

T&E reaction on ACEA's study on battery capacity meeting IAA demands September 2026

As negotiations on the Industrial Accelerator Act (IAA) advance, industry lobbying to dilute Union content incentives for battery cells and midstream components has intensified. Carmakers lobby ACEA (in a [study](#) commissioned to Mobility Global) and large-scale manufacturers Volkswagen Group, Stellantis and Renault Group have recently called on policymakers to weaken and delay criteria for battery cells and their strategic components. They claim that Europe lacks the capacity to meet local battery cell requirements because of an unbridgeable battery supply deficit. ACEA and [Bruegel](#) also mention insurmountable cost penalties linked to local content requirements.

T&E has analysed these claims and identified fundamental methodological flaws in industry's arguments - leading to an over-pessimistic conclusion on battery cell capacity in Europe and cost increases linked to onshoring the battery value chain.

- **T&E estimates battery cell production in 2027 to reach 196 GWh, using a ramp-up model and taking into account high scrap-rates.** ACEA's baseline starts with ~120 GWh in 2027 which is further reduced to 75 GWh as exported capacity is deducted.
- **ACEA's 150 GWh "battery shortage/gap" projected for 2028 is inflated and comes from restrictive accounting assumptions.** This gap does not actually represent a physical capacity shortfall, but it is rather a commercial allocation choice by OEMs. By subtracting battery cells exported in EU-assembled cars and excluding cells not currently aligned with local assembly setups, the Mobility Global study underestimates real EU manufacturing capacity. On top of this, demand for vehicles to fall under the IAA is overestimated.
- **Cost increases linked to Made-in-EU batteries, as modelled by carmakers, are overstated.** Cost increases will remain limited as cost gaps are not static but will decrease over time, as European battery production scales. As European gigafactories mature and scrap yields optimise, the cost differential between EU and Chinese cells will drop by 70% by 2030, adding just €500 to the cost of an average EV - a fraction of the €2,100 figure claimed by critics.

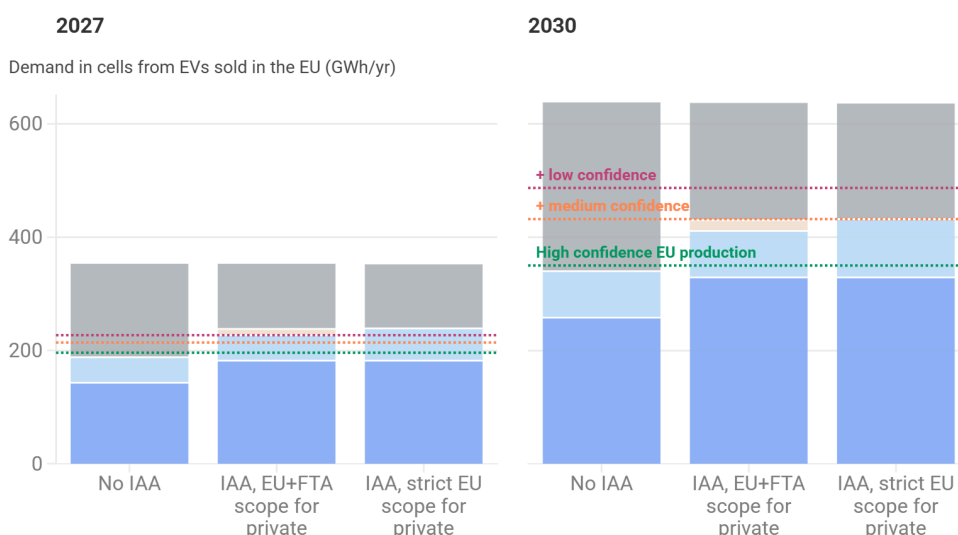
1. Debunking the battery production gap

T&E models EU cell production (low-risk projects only) at around 196 GWh in 2027. Calculations follow a gigafactory ramp-up model and include scrap rates as well as utilization rates, taking a voluntarily pessimistic/conservative approach and going beyond name plate capacity.

EU cell supply to meet IAA demand for corporate vehicles even under a low-risk production scenario for 2027 and 2030

Assuming all (and only) EU-assembled EVs under a subsidy scheme relocate their cell

■ Corporate — EU cells ■ Private — EU cells ■ Private — undetermined relocation (EU or FTA) ■ Non-EU



Source: T&E analysis • Demand from T&E's IAA impact assessment model assuming all EU-assembled BEV+PHEV (personal & commercial) under a subsidy scheme become compliant. Heavy-duty and stationary storage excluded. No-IAA scenario assumes current EU origin share of cells remains constant. All scenarios assume no further outsourcing. Supply from T&E Gigafactory ramp-up model, limited to EU scope



T&E models demand for EVs covered under public support schemes - e.g. corporate vehicles benefiting from tax rebates or subsidies and subsidised private vehicles.

T&E analysis shows that by 2027, the EU alone would have sufficient cells to power corporate EVs. A substantial share of the demand stemming from subsidised private vehicles can be met with local cell production too. Additional flexibility can be met together with trusted partners via a strict opt-in approach.

Later in 2030, both demand for corporate and private vehicles can be met with existing cell production. In 2030, if all announced EU cell projects materialise (low confidence scenario), EU production would exceed IAA-driven demand (corporate + private) by around 76 GW.

ACEA's alleged 150 GWh battery gap in 2028 stems from a methodological choice, not a physical supply deficit. By using an overly restrictive definition of "supply", and overestimated demand scenario, it creates an artificial headline "deficit". This is due to:

- **Distortion through export volumes:** ACEA's "gap" mixes up gross production with net domestic supply. The study assumes that EU27 cell production triples from 90 to 306 GWh by 2032 but the headline "deficit" only counts what's left after exports (55 to 170 GWh), since 38-44% of output is shipped abroad. The gap abstained is therefore not a physical capacity shortfall, but rather a commercial allocation choice by OEMs to export part of their production rather than reserve it for the domestic market (hence becoming IAA-eligible). The IAA is designed to redirect this supply toward the domestic market.
- **Restricted supply assumption:** The Mobility Global study limits its definition of "supply" narrowly as EU-made cells that end up in EVs assembled and sold in the EU. This amounts to a supply capacity of ~75GWh in 2027 (after subtracting exports). In essence, this does not measure what Europe is capable of producing, but rather projects how much locally produced batteries are likely to be sourced by EVs assembled in the EU (supply forecast). This largely understates Europe's actual and expected battery production. T&E projection focuses on actual EU cell capacity: in 2027, low-risk EU cell capacity is modelled at ~197 GWh.
- **Overestimated demand assumption:** T&E estimates that 59% of EU-assembled EVs will be subject to the IAA requirements¹, as the IAA rules do not apply to every EV sold in Europe. The law only governs vehicles receiving public support (e.g. tax incentives, purchase subsidies and publicly procured vehicles). On the other hand, ACEA's "full demand scenario" overstates the demand by assuming all BEV, REEV and PHEVs would be subject to the IAA - 3 million vehicles sold in 2025 which corresponds to actual total vehicle sales. Demand stemming from vehicles receiving public support is much lower however. The study claims that *"around 3 million cars may be unable to qualify for the associated incentives because of the*

¹ In line with the JRC

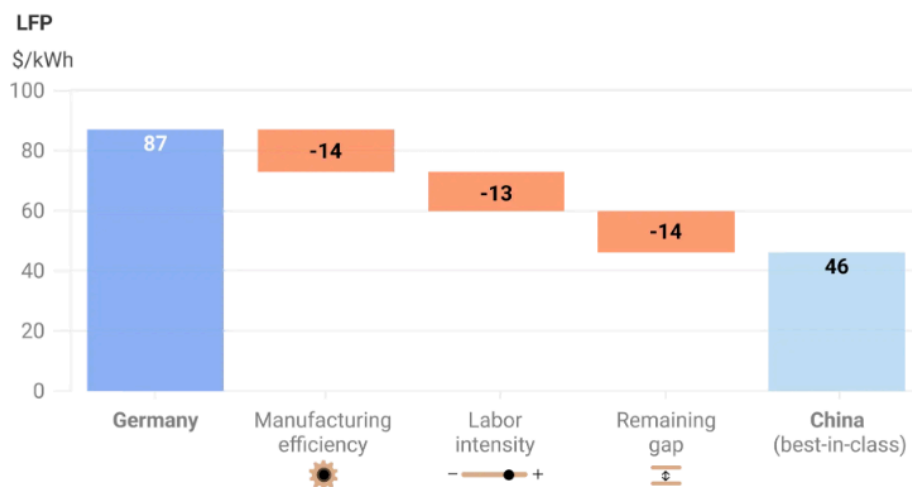
lack of supply if the IAA enters into force in 2028”, which is then translated into a 150 GWh “critical deficit”. This headline figure is skewed both by an overstated demand and a narrowed supply.

2. The price of onshored EVs won't skyrocket

ACEA cites a 24-33% cost premium for European cells over Chinese imports as a permanent barrier. But this is a snapshot of an early-stage industry navigating its scaling phase, not a structural disadvantage. The cost gap is temporary, not permanent. This ignores industrial scaling, as scaling erases the cost gap.

[T&E finds](#) that the temporary cost differential will narrow significantly: improved manufacturing efficiency (notably lower scrap rates) and labour proficiency and automation would cut the costs by almost a third. This translates into a cost gap of around \$14/kWh for both NMC and LFP chemistries by 2030 from \$41-43/kWh today (before incorporating financial aid or tariffs).

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

This would translate into a modest average additional cost for an EV of €500 in 2030, ranging from €300 to €750 depending on the carmaker. The impact on the final price may

be further offset by public support schemes and purchase incentives (as defined in the IAA).

A recent report by [Bruegel](#) has also assumed a worst case scenario where EU-origin requirements on battery cells would raise battery costs from €50/kWh to €85/kWh, adding roughly €2,100 per EV. This estimate is flawed for two reasons:

- The model assumes that Europe starts from zero local production and must abruptly replace 100% of its supply (typically imports of Chinese cells at best in class cost). In reality, in Europe a substantial share of an EV value chain is already local: more than half of the cells in EVs sold on the EU market today are already made in Europe.
- Inaccurate static price assumption: Bruegel relies on a single fixed snapshot (€50/kWh → €85/kWh, sourced solely from BloombergNEF, 2024) without further specifying, e.g. if this is permanent or for a particular year. This ignores learning curves, economies of scale and localised supply chain integration. T&E analysis, taking into account these parameters, estimates that prices will fall as the scaling effect kicks in by 2030.

Further information

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