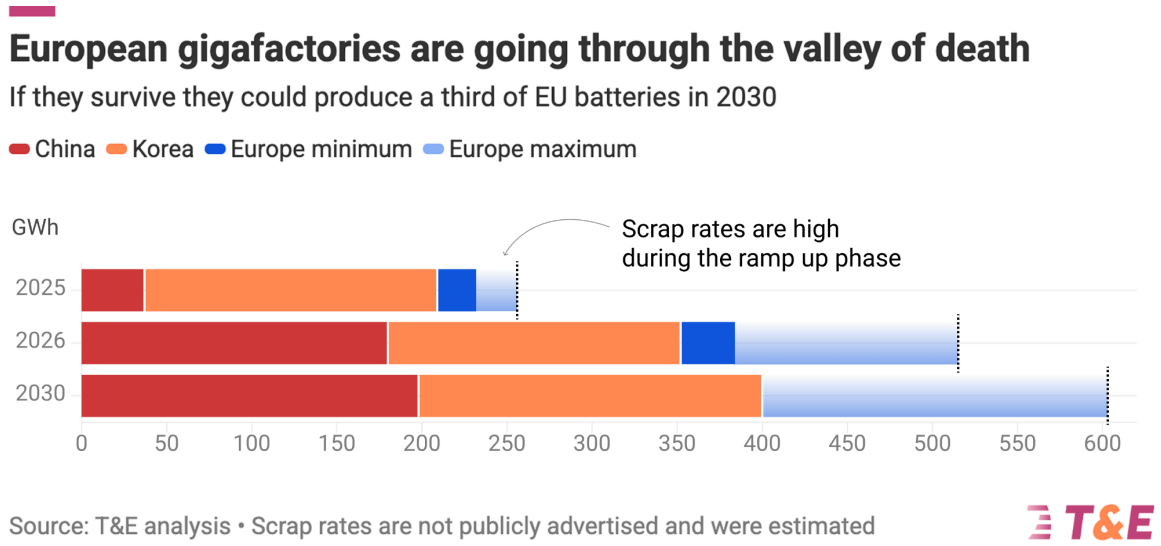
5. **Create lead markets for low carbon steel and aluminium:** The low carbon steel and aluminium requirements should be extended to all vehicle types (not only EVs). The IAA should mandate both low carbon steel and aluminium to be Made-in-Europe.

1. Why the IAA is key

The Industrial Accelerator Act (IAA) is a milestone towards a more robust EU green industrial strategy. Europe needs a forceful industrial policy to achieve its economic, security and climate goals. The IAA must ensure that a significant share of the critical electric technology stack (batteries, electronics, e-motors and critical minerals) will be produced in Europe.



Europe has many strengths. It has a large market for cleantech and there are dozens of companies planning to produce battery components and minerals locally. Still, many struggle to survive in the ramp-up phase or fail to secure offtake from carmakers because Chinese sourcing remains cheaper.



T&E welcomes the proposal to introduce Union content incentives as a lever for public support schemes. For the first time EU preference is enshrined into an EU regulation, covering batteries.

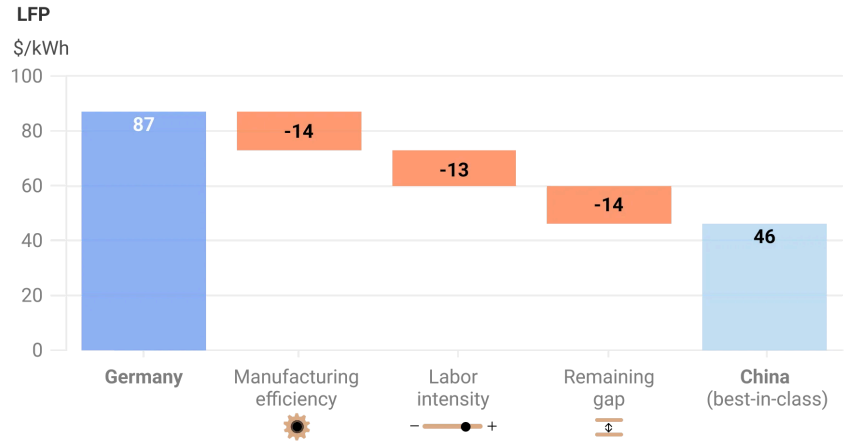
Introducing a European preference is not protectionist but delivers on resilience and reciprocity. Local content criteria are tools commonly used around the globe by various trading partners, e.g. the US or India. Setting these incentives in the EU doesn't mean creating a precondition for accessing the European market. It rather ensures that scarce public resources support local industry and attract capital. Non-European firms can equally play an important role, provided they onshore their supply chains and enter into beneficial partnerships in Europe.

The resilience premium

Introducing local content incentives to support Europe's clean tech industry should not merely be considered from an economic angle, but even more so from a resilience standpoint. EU dependencies on rare earths have already been weaponised, batteries and battery materials could be next. Concrete support for local industry should therefore be prioritised and additional costs should be considered a sovereignty premium worth paying.

T&E estimates additional cost for an electric vehicle - the sovereignty premium - to be around €500 in 2030, ranging from €300 to €750 depending on the carmaker. Importantly, the impact on the final price is likely less due to public incentives. Crucially, these costs will shrink even further over time.

Efficiency and automation can reduce the cell production cost gap between Europe and China in 2030



Source: T&E calculations based on BNEF's BattMan model and IEA. Manufacturing efficiency refers to scraps and (un)planned production line downtime; Labour intensity relates to level of automation and worker know-how

T&E analysis shows that while European battery cells are on average 17% more expensive than those produced in the US and 90% more expensive than in China, this gap largely reflects limited economies of scale rather than structural disadvantage. With more rapid scale-up thanks to Union content incentives, the temporary cost differential can be expected to narrow significantly thanks to improved manufacturing efficiency, labour proficiency and automation.

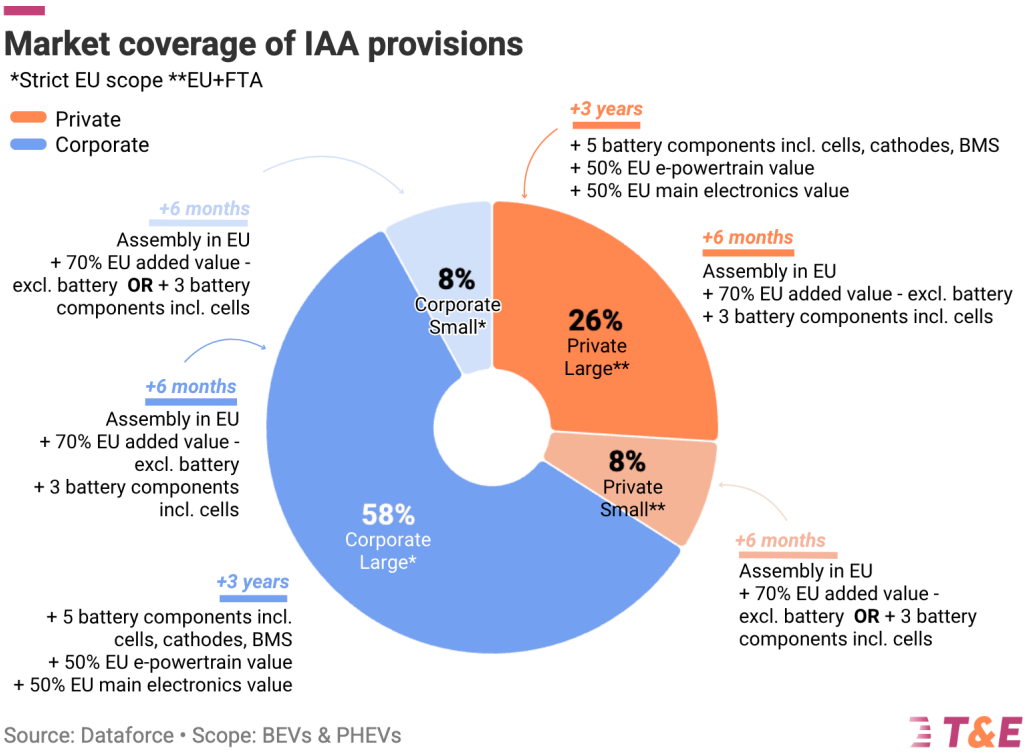
As a next step, co-legislators need to tighten loopholes in the proposed framework to truly support the build-up of resilient clean tech value chains in Europe.

2. The design of Union origin incentives

The Commission's IAA proposal delivers a solid starting point to use Union content incentives for public subsidy schemes and procurement. To provide the right support for EU industry, the IAA needs to establish a firm definition of what constitutes a Made-in-EU product.

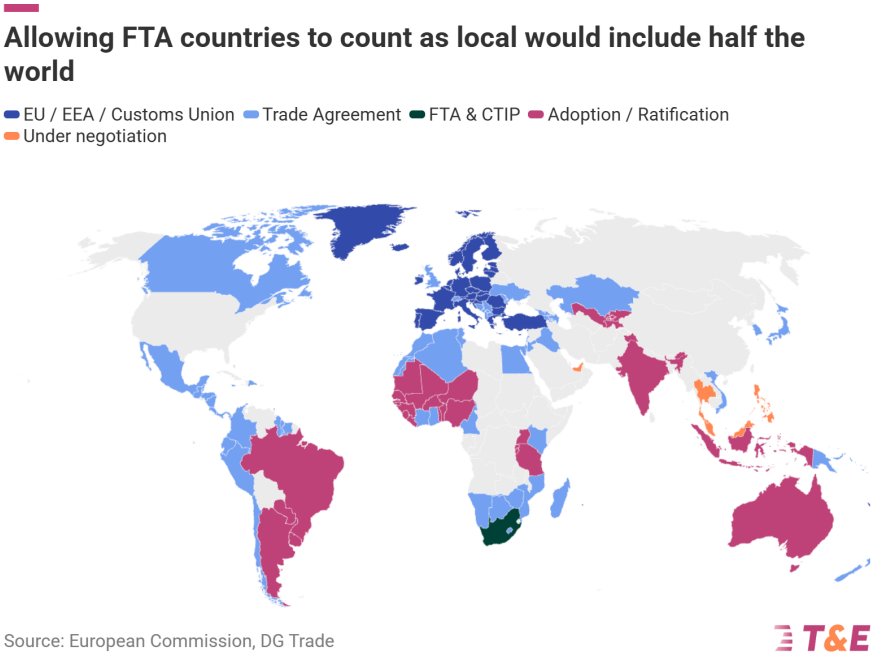
2.1 Clear Made-in-EU scope is key to success

T&E particularly welcomes the Union content definition for corporate EVs (Article 13) which strictly follows the Made-in-Europe approach as laid out in Article 7 (production within EU only). This is key to preserve as corporate vehicles currently represent over 65% of EV sales, providing a large offtake for European battery and component manufacturers.



However, this strict Made-in-EU definition for corporate vehicles is an exception.

For public procurement and public subsidies, the proposal adopts a much broader definition of Union origin and includes FTA partners ("Made-with-EU"). This risks making the IAA partly futile, as allowing FTA partners to count as local would roughly include half the world. EVs purchased by private consumers would qualify for public subsidies if the EV and battery are made within EU or FTA partners. This would concern a significant share of the current EU EV market, accounting to one quarter of total sales excluding small BEVs.

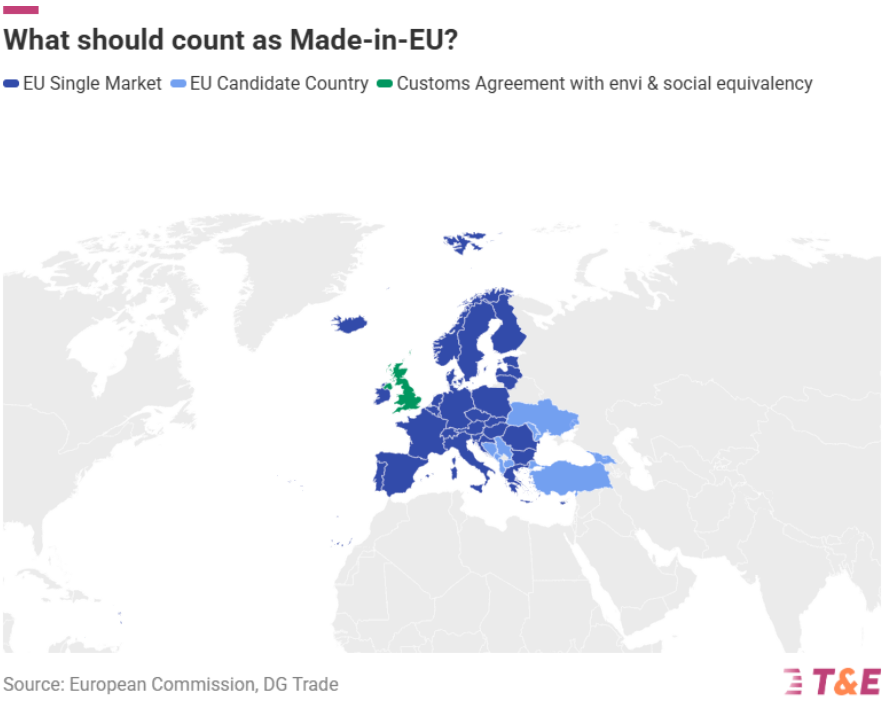


A number of options to tighten the scope can be considered:

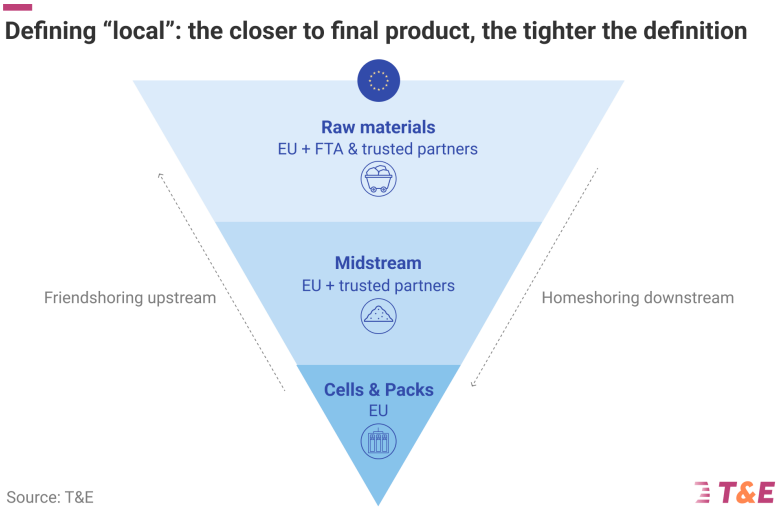
- Revert to the previous IAA drafts by giving the Commission powers to designate trusted partners on a case by case basis (the "EU+ scenario"). This offers significant political leverage to the EU and is likely to result in better market access conditions for European companies.

- The Made-in-EU scope could include the EU Single Market (EU27 and Norway, Liechtenstein, Switzerland and Iceland), the EU candidate countries[1] and the United Kingdom. This option would mean a wider scope, but only including countries where comparable social and environmental conditions can be monitored. EU candidate countries are working towards the EU acquis which gives the EU direct say over social and environmental conditions. Similarly, the UK-EU customs agreement (TCA) is the only one with environmental and social equivalency, also reflecting EU standards. This definition should apply as a default to all categories, e.g. corporate vehicles, small BEVs but also private EVs.

[1] Albania, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Türkiye, Ukraine



- Apply a “pyramid” approach to the Made-in-EU provisions, with tighter EEA (+ the UK) only scope for downstream components such as battery cells and cathodes, extending broader to FTA and Strategic Partnership countries for upstream materials such as precursors and critical minerals.



Finally, in the proposal, eligibility requirements for public support (in terms of components and Union origin) vary by vehicle type. This risks fostering fragmentation of European markets and making the framework unpredictable for investors, companies and citizens alike.

There should not be four but only one single set of battery content criteria applied to all use cases – be it stationary batteries, EV batteries or maritime applications – and supported via either public procurement, vehicle subsidies or supercredits for car Co2 standards. This is key to the EU's own simplification agenda and to avoid distortions in the supply chain based on what the final product will be used for.

Similarly, plug-in hybrid electric vehicles (PHEVs) should be excluded from the eligibility methodology, as they are not future-proof options for European drivers and the European automotive industry (see latest T&E study).

T&E recommendations:

- Keep strict Made-in-EU incentives for corporate vehicles.
- Pivot away from the Made with Europe approach with a strict Made-in-EU definition for public procurement and public schemes. Made-in-EU should include the EU Single Market (EU27 and Norway, Liechtenstein, Switzerland and Iceland), the EU candidate countries[2] and the UK. Alternatively, the IAA could use a EU+ approach, meaning EU single market and trusted partners added on a case by case basis.
- Made-in-EU requirements and component criteria should apply equally to any type of vehicles, and any type of public support e.g. subsidies, purchase support or tax rebates, including existing ones. This ensures more coherence and harmonisation across Member States.

2.2 No loopholes

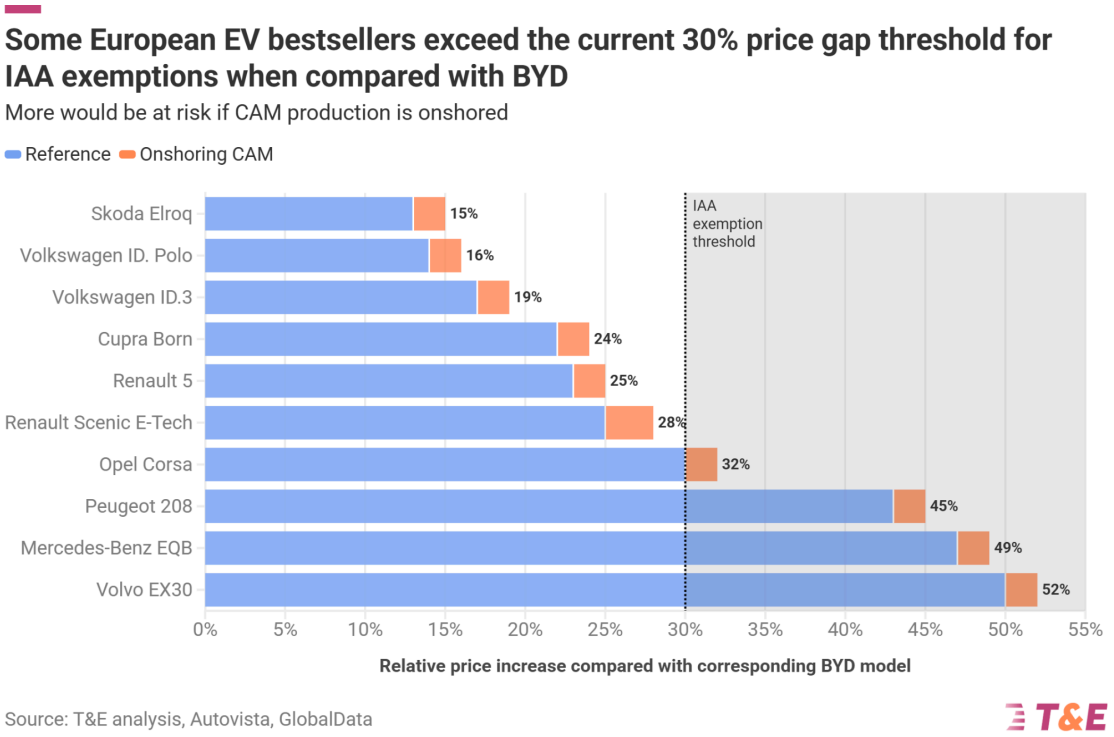
To fully capture its potential, the IAA needs to urgently close two central loopholes on cost and availability exemptions as well as Made-in-EU requirements for batteries in small BEVs.

2.2.1 Cost and availability exemptions

The IAA allows opt-outs if cost differences exceed 30% or components are unavailable. This risks making it too easy for national authorities to discard the content criteria for EV tax incentives.

[2] Albania, Bosnia and Herzegovina, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Türkiye, Ukraine

While not all but only some European EV bestsellers would exceed the 30% cost difference, prices come closer to the exemption threshold if costs of onshored cathode active materials (CAM) are included in the calculation.



2.2.2 Small BEVs

With regard to small BEVs, T&E is especially concerned about the missed opportunity to make Made-in-EU batteries mandatory. The current draft requires either to have 70% of the value of the car's components (excluding the battery) from the EU **OR** a Made-in-EU battery. These two conditions should not be considered as separate options, but rather as cumulative, with both conditions having to be fulfilled in order to qualify for super credits.

The expansion of the "supercredit" methodology to all small BEVs, regardless of where their battery is produced, risks allowing small EVs assembled in Europe with a Chinese battery to qualify as meeting Union criteria. This would completely undermine the business case for EU LFP factories, key to compete with China in the affordable EV segment. Looking at Europe's small EV bestsellers, many do not have a Made-in-EU battery currently.

Small EV bestsellers are not all Made-in-EU

European small EV bestsellers	Assembled in Europe	Battery made in Europe
Smart forfour	✓	✗
Renault Twingo	✓	✓
Seat Mii	✓	✓
Skoda Citigo	✓	✓
Volkswagen Up!	✓	✓
Smart fortwo	✓	✗
Alfa Romeo Junior	✓	✗
Fiat 600	✓	✗
Fiat Grande Panda	✓	✗
Alpine A290	✓	✓
Renault 4	✓	✓
Renault 5	✓	✓
Opel Mokka	✓	✓
Opel Corsa	✓	✓
MINI Aceman J05	✓	✗
Lancia Y/Ypsilon	✓	✗
Peugeot 206/207/208	✓	✓

Source: GlobalData

Combining the 70% component value provision with the Made-in-EU battery is crucial to give more investment certainty to LFP investments in Europe. Alternatively, this exclusive requirement (either/or) could switch into a cumulative requirement three years after entry into force of the IAA (mirroring additional battery component requirements).

T&E recommendations:

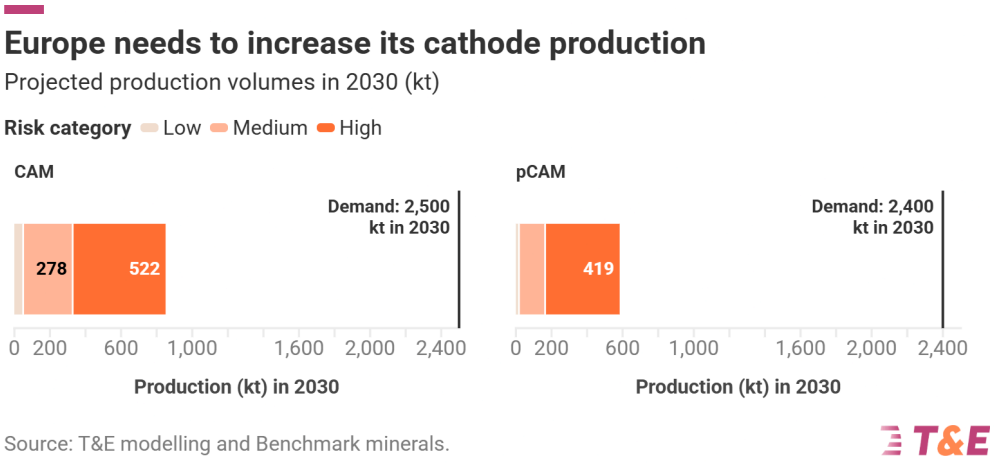
- Cost difference waivers should be further calibrated to reflect the actual market dynamics, and be placed on the final product instead of the key components, for simplification and robustness.
- The 30% cost waiver for public support schemes and the provision on component "unavailability" should be deleted to ensure existing European components are purchased. While legitimate for auctions and public procurement, such provisions are not relevant for public support schemes since national governments have full discretion on terms and conditions of their support and which products they back.

- For the small BEV methodology, combine the 70% component value provision with the Made-in-EU battery incentive (70% car components value from the EU **AND** a Made-in-EU battery).

2.3 Cover the entire supply chain

T&E welcomes the IAA's component based approach to define eligibility for public procurement and support schemes. This provides a solid start to build out Europe's wider battery value chain. As many of Europe's battery gigafactories are currently going through the so-called 'valley of death', it is crucial to ensure offtake for key components produced in Europe.

The IAA needs to keep progressive eligibility incentives for batteries to contain ≥3 main components (including cells) from the EU by 2027, extending to ≥5 components (cells, cathode active material - CAM, battery management systems - BMS) by 2030. The focus on CAM is particularly crucial as this is the most valuable part of the battery.



3 components by 2027 and 5 by 2030 are a bare minimum, as other battery components (e.g. separators, electrolytes, current collectors) can be scaled in Europe.

While progressivity and aligning with ramp up trajectories of industrial capacity in Europe is key, further parts of the up- and midstream value chain cannot be omitted. T&E recommends that on top of the additional component criteria entering into force after two years, the IAA includes a third step after five years (e.g. from 2032), adding additional component criteria of the battery mid- and upstream part. **This should most importantly include precursors (pCAM)**, as well as

anode active materials (AAM) and critical raw materials (CRMs), originating from Europe+ countries.

Precursor active material is a major omission on the Commission's component list as without it there will likely be no recycling or cathode industry in Europe. pCAM provides offtake for European recyclers which are currently struggling to secure offtakers as Chinese pCAM remains cheaper. Without European demand for local pCAM, local battery recycling capacity won't be able to scale. Without precursors in Europe - identified as one of the major weaknesses in the western battery supply chain by the International Energy Agency - even if local materials are refined in the EU, they will be shipped to China and come back as an electric car.

Similarly, the component criteria should include materials from EU end-of-life batteries, production scrap from EU-based cell manufacturing facilities and battery materials from EU-based recycling facilities to qualify as local content. The IAA should add CRMs sourced from Europe or partner countries (EU+ or EU + FTA countries) to the component criteria, ensuring that CRMs from Europe and partner countries can better secure their offtake. This should include lithium, nickel, cobalt and natural graphite. As full supply chain traceability will be required for these minerals from 2027 onwards as laid out under the EU Batteries Regulation, implementation will be feasible.

Finally, while the current proposal rightfully focuses on battery components, it also requires that at least 70% of the value of the car's components (excluding the battery) must originate in the EU. De facto, this means that non-strategic components such as seatbelts and tyres also need to be produced in Europe. T&E recommends to delete or redesign this provision to avoid unnecessary higher costs for EVs.

T&E recommendations:

- At a minimum, maintain the eligibility requirement for batteries to contain ≥3 main components (incl. cells) from the EU by 2027, extending to ≥5 components (cells, cathode active material - CAM, BMS) by 2030, while expanding the number of components to ≥4 in 2027 and ≥6 in 2030. This ensures that there is an incentive to go beyond standard components like packs and modules.
- Add a third wave of incentives set five years after adoption (2032) focusing on the battery mid- and upstream part: this should above all include precursors (pCAM), as

well as anode active materials (AAM) and critical raw materials (CRMs), originating from Europe+ countries.
- Delete or redesign the 70% component value addition provision for non-strategic components.

3. Ensure FDI contributes to local value addition

The IAA introduces crucial and long-time overdue conditions to reform the EU's Foreign Direct Investments (FDI) framework. T&E welcomes the introduction of new conditions and the Commission's more active role in overseeing and engaging with investment authorities, as well as its involvement in setting conditions. A more ambitious FDI framework is crucial for strategic sectors such as batteries, EVs but also CRMs and solar PV to counter security concerns and ensure long term added value for Europe's industrial ecosystem. Europe can no longer merely serve as an assembly plant for key technologies but needs to master these.

T&E urges decision makers to keep the laid out conditions including ownership caps and a minimum 51% EU ownership, mandatory licensing agreements for intellectual property rights and know-how and mandatory EU workforce employment at all levels including operational, technical supervisory and (senior) management positions. This should include mandatory skill transfer focusing on manufacturing scale and equipment operations.

Most importantly, while the newly proposed FDI conditions aim for greater value addition in future EV, battery and mineral projects, many major investments that have already been announced but not yet built are not covered. The success of these new FDI conditions depends on whether they cover already announced projects. Key Joint Ventures between European and mostly Chinese companies are currently very far off from meeting these new FDI requirements, as demonstrated by T&E analysis.

While the proposal acknowledges the role of using the local supply chain, language remains vague and merely encourages foreign investors to demonstrate their 'endeavours' to source from the Union a minimum of 30% of its inputs. Instead, to fully support Europe's vibrant battery start-up landscape and to prevent companies from importing cheaper components from third countries like China, the IAA should foresee a 50% mandatory local sourcing requirements. This should include cathodes, anodes and processed materials (where possible), increasing over time.

Comparison of EU vs American joint ventures with Chinese companies

	VW + Gotion Partnership	Gotion + Inobat JV	Stellantis + CATL JV	Tesla + CATL (US)
Ownership structure	VW holds 26.47% in Gotion	Gotion: 80% | Inobat: 20%	Stellantis: 50% | CATL: 50%	100% owned by Tesla (incl. equipment)
IP or technology transfer provisions	"Limited"	Some	✗	✓
Local supply chain	✗	✗	✗	✗
Local workforce	Local R&D centre	Some, incl local schools	No known provisions	✓
Equal decision-making (e.g. voting rights) on battery side	✗	✗	✗	✓

Source: Carbonne4, expert interviews & T&E.

Many of these projects, such as the Stellantis-CATL battery joint venture in Spain, are currently in a critical implementation phase. To ensure these projects add local value, the IAA should apply FDI conditions to all foreign investments (greenfield and brownfield) over €100 million made in at least the 36 months prior to the entry into force of the IAA, taken cumulatively. This is key considering that many of these projects have received high sums of public support, with a total of €2 billion in state aid disbursed to Asian battery manufacturers over the past four years.

T&E recommendations:

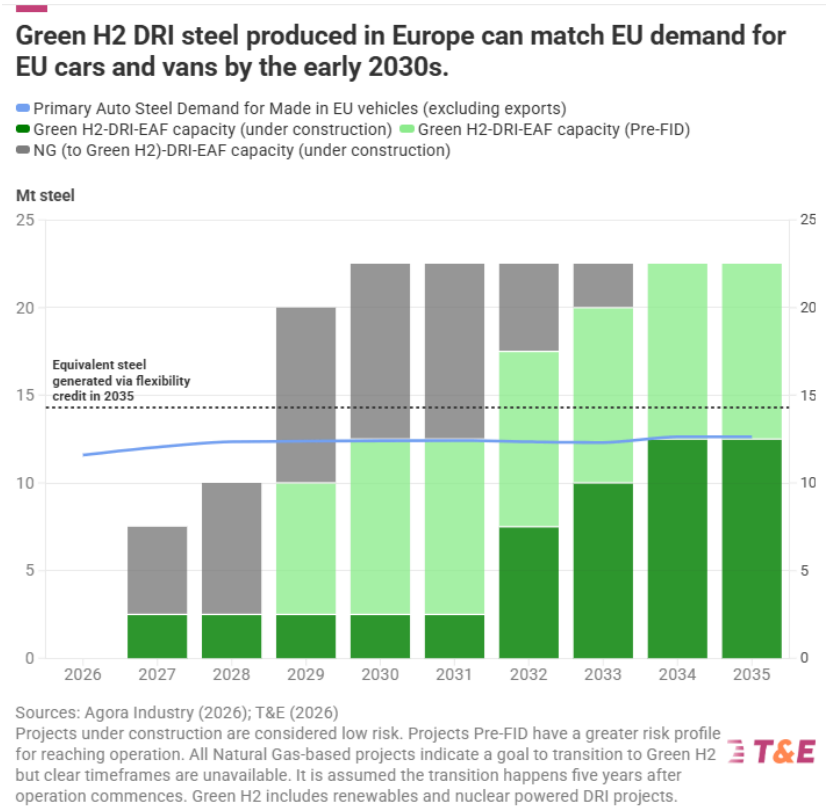
- Mandate that FDI conditions are applied to cumulative investments worth more than €100 million over the past 36 months.
- Ensure foreign investors use local supply chains in Europe, including for cathodes, anodes, processed materials where feasible, with a minimum 50% local sourcing requirement.

4. Build lead markets for Made-in-EU low-carbon materials

The IAA offers a unique opportunity to scale lead markets for low carbon materials like green steel and green aluminium. While the voluntary label for a low carbon steel definition is left to the Ecodesign for Sustainable Products Regulation (ESPR), the IAA can still play an important role to create offtake for its nascent green steel and green aluminium industry.

While T&E welcomes that public support schemes will be eligible to motor vehicles containing at least 25% steel or aluminium, this threshold should apply to all vehicle types, not only EVs. This allows to scale green steel production in Europe while preventing an unfair cost increase for only some powertrains like EVs, when all cars use steel. Further, it is crucial that both aluminum and steel eligible for these schemes are produced in Europe.

The automotive sector can serve as a prime offtaker for nascent green steel projects. Green steel produced via the hydrogen direct reduced iron route (H2 DRI) in Europe alone would be sufficient to meet auto steel demand for Made-in-EU vehicles. H2-DRI capacity will increase as operations scale and national grids transition to hydrogen, ultimately exceeding auto demand for green steel and creating capacity for other markets.



T&E recommendations:

- The 25% threshold for low carbon steel and aluminium should apply to all powertrains, not just EVs (e.g. by applying the threshold to OEM-wide volumes of their fleets).
- Ensure Made-in-EU incentives for **both** low carbon steel and aluminium.
- Go beyond 45% of national public support schemes coverage.

5. Beefing up the Net Zero Industry Act

T&E supports the reinforcement of the Net-Zero Industry Act (NZIA) through targeted amendments in the IAA, particularly those aimed at securing the future of EU-made electrolysers.

By integrating cybersecurity and high-risk supplier restrictions directly into public procurement and auction frameworks, the IAA moves beyond mere market incentives to address security risks associated with strategic dependencies. For critical sectors like hydrogen and hydrogen-based fuels production, these pre-qualification criteria are essential to ensure that Europe's decarbonization does not come at the cost of its industrial sovereignty. They will complement the sustainability and resilience criteria already designed under the NZIA.

From a security and defence perspective, electrolysers must be resilient to external pressure or "weaponisation" of supply chains. By establishing clear limitations on suppliers who do not meet stringent European security standards, the IAA can effectively shield our energy and industrial systems from geopolitical volatility.

While the current list of covered technologies provides a solid baseline, the Commission must retain the authority to include additional critical components via Delegated Acts - particularly for technologies central to Europe's maritime transition, which often have a dual-use. Fleets segments like short-sea shipping and ferries will increasingly rely on large battery systems. For marine applications, batteries are typically a smaller share of total vessel cost than in road vehicles but critical to operational resilience and safety. Union content incentives for maritime applications and their fleet renewal cycles (e.g. ferries, service vessels, port craft) can provide predictable demand for European-made battery systems. To secure this transition, a component-based approach - modeled on road transport - should be extended to marine batteries. Furthermore, public procurement incentives are essential: the high-value downstream

processes required to adapt battery systems to specific vessels offer a significant strategic opportunity for European industry to build a predictable, localized value chain.

Further information
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