

# Demand Report

## Automotive industry demand forecast: Q1 2026

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June 2026



ADVANCED  
PROPULSION  
CENTRE UK

Accelerating  
Progress


## This demand forecast covers

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**Markets** Global; Europe; UK

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**Vehicles** Light-duty vehicles  
Heavy-duty vehicles



**Materials** Cathode Active Material (CAM); anode material;  
battery foils; electrolyte and separator material;  
traction electric motor material

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## Demand forecast purpose

This forecast brings together data from multiple sources to provide an overview of electrified vehicle (xEV) production for light and heavy-duty vehicles with the aim of putting this into context for global, European and UK regions.

This report consists of two sections:

1. Demand updates
2. Electrified components demand

## Our process

The data in this report has been collated by the Advanced Propulsion Centre UK (APC) based on insight gathered from UK original equipment manufacturers (OEMs) as well as forecasts from S&P Global AutoTech Insight, Benchmark Mineral Intelligence, BloombergNEF (BNEF), Wood Mackenzie, Global Data and KGP Powertrain Intelligence.

## Data

Data sources have been used from April 2026 and Q1 2026 (January – March) forecasts.

## Disclaimer

These forecasts provide an estimate of electrified powertrain demand and are by no means an accurate statement of future markets and industry intentions. The data should be used in good faith and the APC UK cannot be held liable for any inaccuracies in the data, views expressed or underlying assumptions.

The APC has been producing quarterly demand reports since 2022 to track and monitor changes and predictions in the demand for automotive batteries and subsequent components.

Our team of expert analysts regularly analyse the market here in the UK, as well as in Europe and worldwide, to understand the market outlook for automotive OEMs and their supply chains, focusing on battery production, supply chain, economic climate, and geopolitical impacts.

Vehicle production forecasts are used to predict the demand for both battery and electrified components in Europe and the UK, including both battery supply chain and electric-motor demands. Additionally, a comparison is provided between demand and anticipated battery material supply in Europe.

The Advanced Propulsion Centre UK (APC) collaborates with UK government, the automotive industry, and academia to facilitate driving research and investment in zero-emission vehicle manufacturing. Established in 2013 and jointly funded by the Department for Business and Trade (DBT) and the automotive industry, the APC accelerates the technologies that support the transition to zero-emission vehicle manufacturing and towards a net-zero automotive supply chain in the UK.



Department for  
Business & Trade

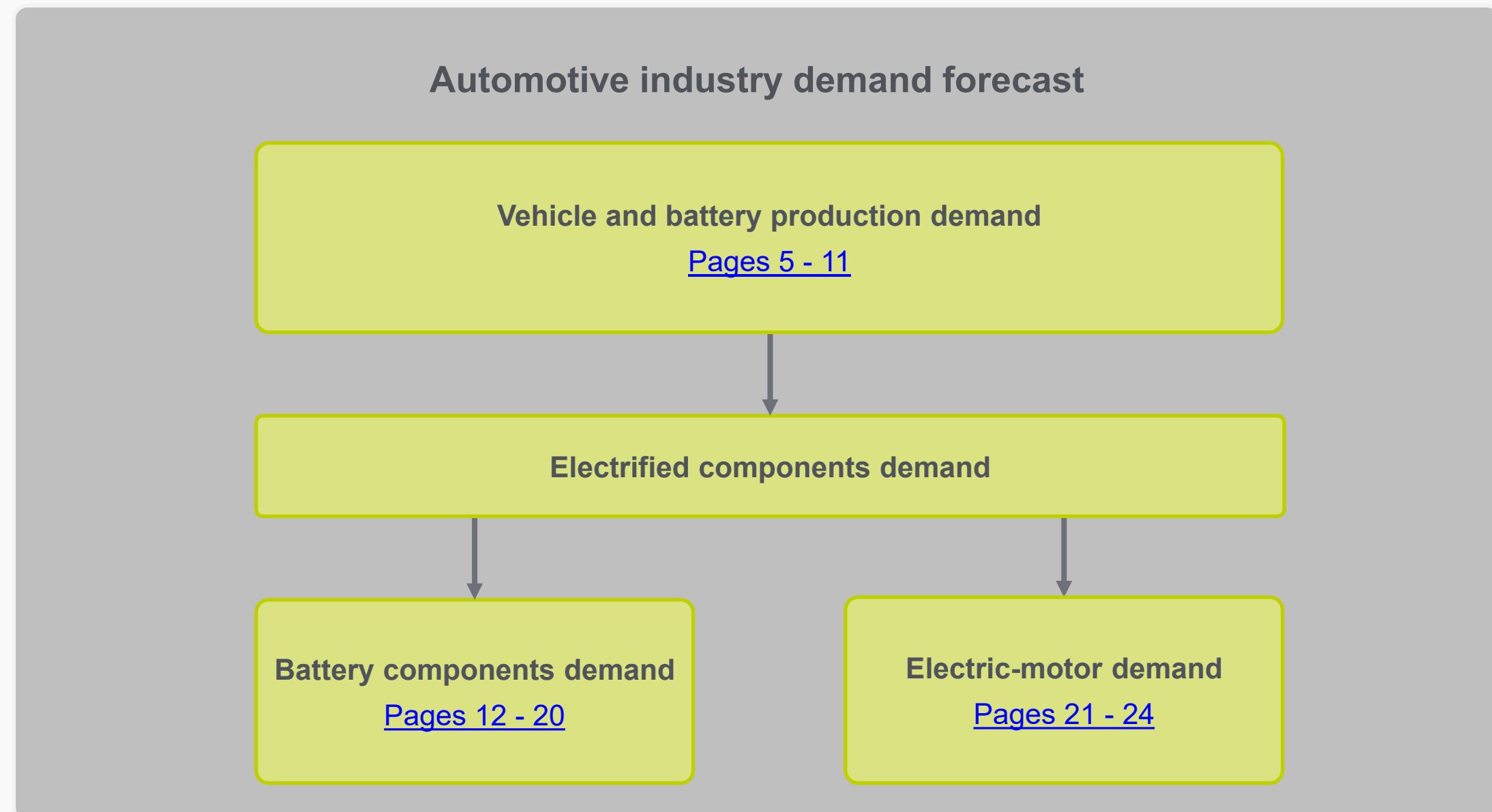
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Vehicle production forecasts serve as the basis for projecting the demand for batteries and electrified components across Europe and the UK. This includes forecasting requirements for both the battery supply chain and electric motor production.

The diagram on the right outlines the information flow used in developing these forecasts.

Please note that this analysis excludes the potential impact of the proposed Industrial Accelerator Act (IAA) and its subsequent implications for UK-based Original Equipment Manufacturers (OEMs). Furthermore, UK production outlook excludes potential third-party manufacturing MoUs, such as the use of Nissan Sunderland capacity by external OEMs.






## Q1 2026 – Demand update

The following section includes production and battery demand for light and heavy-duty vehicles



# Key facts and outlook: vehicle production

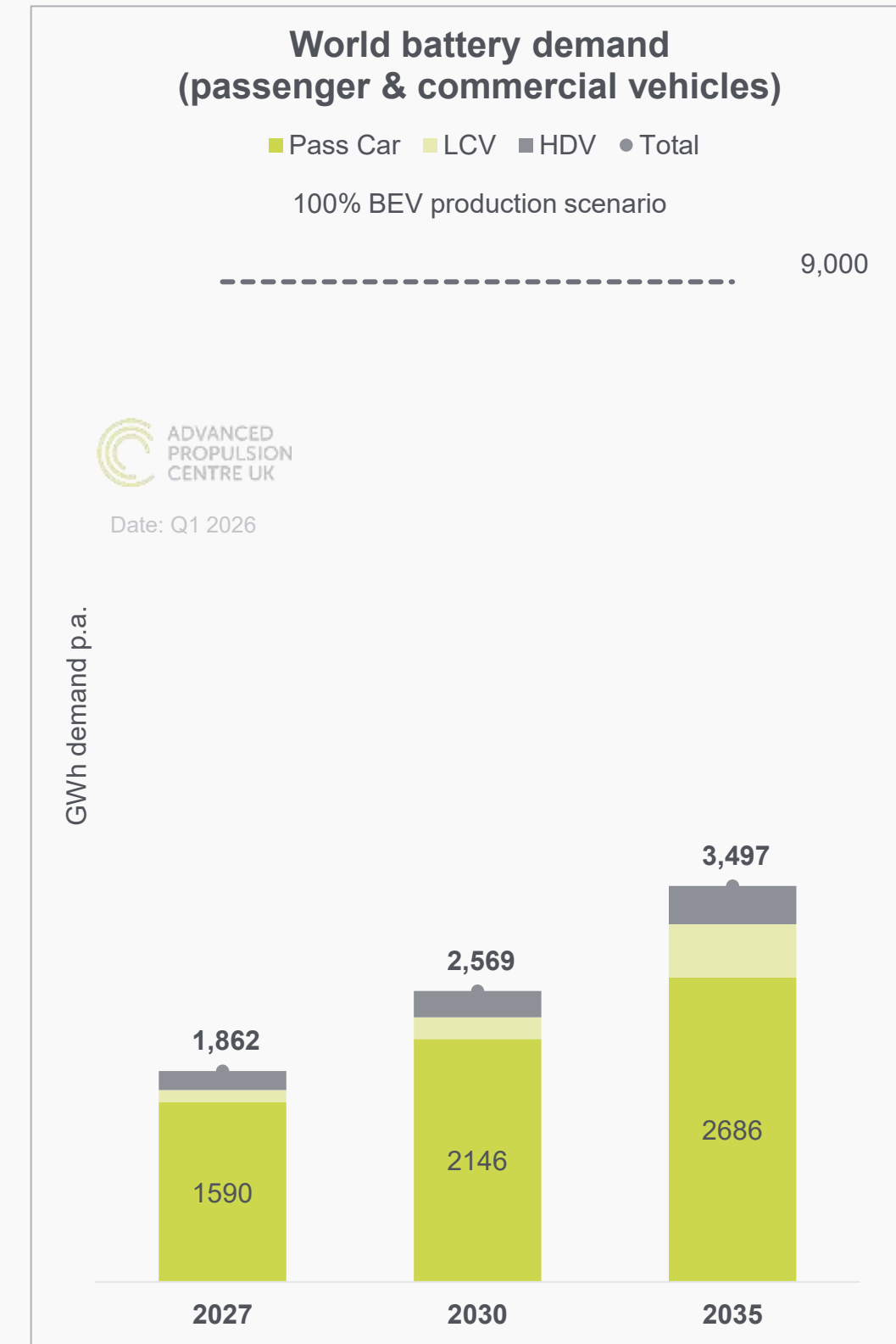
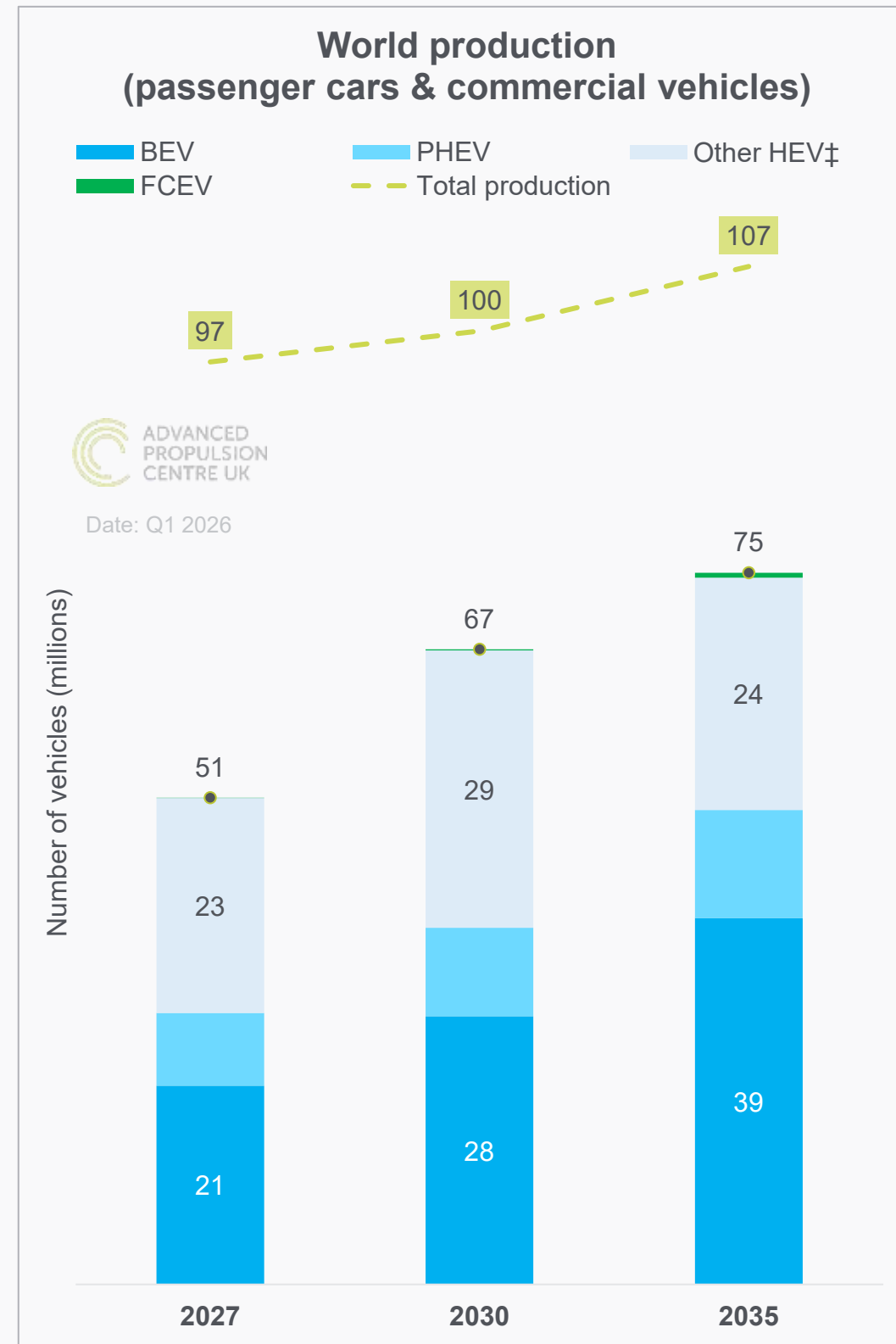
 <b>Global demand update</b>	 <b>European demand update</b>	 <b>UK demand update</b>
<ul style="list-style-type: none"> <li>• The global auto industry continues to navigate the effects of the ongoing Middle East conflict as well as industry-specific dynamics and general macro developments.</li> <li>• Electrified vehicles (BEV, PHEV, FCEV, hybrids) rise from 51M to 75M units from 2027 to 2035, lifting penetration from ~50% to ~70% of total production.</li> <li>• No major structural revisions to total volume forecasts; however, the powertrain mix continues to shift, with hybrids providing near-term resilience and BEVs dominating the longer-term trajectory.</li> <li>• Key BEV adoption risks: affordability pressures, uneven charging infrastructure, and regional policy variability.</li> <li>• Emerging regions will continue to expand, especially with help from Chinese exports.</li> </ul>	<ul style="list-style-type: none"> <li>• Europe’s vehicle production outlook was slightly lowered due to the prolonged Iran war, rising costs, and resulting energy and supply chain pressures.</li> <li>• Middle East-related logistics disruptions have not yet caused visible automotive component shortages, with impacts currently limited to higher input costs and weaker profitability rather than vehicle assembly interruptions at European plants.</li> <li>• Long-term BEV volumes revised down; PHEV confidence slightly strengthened.</li> <li>• EU 2035 CO<sub>2</sub> targets softened. Proposed 90% emissions reduction (vs. prior 100%), with remaining 10% offset via e-fuels, biofuels, or low-carbon steel.</li> <li>• Transition strategy shifts from "EV-only" to flexible, with up to 20% of 2035 sales potentially still combustion or hybrid.</li> <li>• Subsidies in France, Spain and tax incentives in other EU states till 2030. Additional subsidies in Germany till 2030.</li> </ul>	<ul style="list-style-type: none"> <li>• UK vehicle production and battery demand broadly aligned with Q4 2025 forecasts, with a slight downward revision across near- and mid-term volumes.</li> <li>• Near- and mid-term (2027/2030) production outlooks remain stable, and the long-term forecast remains at the UK producing ~1 million vehicles in 2035</li> <li>• Uncertainty around UK BEV production persists, as several OEMs have yet to confirm future EV platform allocations and long-term manufacturing commitments.</li> <li>• Hitting the UK’s 1.3M vehicle ambition by 2035 requires ~300K units above current forecasts and would effectively double 2025 output (717k units), underscoring the scale of the recovery challenge.</li> <li>• The UK automotive sector could face supply chain disruptions and reduced investment attractiveness unless it secures a “trusted partner” status to bypass upcoming EU local content and procurement restrictions under the proposed Industrial Accelerator Act (IAA)</li> </ul>

# Global production and battery demand

## Passenger cars and commercial vehicles

### Notable changes compared with previous quarter

- Quarter on quarter, the outlook shows a modest decrease in total production across the forecast period, with weaker BEV expectations partially offset by increased hybrid volumes in the medium to long term, while overall electrified output remains broadly stable with a slight rebalancing within the powertrain mix.
- Battery demand has been revised slightly upward in the near term but softened in the medium to long term, with weaker expectations in heavy-duty and passenger car segments outweighing modest adjustments elsewhere, resulting in a marginally lower long-term total outlook.



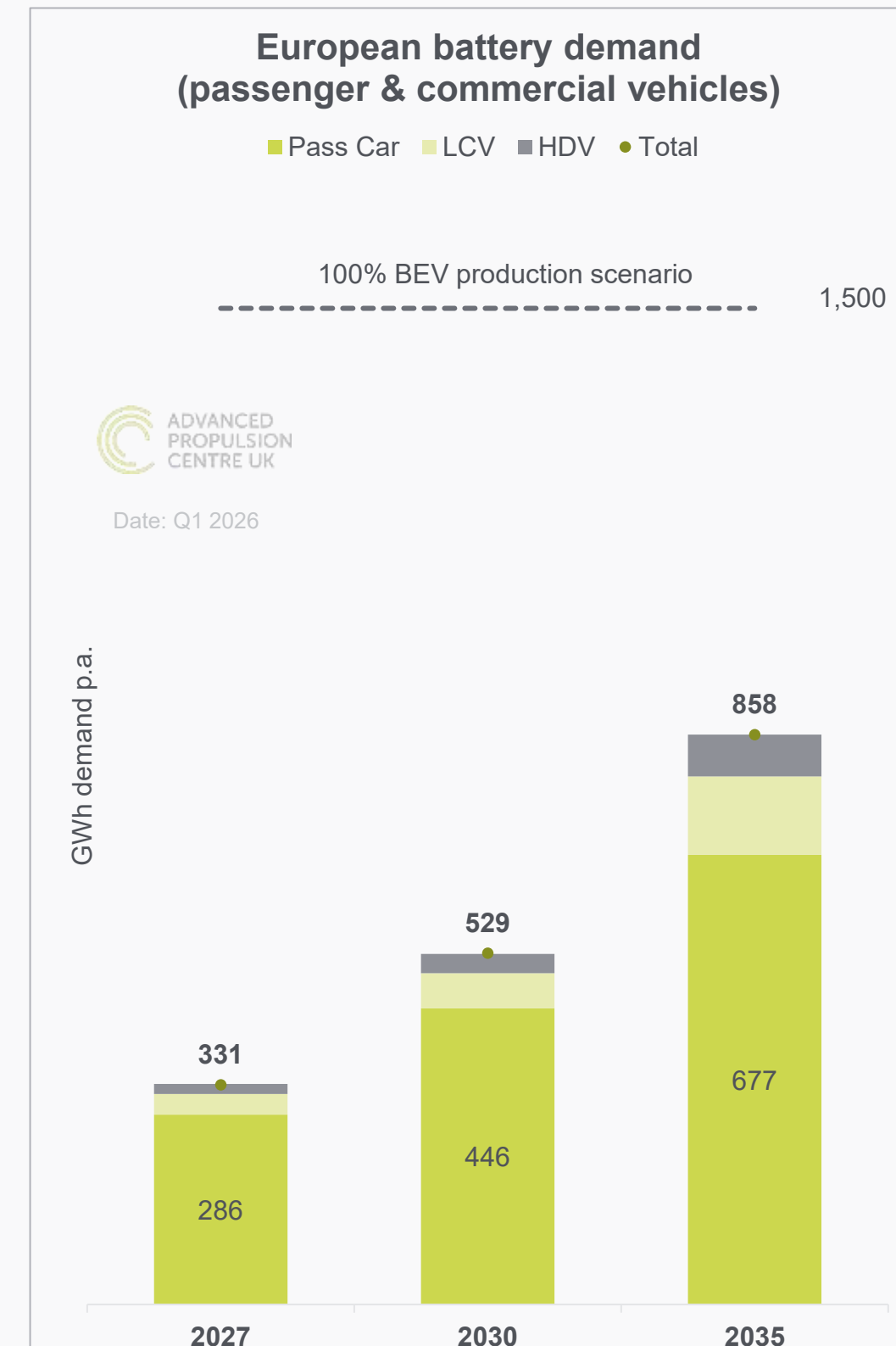
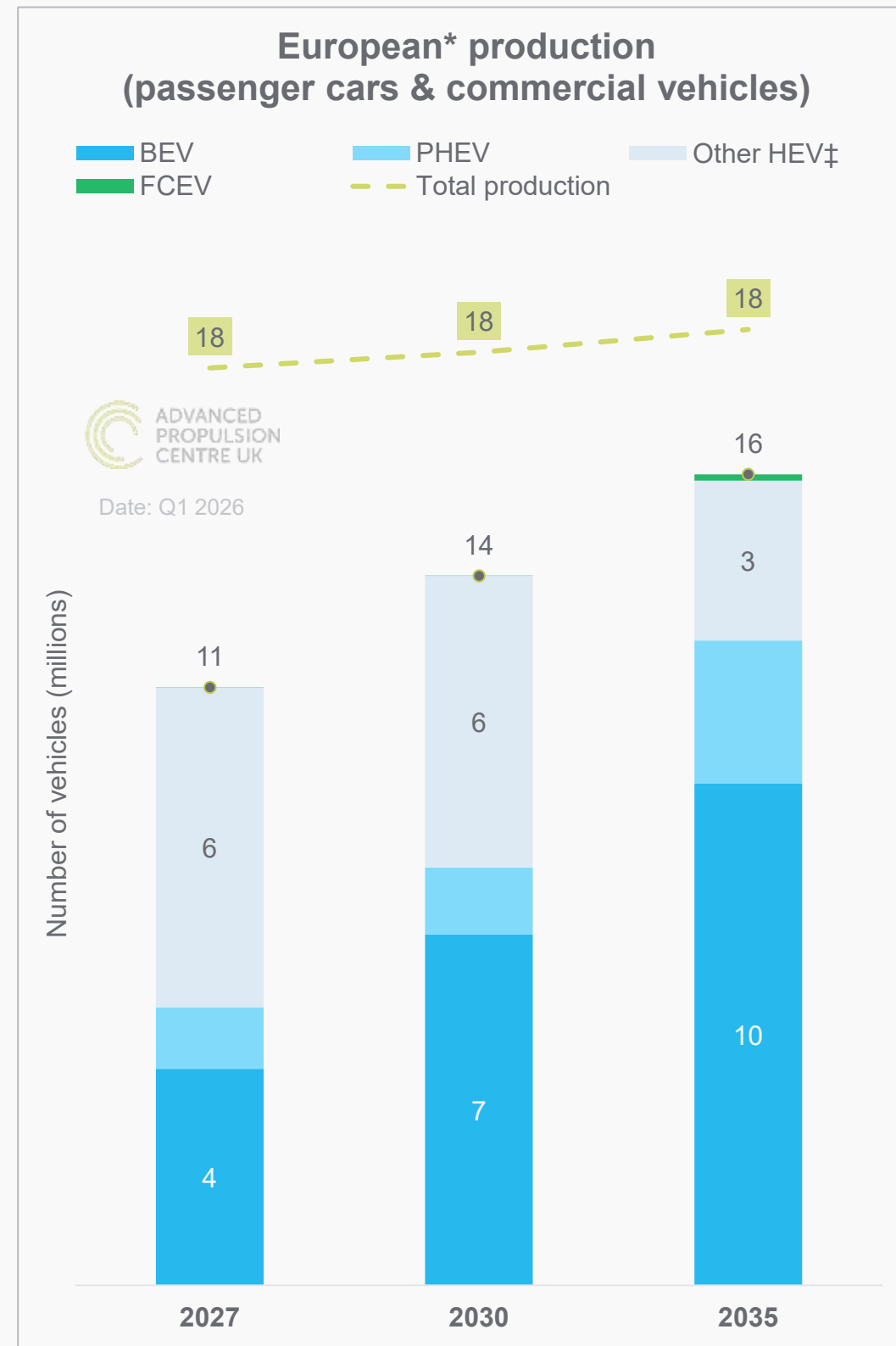
Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), BNEF forecasts (2025), Wood Mackenzie forecasts (Q1 2026), Global Data and KGP Powertrain Intelligence (Q1 2026) and Benchmark forecasts (Q1 2026)  
 Total production includes ICE vehicles.  
 ‡ Other HEV includes MHEV and H<sub>2</sub> ICE

# European production and battery demand

Passenger cars and commercial vehicles

## Notable changes compared with previous quarter

- While overall numbers do not change compared to previous quarter, Q1 2026 revisions paint a picture of a slightly slower near-term EV ramp but a more ambitious long-term electrification trajectory, with traditional hybrids playing a larger transitional role than previously assumed.
- Overall battery demand estimates do not change in the short term, but medium and long term out to 2030 and 2035 sees a slight reduction as hybrids with smaller average pack sizes make a larger powertrain mix.



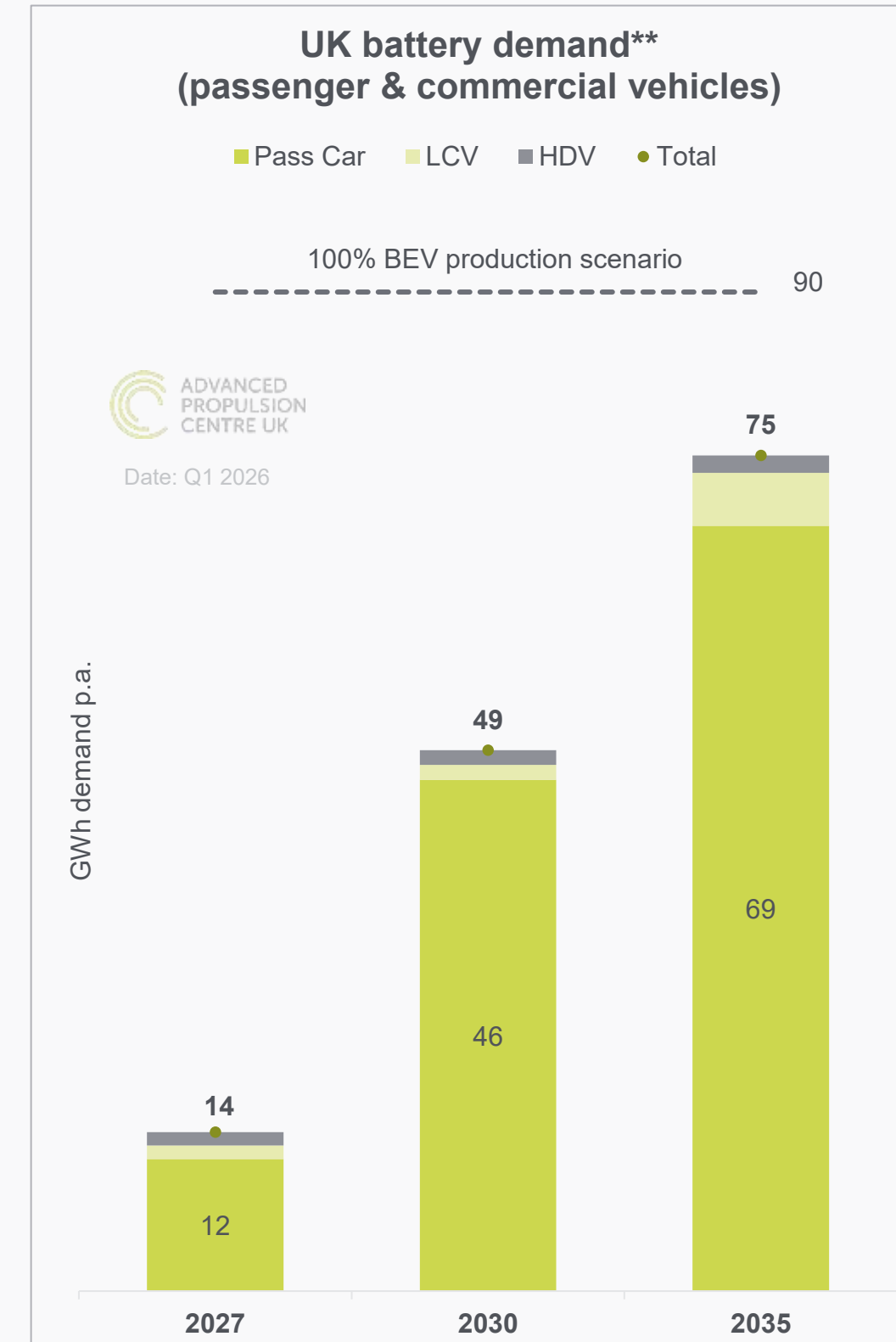
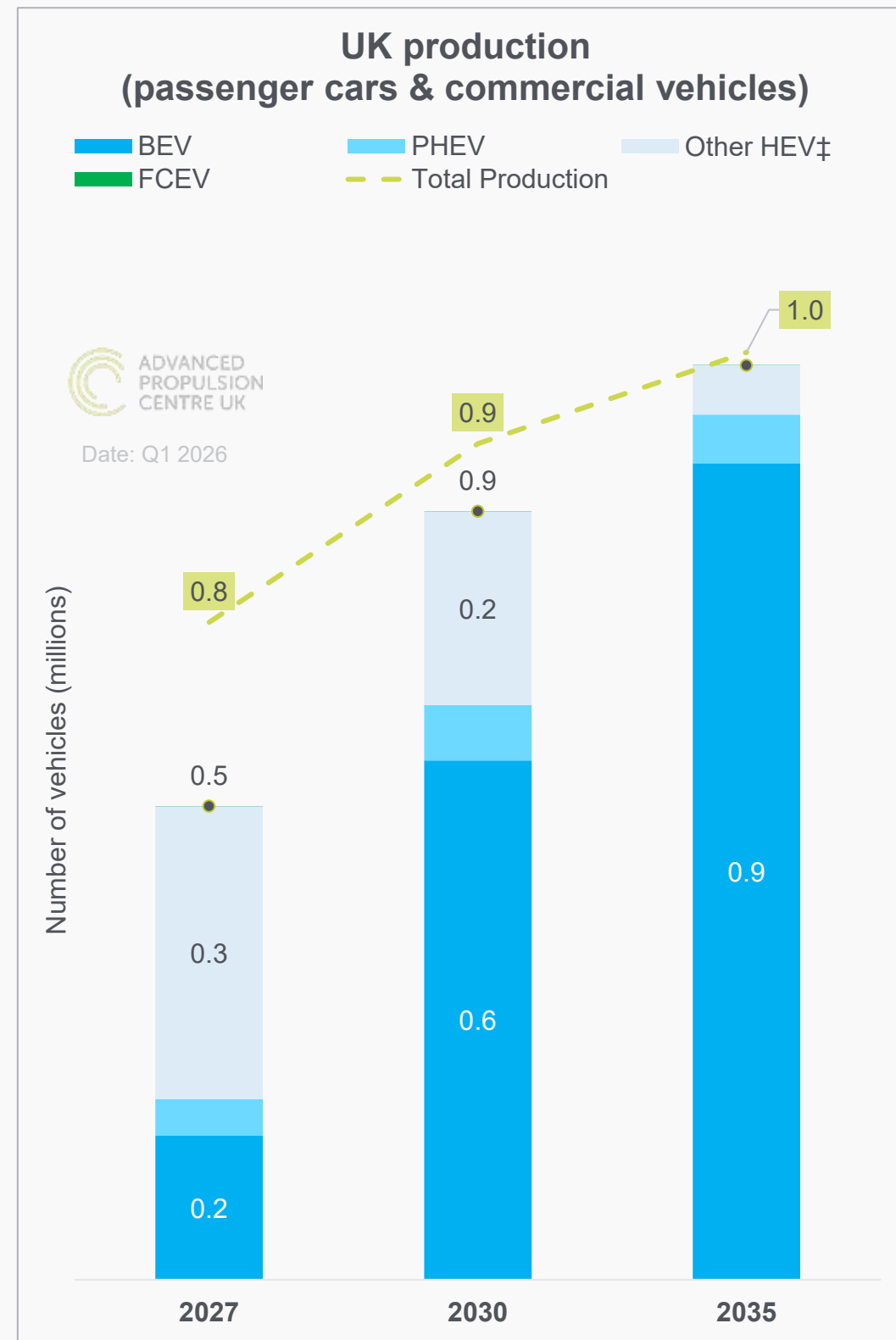
Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), BNEF forecasts (2025), Wood Mackenzie forecasts (Q1 2026), Global Data and KGP Powertrain Intelligence (Q1 2026) and Benchmark forecasts (Q1 2026)  
 \*European forecast includes non-EU countries such as Turkey  
 Total production includes ICE vehicles. ‡ Other HEV includes MHEV and H<sub>2</sub> ICE

# UK production and battery demand

Passenger cars and commercial vehicles

## Notable changes compared with previous quarter

- Vehicle production remains broadly unchanged compared to the Q4 2025 demand report.
- This production outlook assumes the current trajectory of the ZEV mandate i.e. 100% of all new car and van sales must be zero-emission by 2035.
- Long term battery demand remains unchanged. 2027 demand drops slightly due to lower battery capacity PHEVs/HEVs coming into production.



Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), BNEF forecasts (2025), Wood Mackenzie forecasts (Q1 2026), Global Data and KGP Powertrain Intelligence (Q1 2026) and Benchmark forecasts (Q1 2026)  
 Total production includes ICE vehicles. ‡ Other HEV includes MHEV and H<sub>2</sub> ICE  
 \*\* Excludes forecast UK battery exports (this represents UK vehicle manufacturing demand only)

# What does it mean for the UK if 1.3 million are produced annually by 2035?

- To achieve the UK ambition of recovering output to 1.3 million vehicles by 2035, this would require nearly doubling the production levels achieved in 2025, a pivotal year for the industry's recovery.
- 1.3 million vehicles remains below pre-Brexit and pandemic production levels, with current forecasts indicating that production from the current OEM base may reach circa 1 million vehicles by 2035.
- If the UK does achieve the 1.3 million mark, the UK automotive industry could look like the following:

## Vehicle production



UK assembly facilities may operate close to maximum capacity



Existing assembly facilities could require new investment



The entry of a one or more new manufacturers could play a key role in helping the UK meet its 1.3 million vehicle production target

**~20%**

Key supply chain components could see an ~20% increase compared to current 2035 APC forecasted demand

## Battery components



95 GWh battery demand



140 kt CAM



90 kt AAM



60 kt Lithium (LCE)

## Electric motors



1.8 million e-motors



330 GW e-motor



Over 3 kt magnets

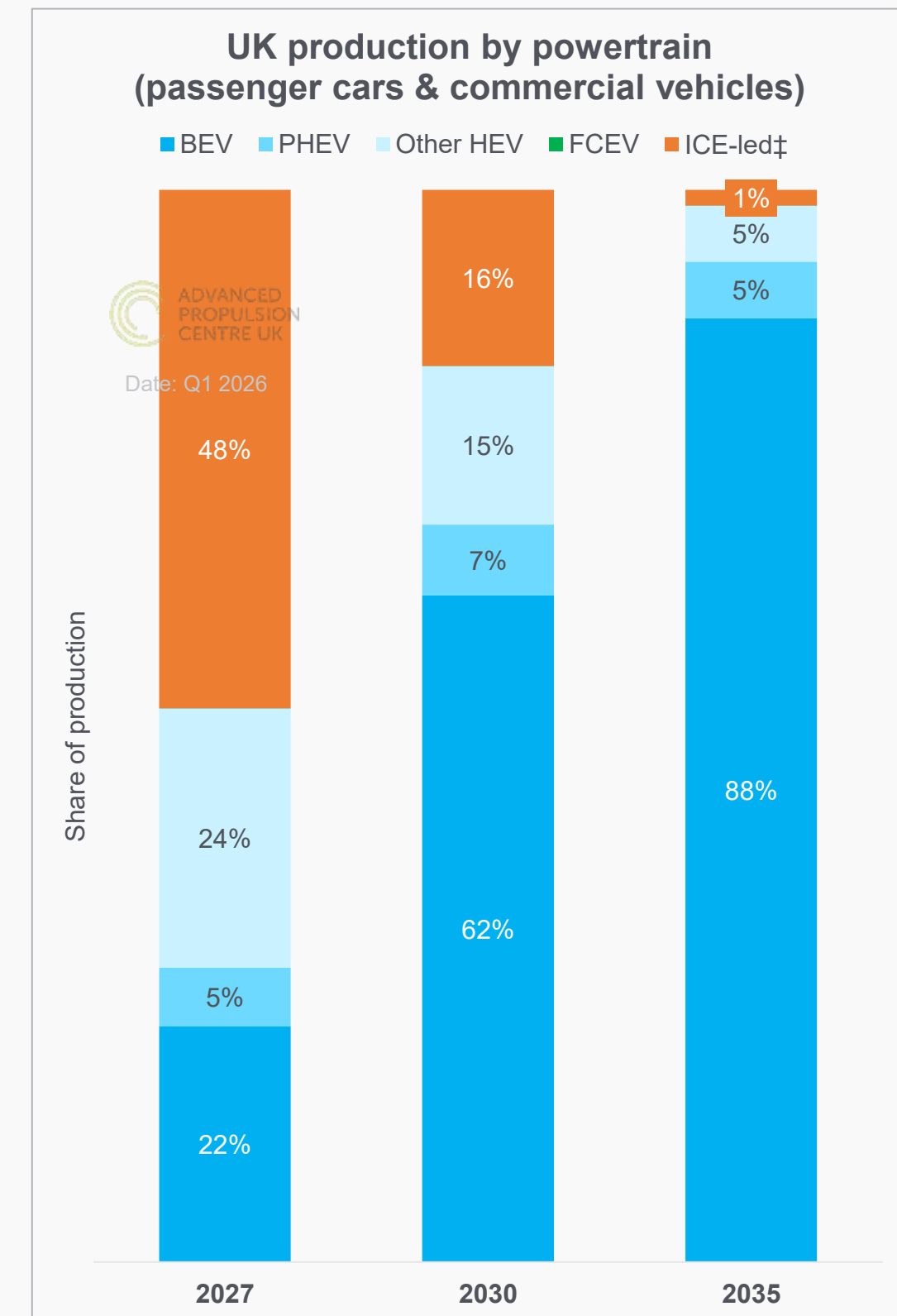
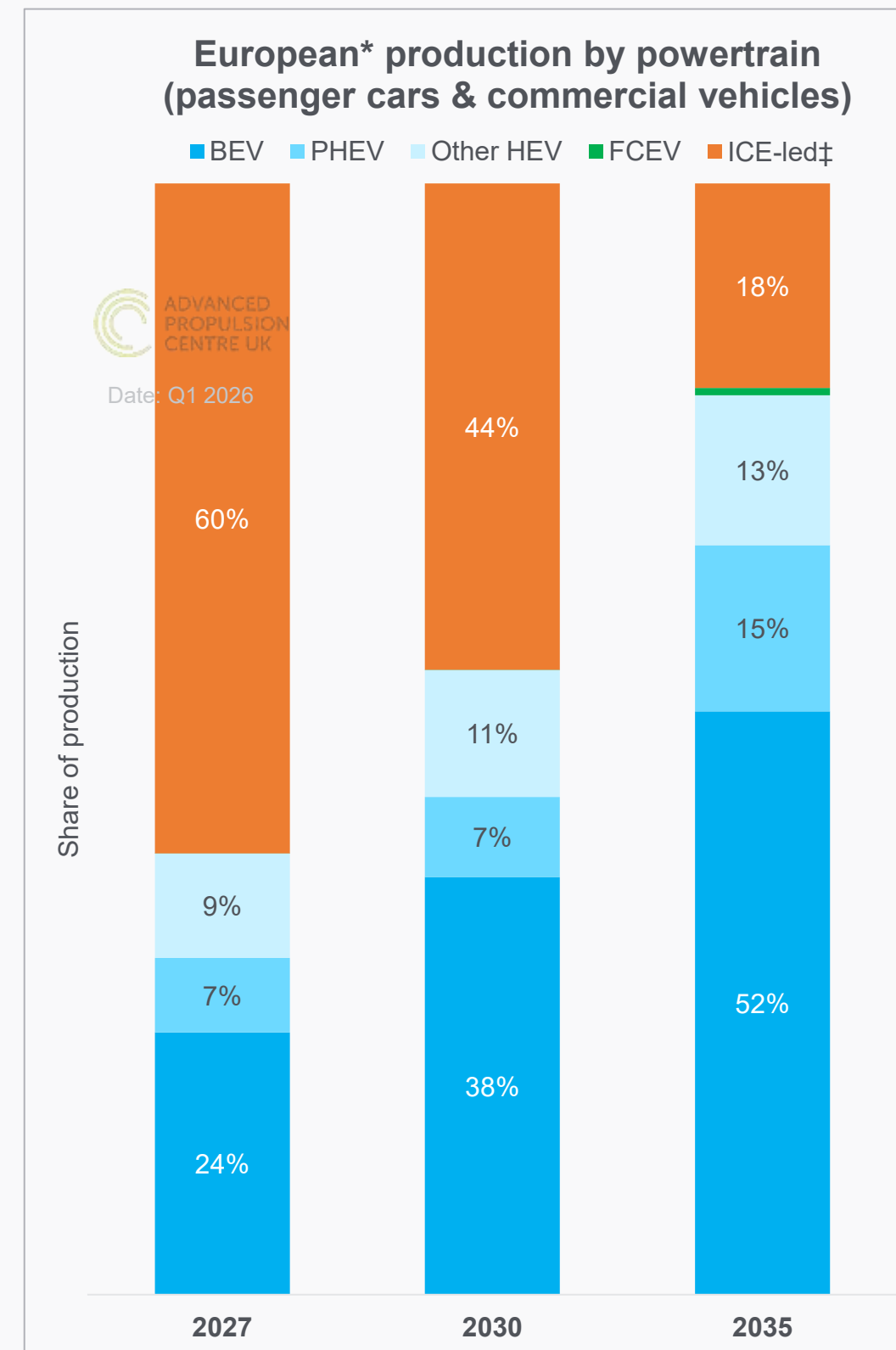
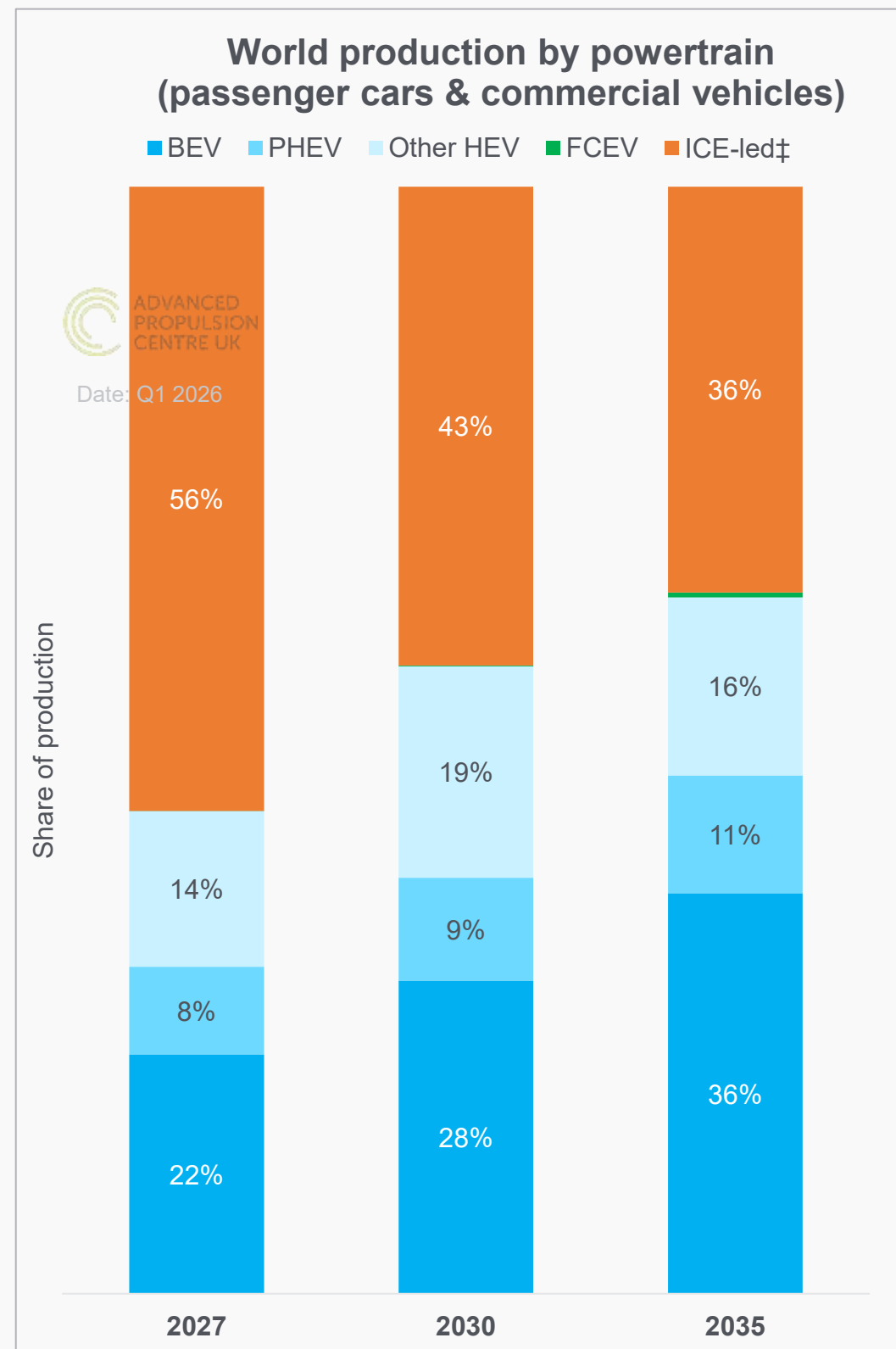
This assessment is based solely on domestic UK vehicle production demand and excludes any consideration of export potential, which could present a significantly greater opportunity

# Forecasts by powertrain

## Passenger cars and commercial vehicles

### Notable changes compared with previous quarter

- The share of BEVs is projected to decline slightly in Europe and the UK in the long term out to 2035 due to the strong resurgence of hybrids.
- The powertrain mix will continue its historic shift, with hybrids proving to be a popular intermediate step for consumers, even as the share of battery-electric vehicles continues to climb.



Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), BNEF forecasts (2025), Wood Mackenzie forecasts (Q1 2026), Global Data and KGP Powertrain Intelligence (Q1 2026) and Benchmark forecasts (Q1 2026)

\*European forecast includes non-EU countries such as Turkey

‡Includes MHEVs, ICE and Hydrogen-ICE



# Q1 2026 – Electrified components demand

## Battery components

The following section provides insights into battery material supply chain activity, cathode chemistry split, battery material demand and supply for LDVs (passenger cars and light commercial vehicles)



# Key facts and outlook: battery components

 <b>European demand update</b>	 <b>UK demand update</b>
<ul style="list-style-type: none"> <li>• Europe shifts from near-balance to a structural cell deficit by 2035; gigafactory pipelines improve the 2030 outlook, but long-term ramp risk remains material.</li> <li>• LFP gains mid-term share but nickel-based cathodes reassert by 2035, driven by energy density requirements; nickel-rich chemistries remain the European default given OEM performance demands.</li> <li>• Upstream materials are the core bottleneck: cathode active material is undersupplied across all timeframes; anode active material faces the deepest deficit, particularly post-2030.</li> <li>• Recycling capacity is misaligned: mechanical processing generates black mass, but hydrometallurgical refining capacity is insufficient to convert it into battery-grade materials.</li> <li>• Proposed EU rules would require 70% of EV components receiving state support to be EU-manufactured, with batteries subject to EU-origin content requirements despite upstream reliance on Chinese materials.</li> </ul>	<ul style="list-style-type: none"> <li>• UK battery strategy pivoting from cell ambition toward materials, next-generation chemistries, and recycling infrastructure.</li> <li>• Gigafactory investment strengthening, led by AESC's Sunderland expansion, anchoring domestic cell supply for UK automotive.</li> <li>• Critical mineral production remains limited; nickel (South Wales) and lithium (Cornwall and North East projects) are the only meaningful exceptions. The UK will remain heavily reliant on imports.</li> <li>• Updated Critical Minerals Strategy targets 10% domestic sourcing, 20% via recycling, and no more than 60% from any single country; lithium ambition set at 50,000 tonnes LCE domestically by 2035, which advancing planned projects could meet or exceed.</li> <li>• Recycling capacity expanding at mechanical pre-treatment stage, but hydrometallurgical refining remains limited, creating a potential mid-term bottleneck in battery-grade material recovery.</li> <li>• Increased activity in advanced anode and alternative chemistries, including silicon-dominant and niobium-based technologies, targeting high-power and fast-charging applications.</li> </ul>

# European battery material supply chain activity

## Notable compared with previous quarter

- Near-term (2027) cell balance deteriorates with an emerging undersupply. Medium-term sees some relief as new facilities start operations. Long-term (2035) structural gap widening. Overall, cells deficit deepens due to delayed or cancelled gigafactory ramp-ups.
- Chronic cathode bottleneck remains; some mid-term easing but no structural fix. Long-term deficits in anode and cathode remain the key structural risk to European self-sufficiency.
- Electrolytes remain in surplus throughout the forecast period. The separator outlook improves significantly across the forecast period as stronger planned separator capacity additions enter the European pipeline.

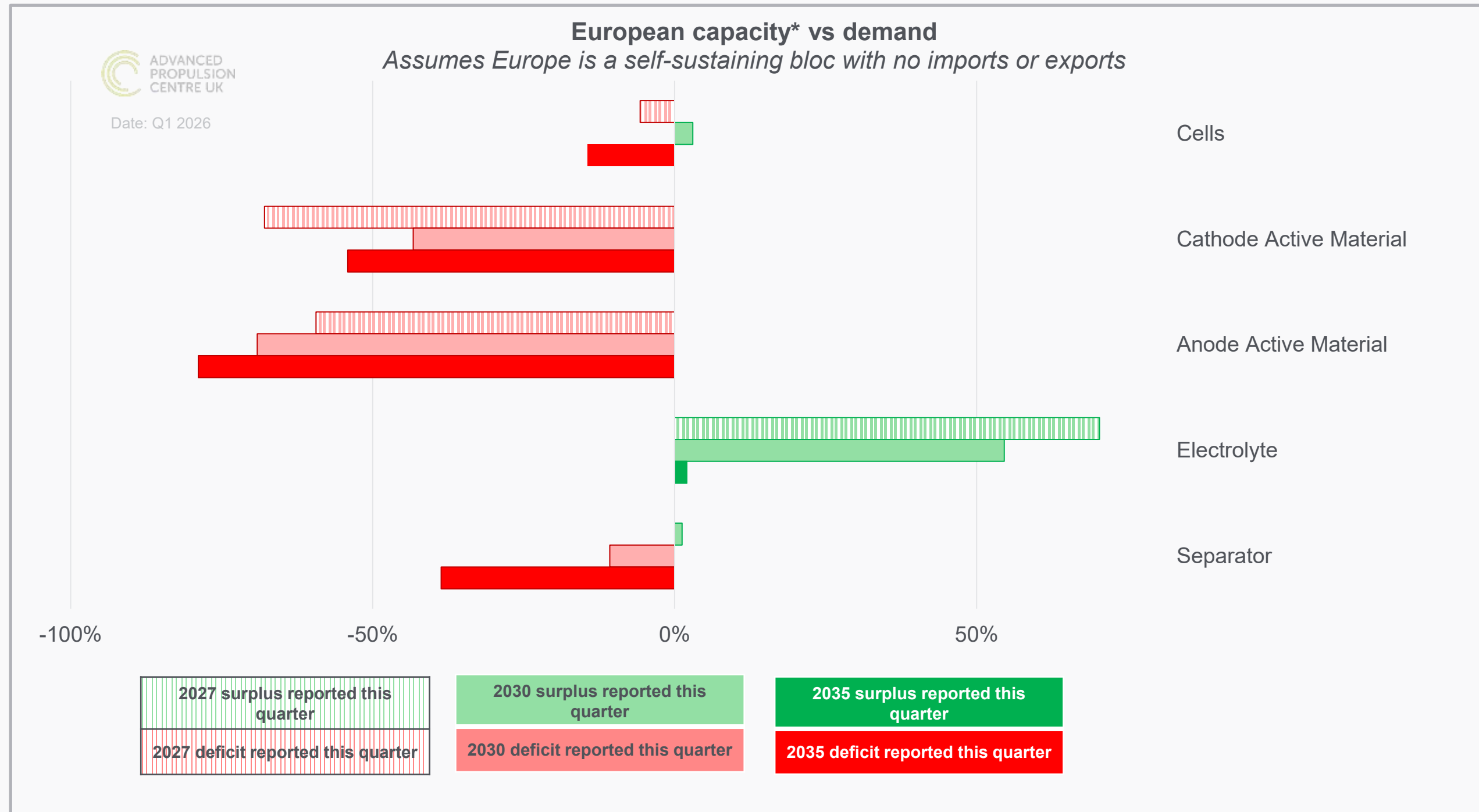


Figure 1: European capacity vs demand assuming Europe is a self-sustaining bloc with no imports or exports

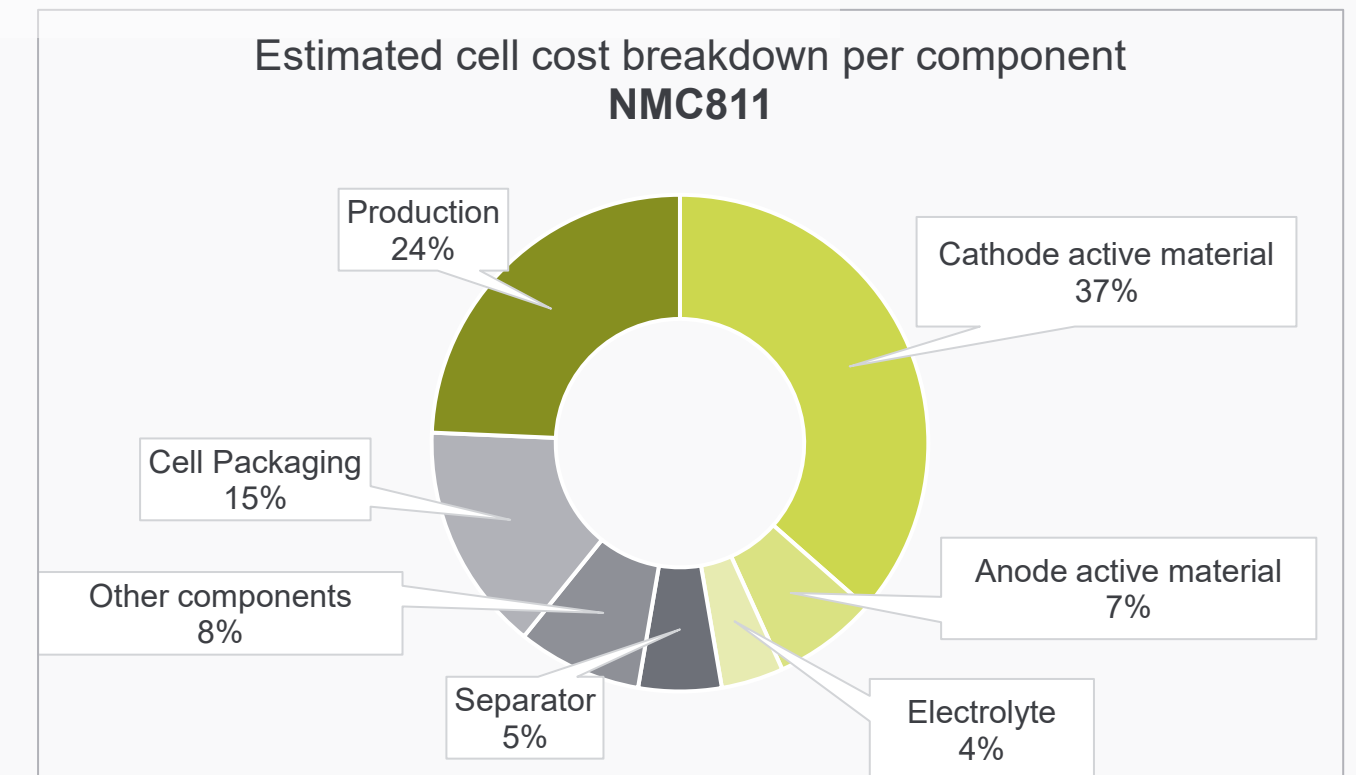


Figure 2: Estimated NMC811 cell cost breakdown per component

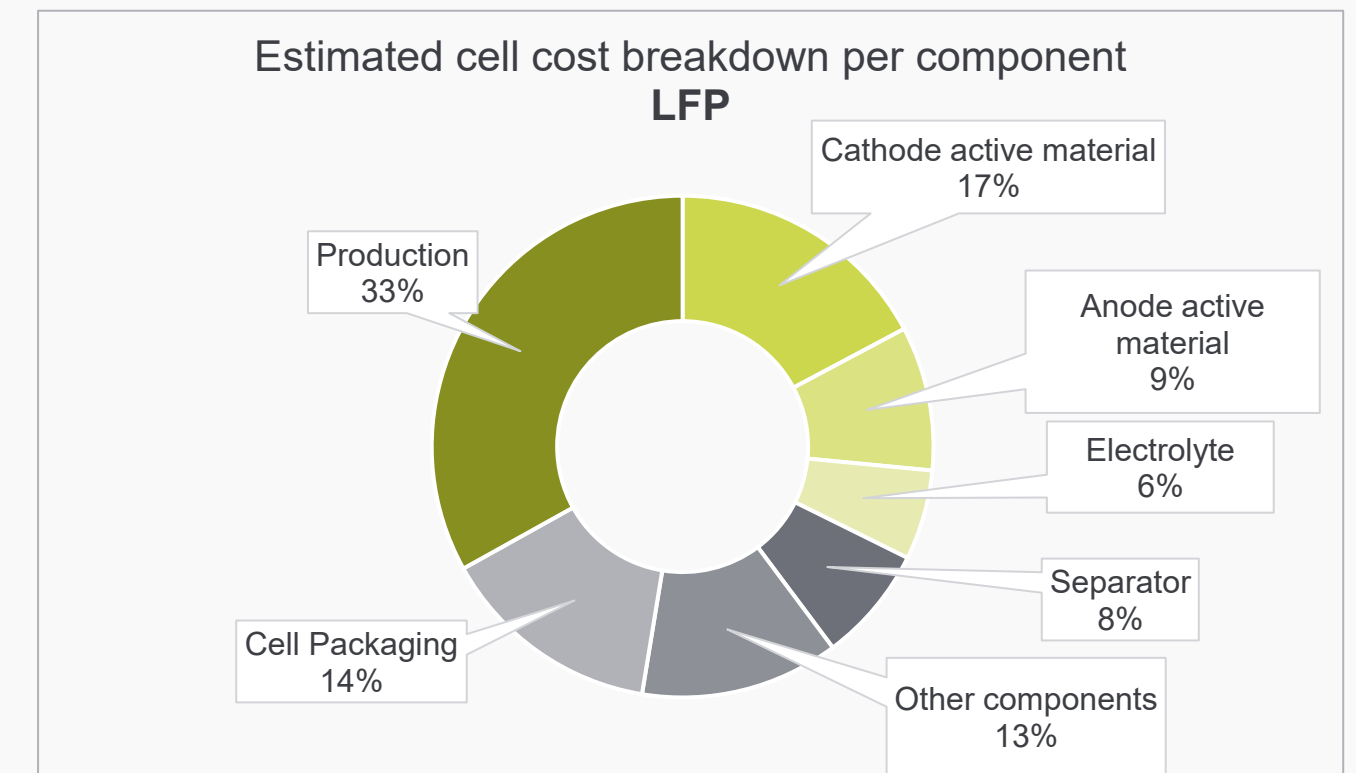


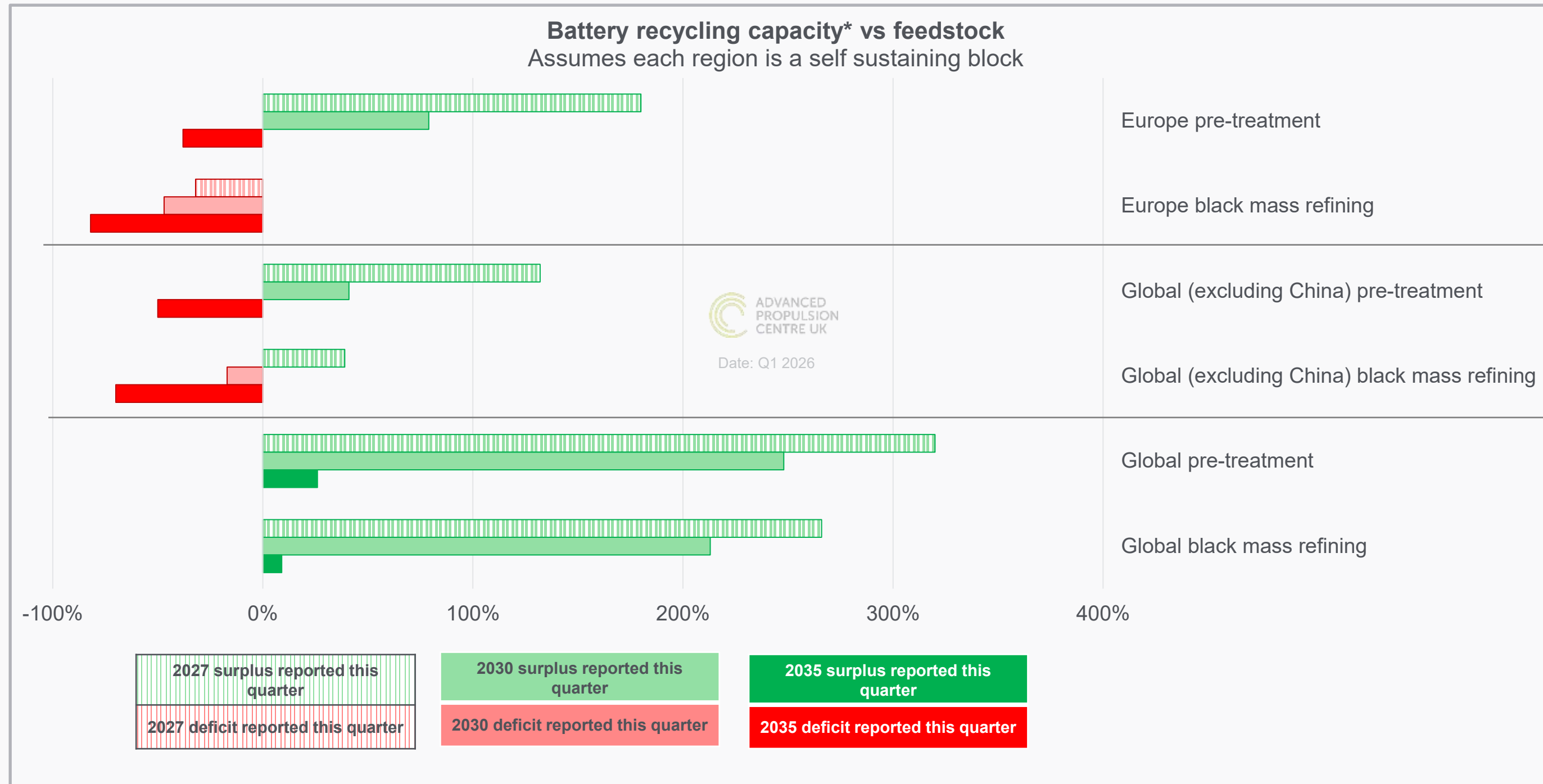
Figure 3: Estimated LFP cell cost breakdown per component

Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), BNEF forecasts (2026), Wood Mackenzie forecasts (Q1 2026), Global Data and KGP Powertrain Intelligence (Q1 2026) and Benchmark forecasts (Q1 2026)  
 \*Europe region includes non-EU countries such as Turkey  
 \*Risk-weighted nameplate capacity based on APC internal assessment of announced and under construction projects

# Battery recycling capacity vs feedstock

## Notable compared with previous quarter

- Pre-treatment remains heavily overbuilt in the near term, especially globally.
- Refining is the structural bottleneck in Europe and ex-China markets, particularly beyond 2030.
- China continues to balance the global system, masking tightening outside China.
- The structural imbalance is feedstock-constrained short term, refining-constrained long term.
- Production scrap represents over 75% of total black mass feedstock in the short-term.



The chart shows two key stages of the recycling process:

### 1. Pre-treatment

Converts battery production scrap and EOL batteries into intermediate products such as black mass.

### 2. Black Mass Refining

Processes black mass into battery-grade materials that can be reused in new battery production.

The chart illustrates the relationship between feedstock availability and recycling capacity across 3 different regions:

1. Europe
2. Global (excluding China)
3. Global

Positive values indicate that the region has more processing capacity than available feedstock (e.g., all end-of-life electric vehicles can be handled locally without exporting material).

Negative values indicate that the region has insufficient processing capacity, meaning some feedstock must be exported to other regions for processing.

Sources of recycling inputs include:

- End-of-life (EOL) electric vehicles
- Gigafactory production scrap
- Stationary energy storage systems

**Figure 1:** Recycling demand across 3 regions (1. Europe, 2. Global excluding China and 3. Global) assuming each region is a self-sustaining bloc with no imports or exports

Source: Benchmark battery recycling forecast (Q1 2026)

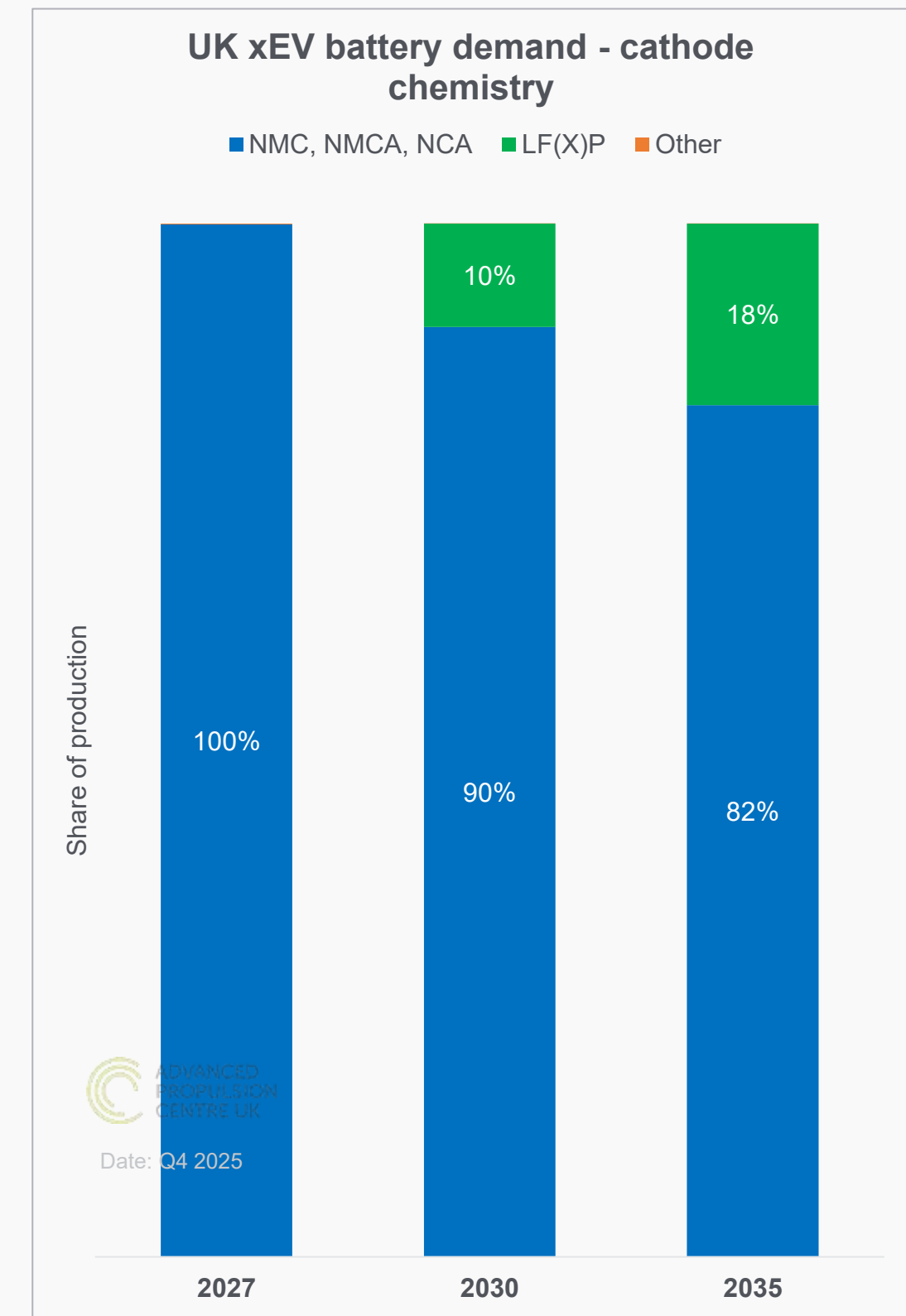
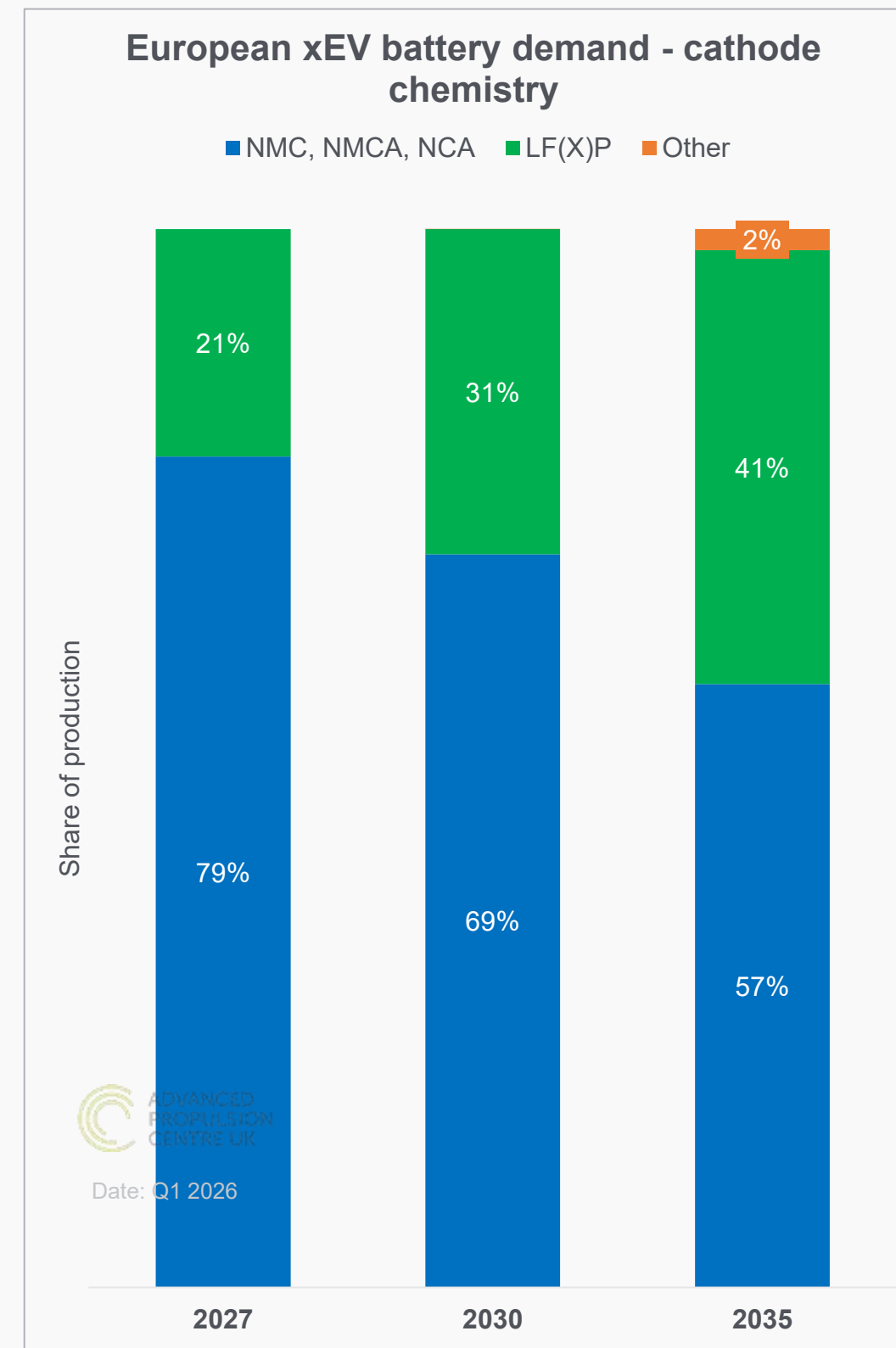
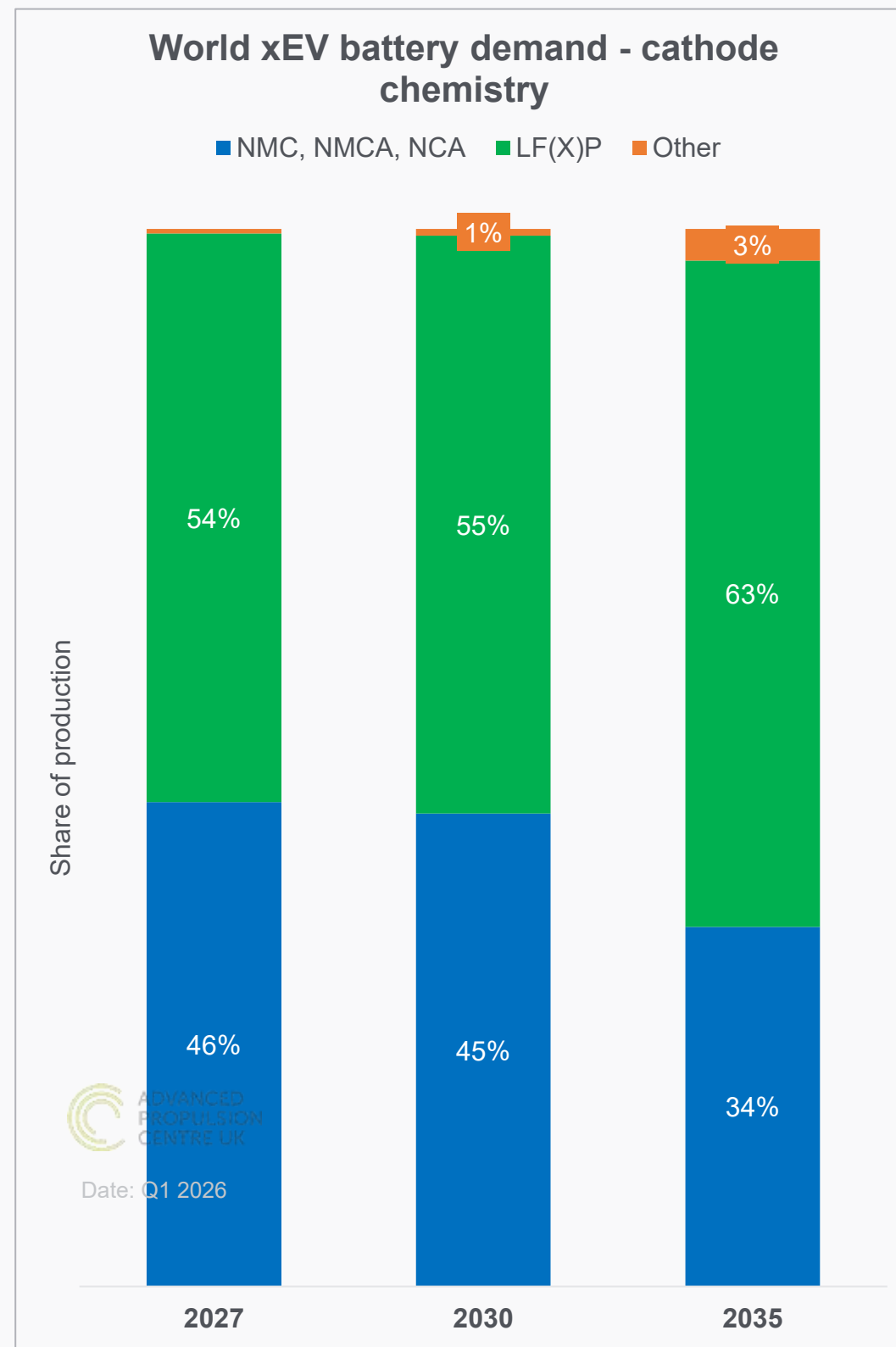
\*Risk-weighted capacity based on projects in commissioning, under construction, or in the planning phase

# Forecasts for automotive battery demand by cathode chemistry

Passenger cars and light commercial vehicles (< 6 tonnes)

## Notable changes compared with previous quarter

- Recent advances in LF(X)P technology with regards to energy density and charging speeds will ensure the chemistry cements its position as the dominant cathode material type within the global battery market with a near 65% share in the long term.
- LF(X)P share in Europe increased slightly compared to Q4 2025 demand report.
- LF(X)P takes 10% share by 2030 in the UK on cost grounds, but nickel-based cathodes reassert by 2035 as energy density and premium production mix requirements dominate.



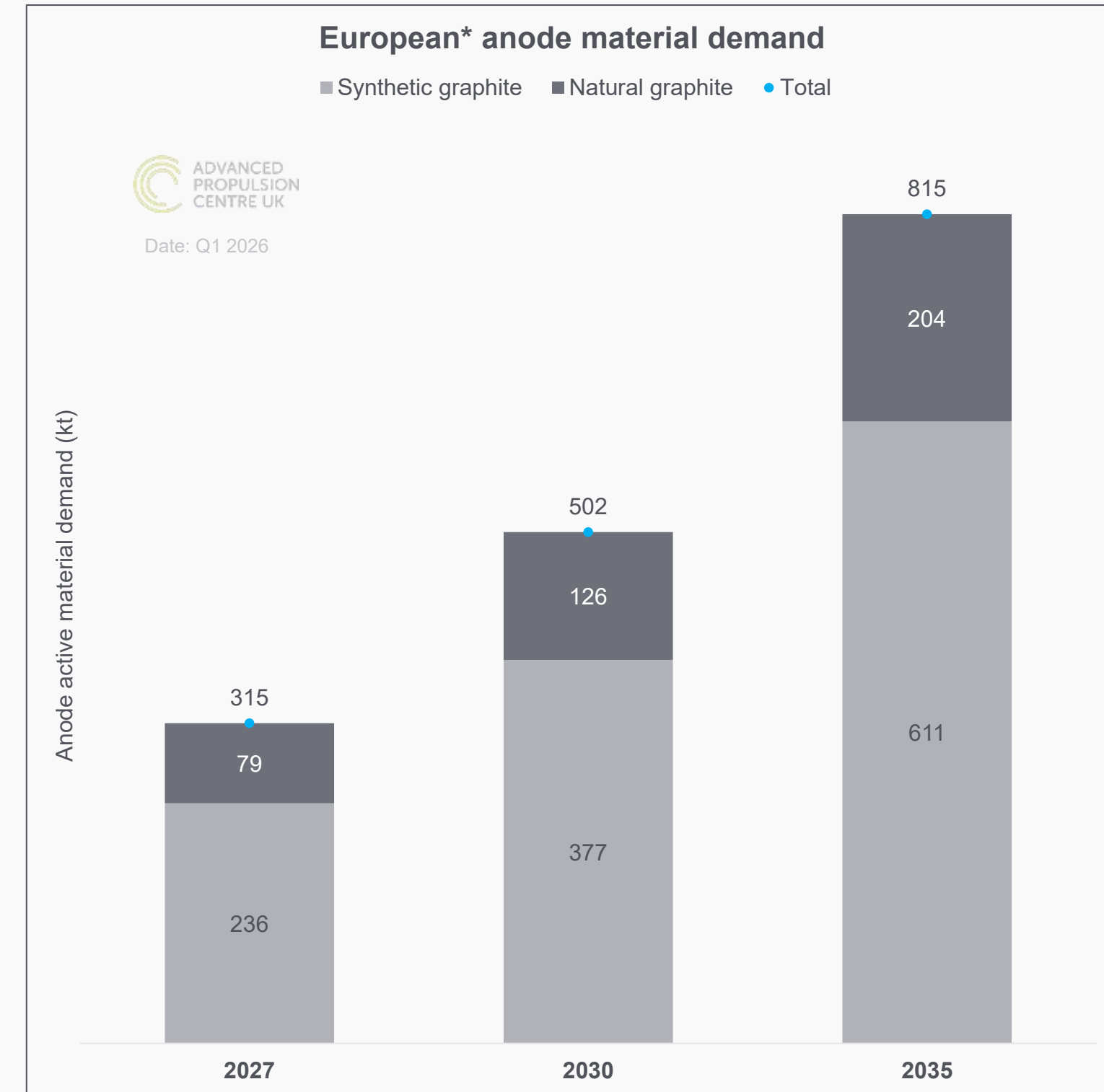
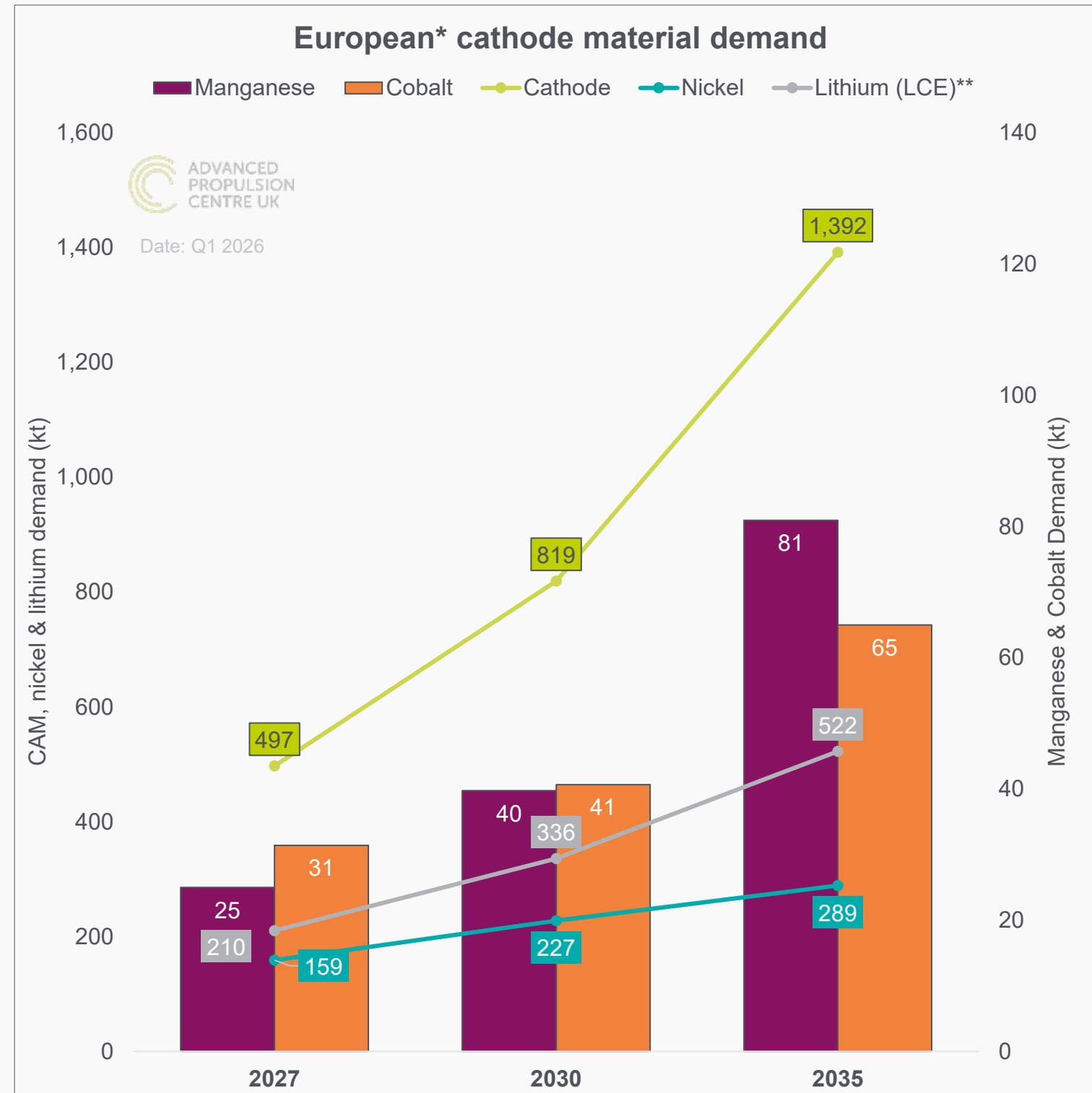
Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), BNEF forecasts (2026), Wood Mackenzie forecasts (Q1 2026) and Benchmark forecasts (Q1 2026)  
 Note: Passenger cars & light commercial vehicles < 3.5t only, \*European forecast includes non-EU countries such as Turkey, †Includes non-plug-in HEVs & ICE  
 NMC includes NMC chemistries with less than 80% Nickel content as well as NMCA

# European cathode and anode active material demand

Passenger cars and light commercial vehicles (< 6 tonnes)

## Notable changes compared with previous quarter

- Slight decrease in battery materials demand in the medium and long term, compared with Q4 2025 demand report, aligning with slight decrease in European battery demand.
- Synthetic graphite share revised up, reflecting OEM preference for high-performance, fast-charge anodes suited to nickel-rich chemistries, and tighter natural graphite access following China's export controls.



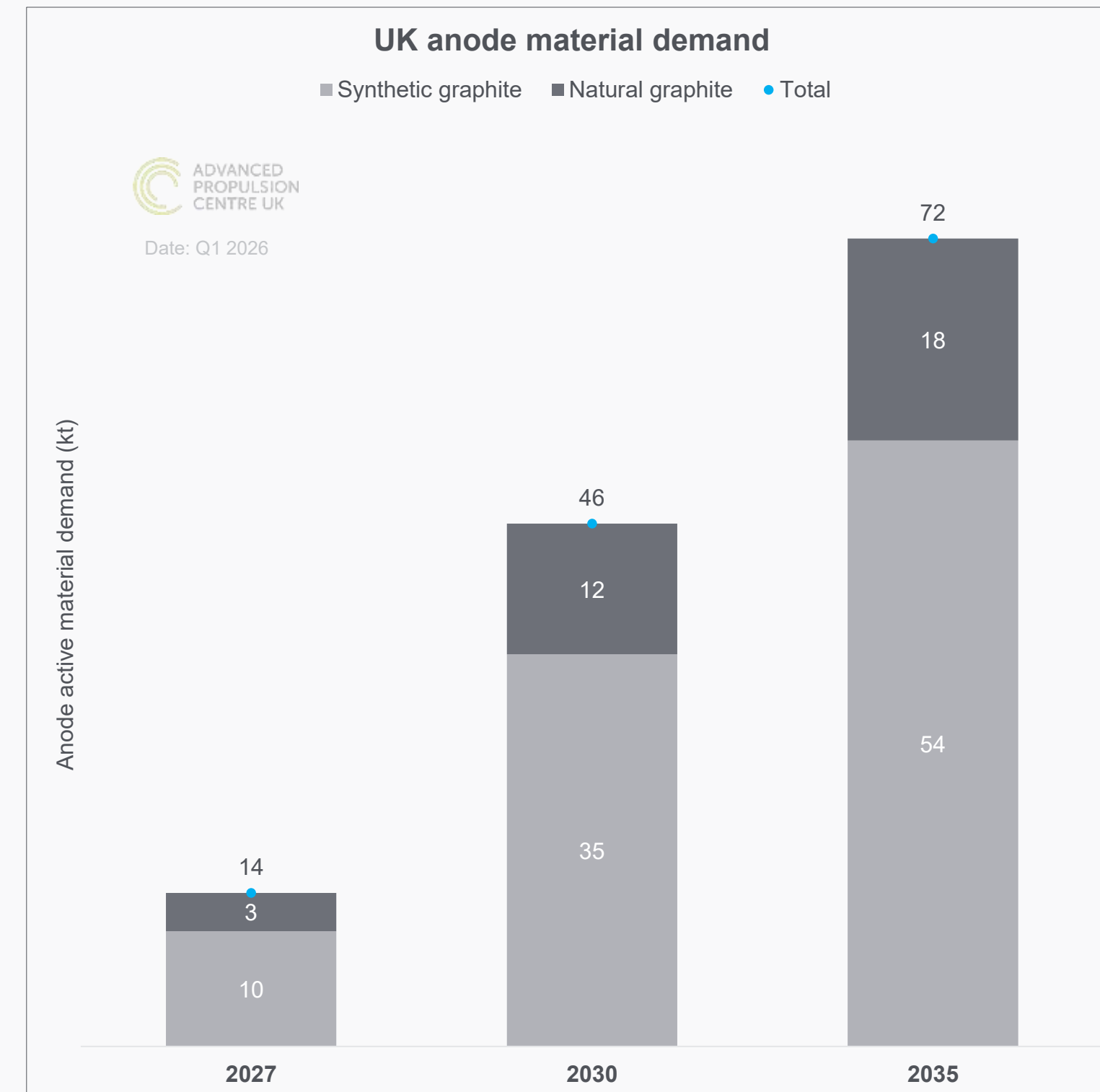
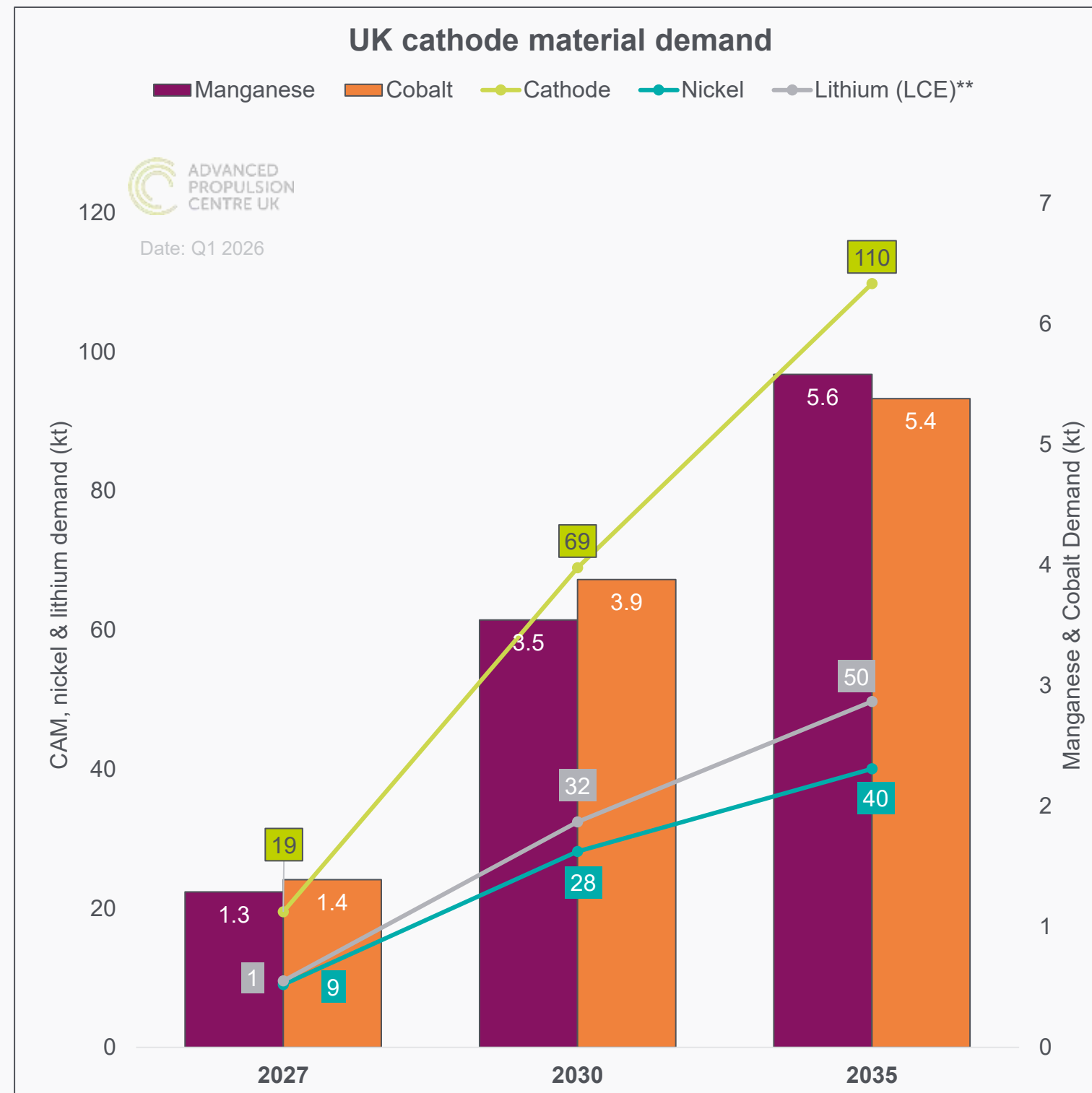
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 Note: Passenger cars & light commercial vehicles < 3.5t only, \*European forecast includes non-EU countries such as Turkey, \*\*Contained Li metal would be 5.3x lower  
 Anode material demand model assumption: Synthetic to natural graphite demand ratio 3:1

# UK cathode and anode active material demand

Passenger cars and light commercial vehicles (< 6 tonnes)

## Notable changes compared with previous quarter

- Cathode and anode material demand remains broadly unchanged in line with long term UK battery demand.



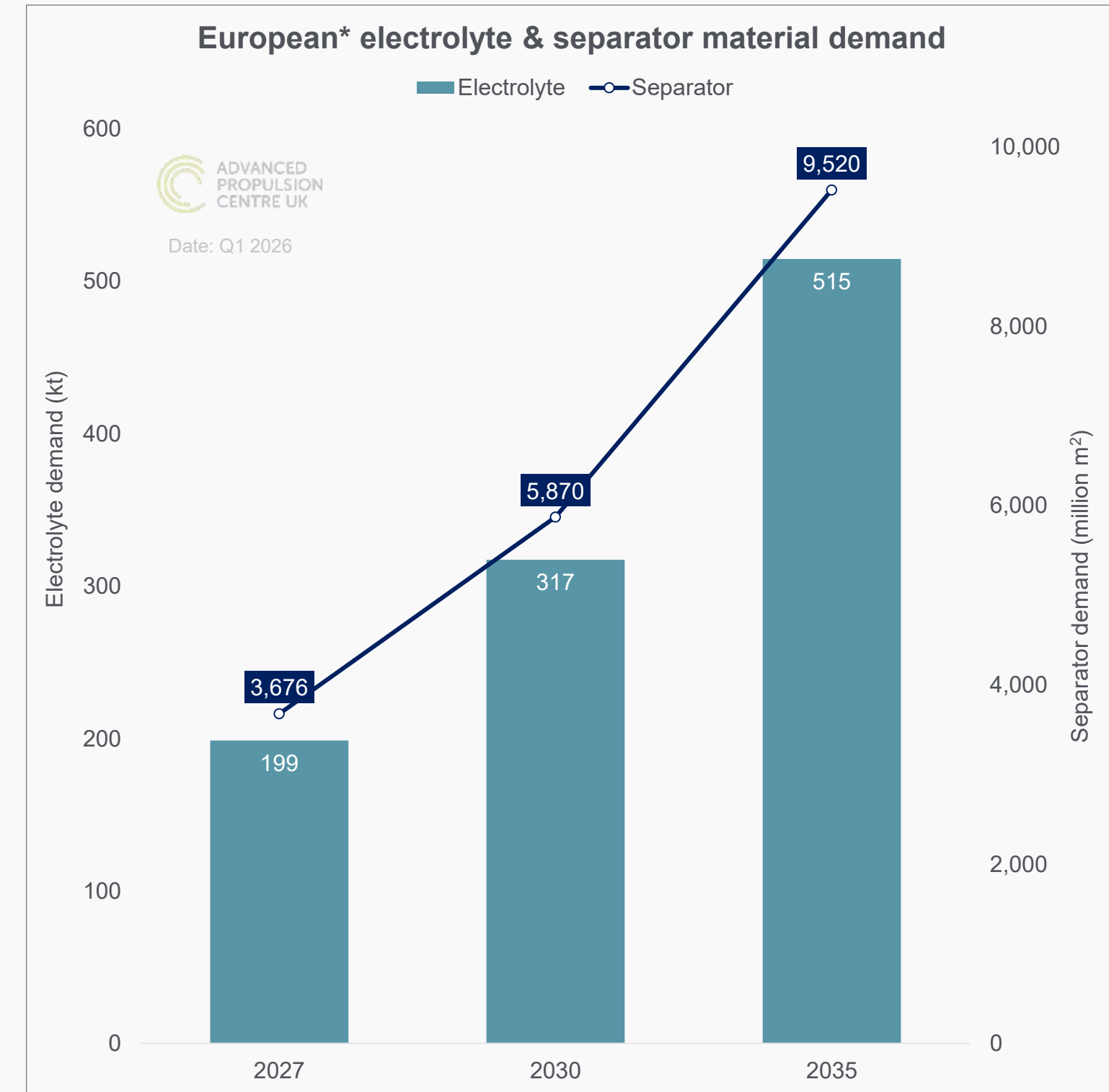
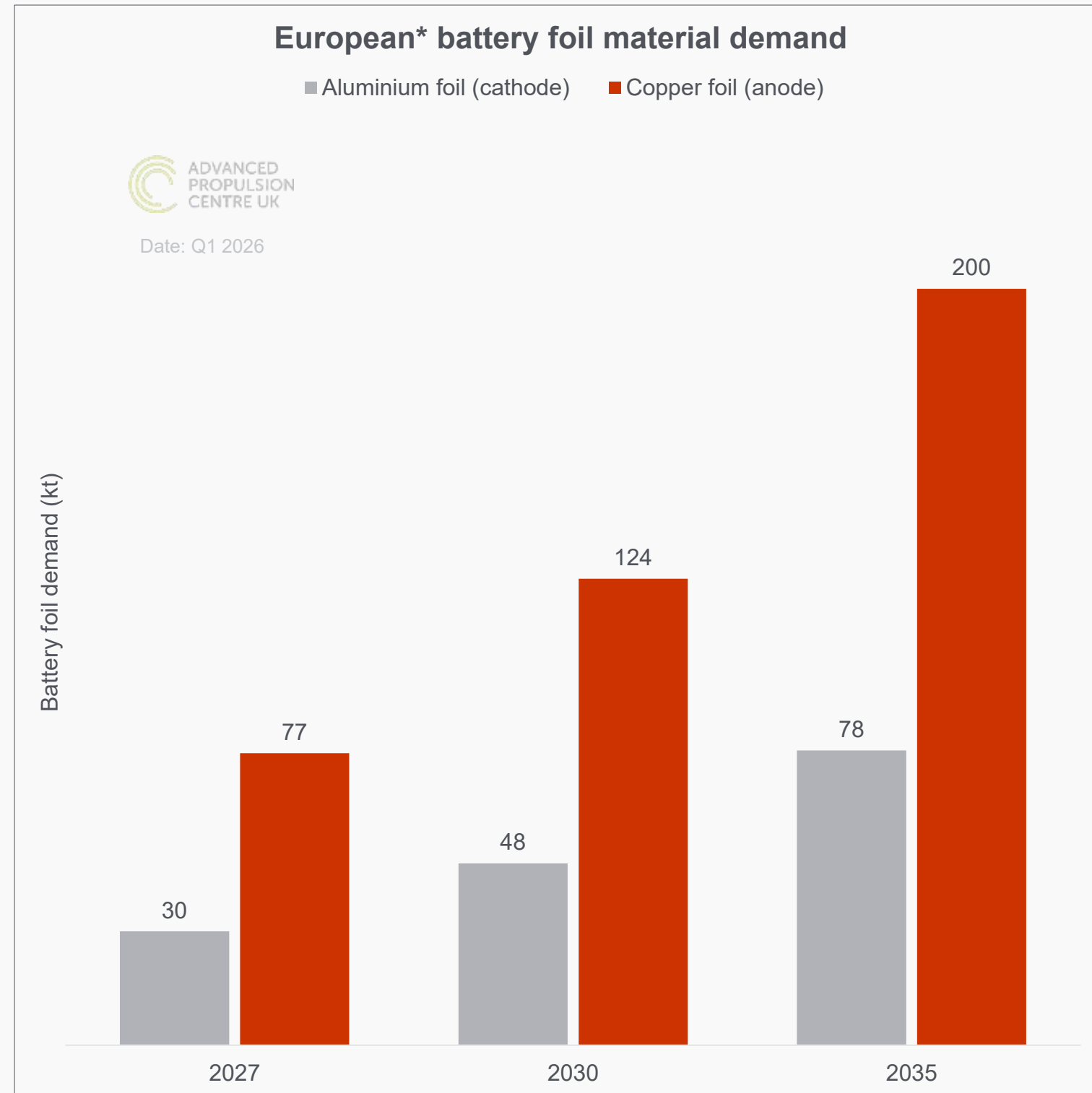
Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), BNEF forecasts (2026), Wood Mackenzie forecasts (Q1 2026) and Benchmark forecasts (Q1 2026)  
 Note: Passenger cars & light commercial vehicles < 3.5t only, \*\*Contained Li metal would be 5.3x lower  
 Anode material demand model assumption: Synthetic to natural graphite demand ratio 3:1

# European demand for battery foils, electrolyte and separator material

Passenger cars and light commercial vehicles (< 6 tonnes)

## Notable changes compared with previous quarter

- Slight drop in foil, electrolyte, & separator material demand in line with European battery demand.
- AI data centres are emerging as a powerful, relatively price-insensitive new source of copper demand that intensifies an already looming supply crunch, likely raising costs and constraining global EV deployment.



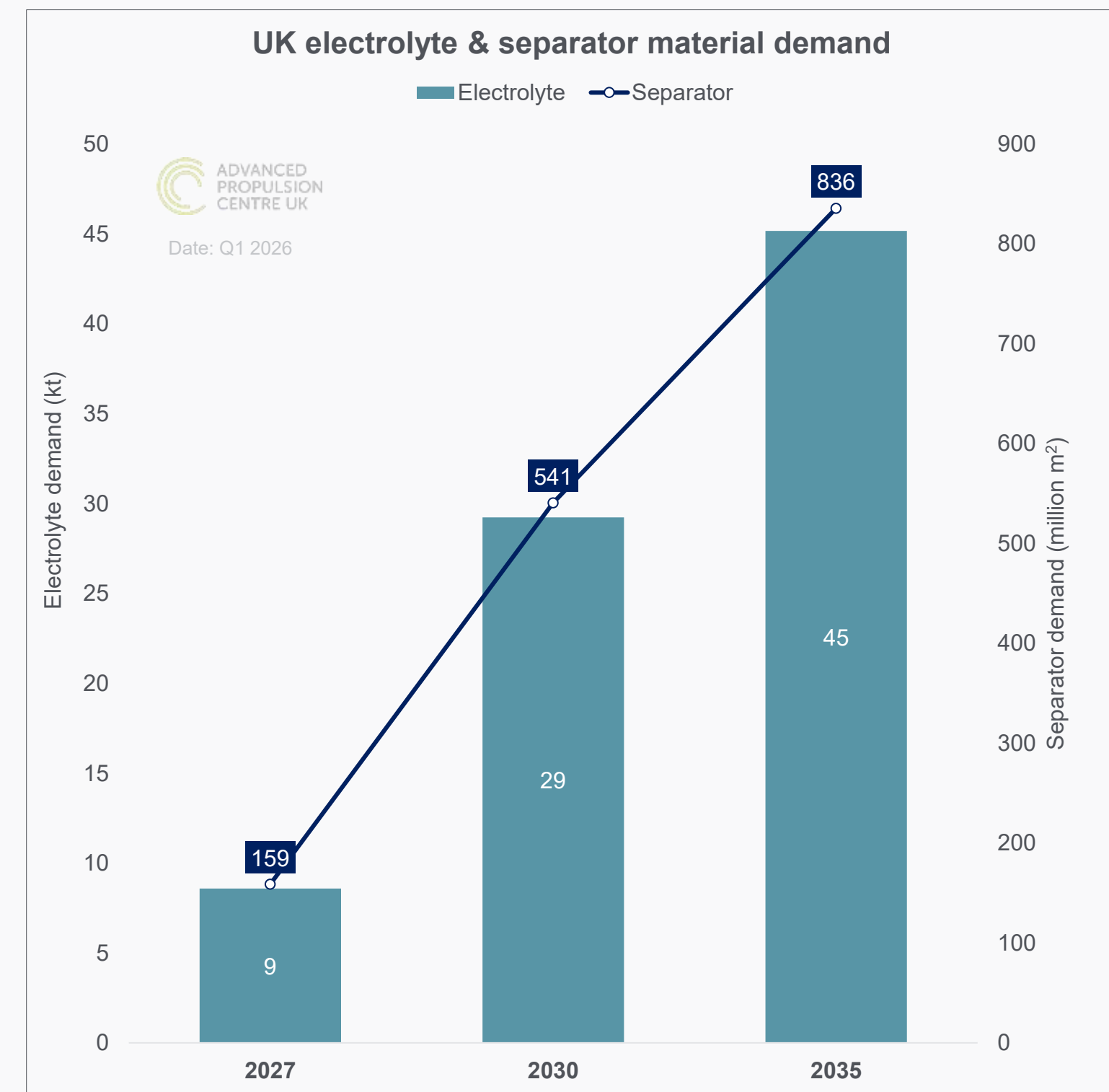
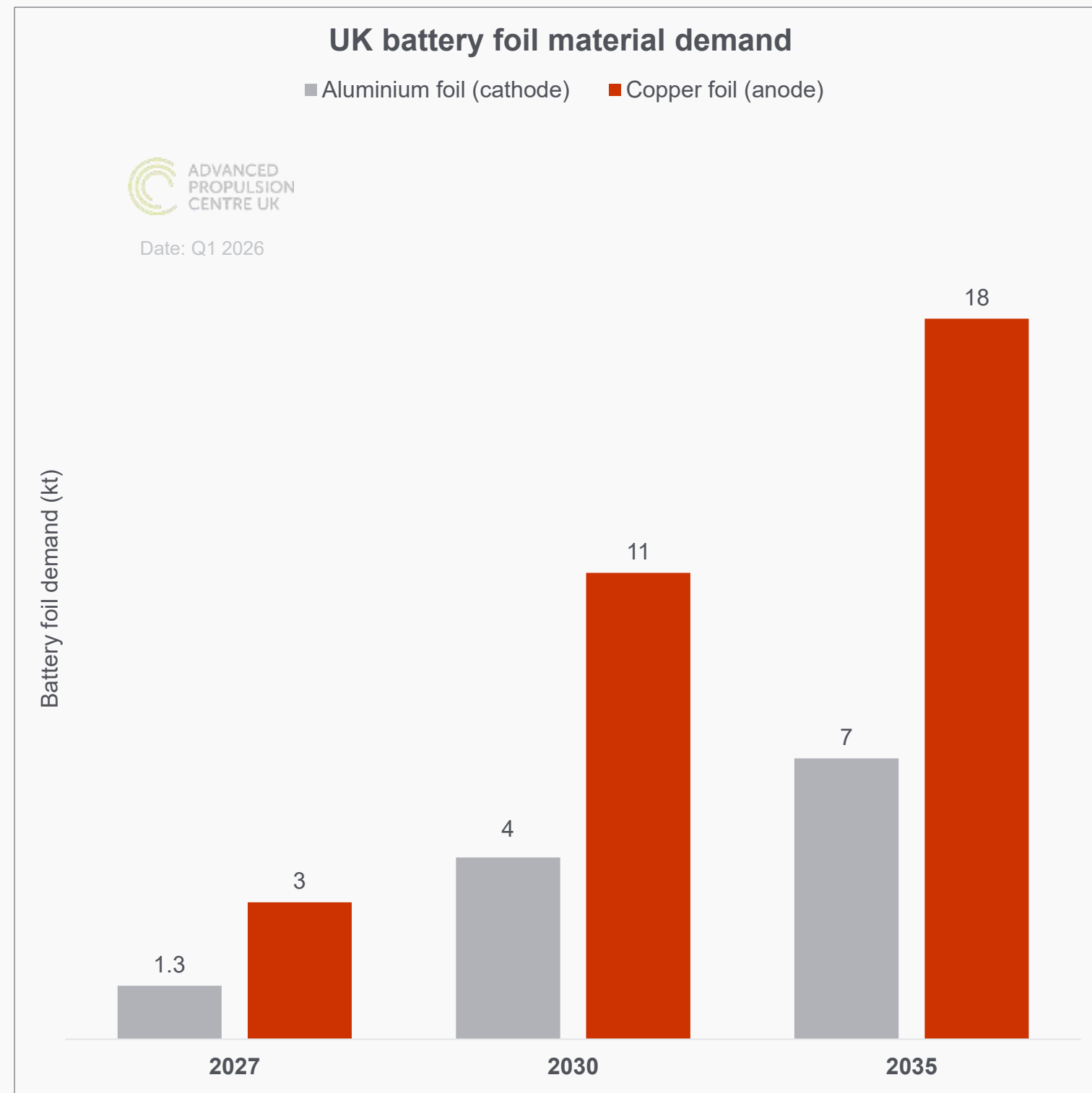
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 Note: Passenger cars & light commercial vehicles < 3.5t only, \*European forecast includes non-EU countries such as Turkey

# UK demand for battery foils, electrolyte and separator material

Passenger cars and light commercial vehicles (< 6 tonnes)

## Notable changes compared with previous quarter

- Material demand remains broadly unchanged in line with long term UK battery demand.





# Q1 2026 – Electrified components demand

## Electric motors

The following section reviews traction electric motor demand for LDVs (passenger cars and light commercial vehicles)



# Key facts and outlook: electric motors

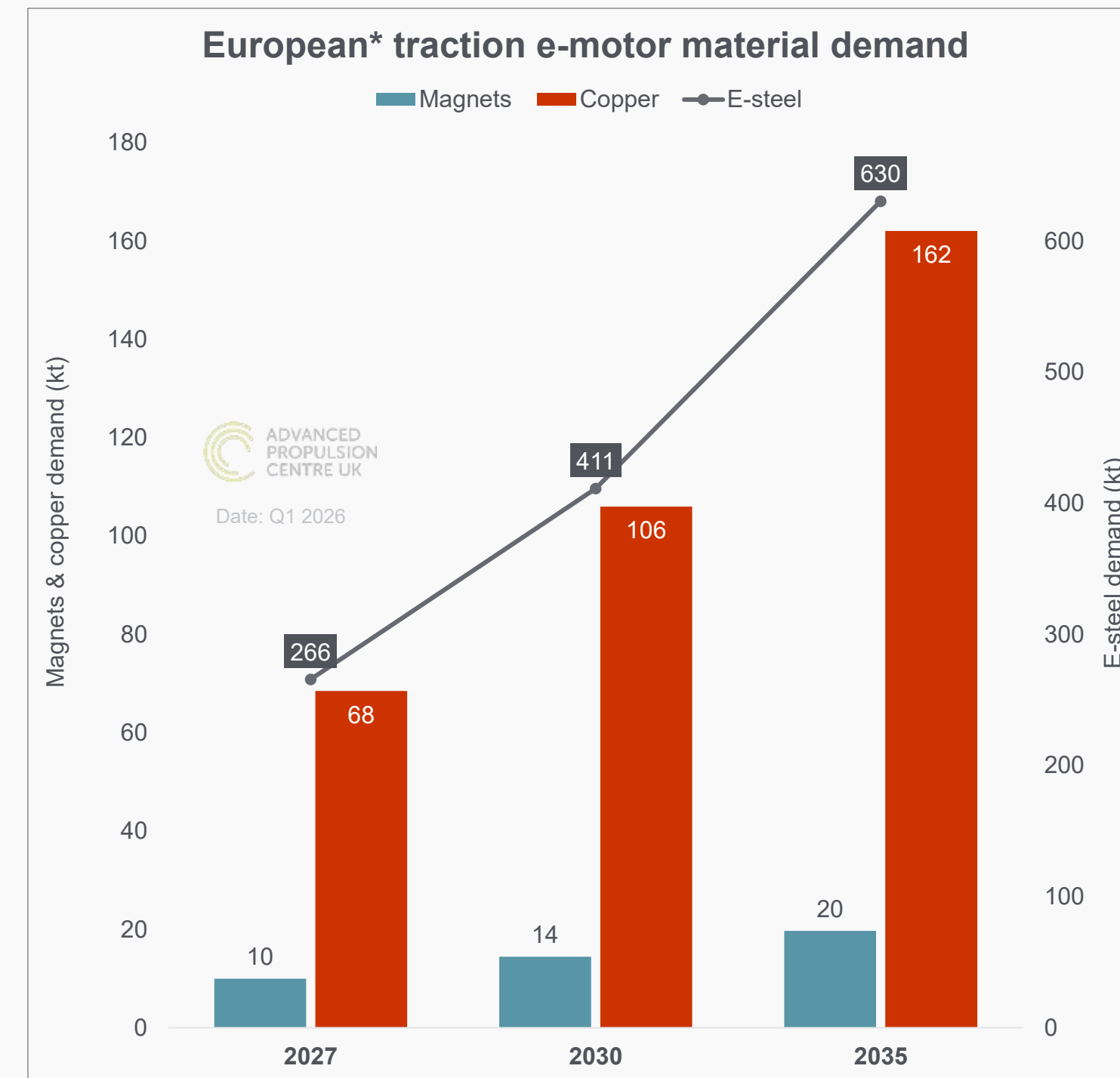
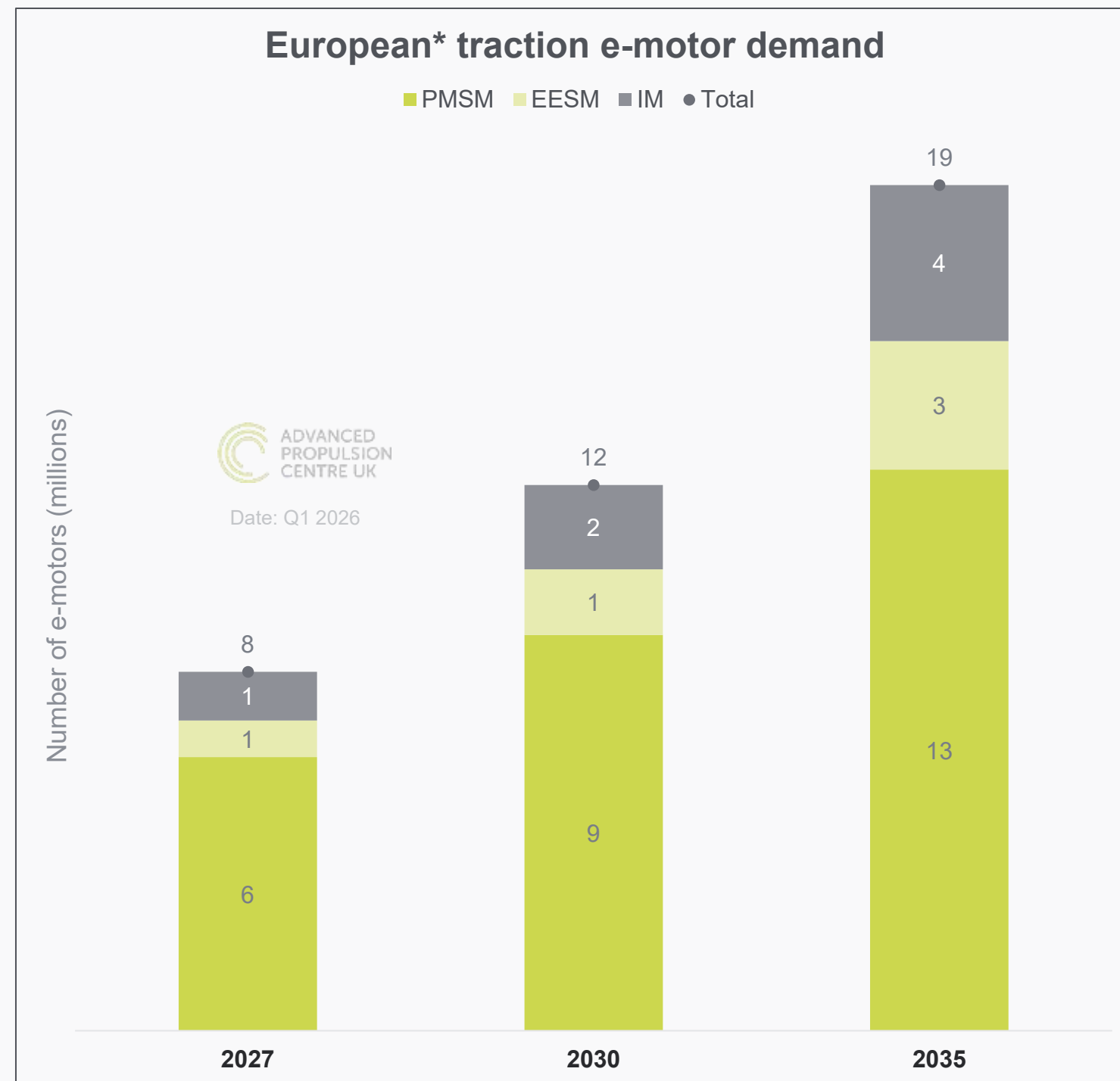
 <b>European demand update</b>	 <b>UK demand update</b>
<ul style="list-style-type: none"> <li>• European traction e-motor demand more than doubles from ~8M units (2027) to ~19M units (2035), driven by sustained xEV growth.</li> <li>• PMSMs remain dominant at ~two-thirds of demand, but EESM and IM technologies grow to over one-third by 2035, reflecting gradual diversification away from rare earth-dependent designs.</li> <li>• Magnet demand doubles (~10kt to ~20kt); copper demand more than doubles (~70kt to ~165kt); electrical steel sees the sharpest absolute growth (~270kt to ~650kt).</li> <li>• China's rare earth export controls are tightening access to key permanent magnet materials, raising costs and supply risk for Japanese magnet makers and EV supply chains downstream.</li> </ul>	<ul style="list-style-type: none"> <li>• UK traction e-motor demand nearly triples from ~0.4M units (2027) to ~1.5M units (2035), in line with domestic EV production growth.</li> <li>• PMSMs remain dominant, growing from ~0.3M to ~1.1M units; EESM penetration rises to ~0.4M units by 2035 as OEMs seek to reduce rare earth exposure.</li> <li>• Supply chain risk remains elevated given China's dominance in rare earth magnet processing, reinforcing interest in EESM architectures and recycled magnet feedstock.</li> <li>• The CirculaREEconomy project recovers permanent magnets from end-of-life EVs and wind turbines, recycling them into high-performance components. Recent testing showed EV motor rotors using recycled Ionic Technologies magnets matched the durability and performance of conventional motors in Ford trials.</li> <li>• HyProMag opened the UK's first commercial rare earth magnet recycling facility (Tyseley Energy Park, January 2026), producing up to 300 tonnes of NdFeB magnets per year using HPMS technology.</li> <li>• The Tyseley facility is a key enabler of the UK's Critical Minerals Strategy (November 2025), which targets 10% domestic sourcing and 20% recycling of critical minerals by 2035, and represents a significant milestone for a country with no rare earth production across the value chain.</li> </ul>

# European demand for traction electric motors

Passenger cars and light-commercial vehicles (< 6 tonnes)

## Notable changes compared with previous quarter

- No significant changes compared to the Q4 2025 Demand Report



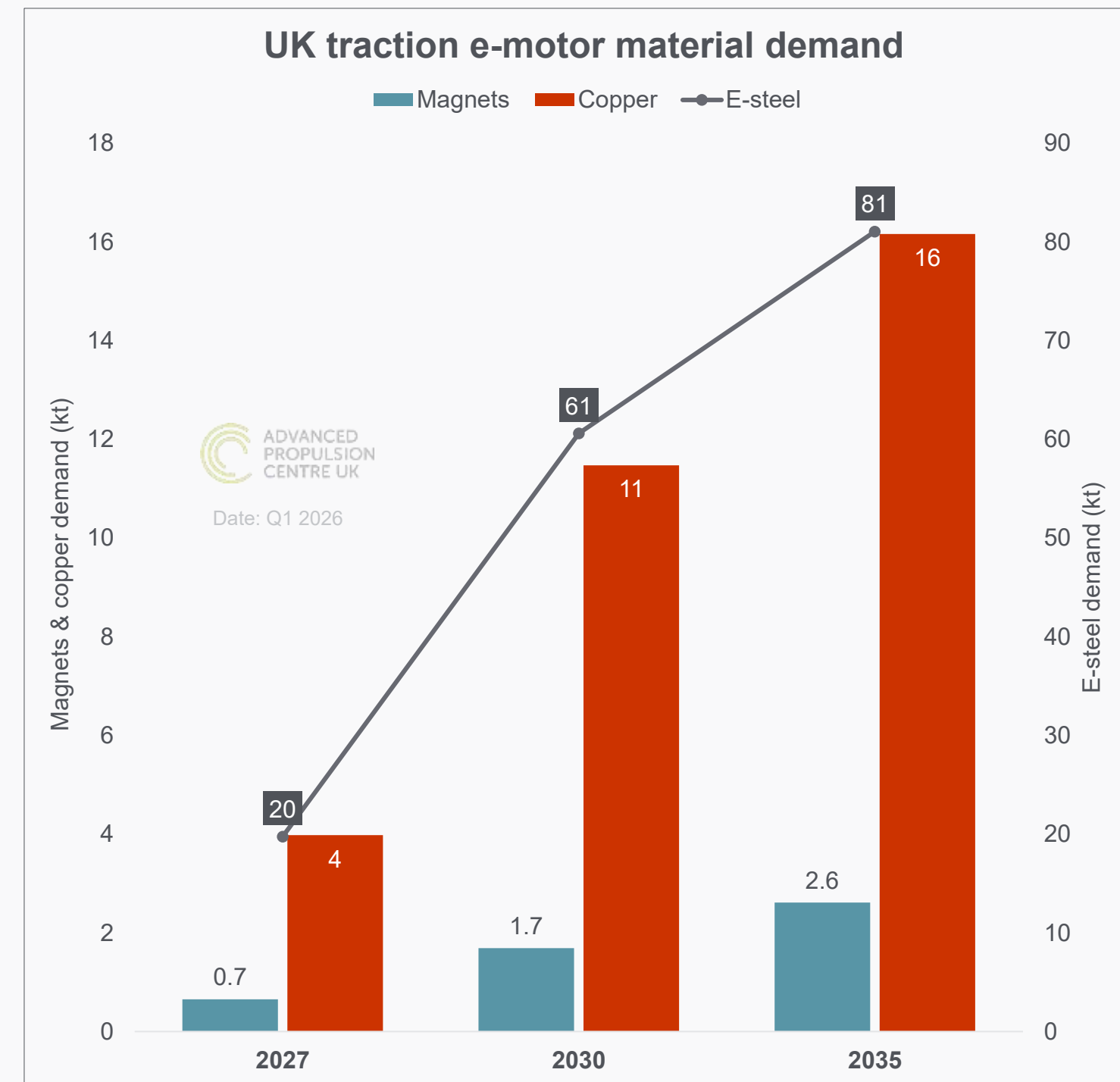
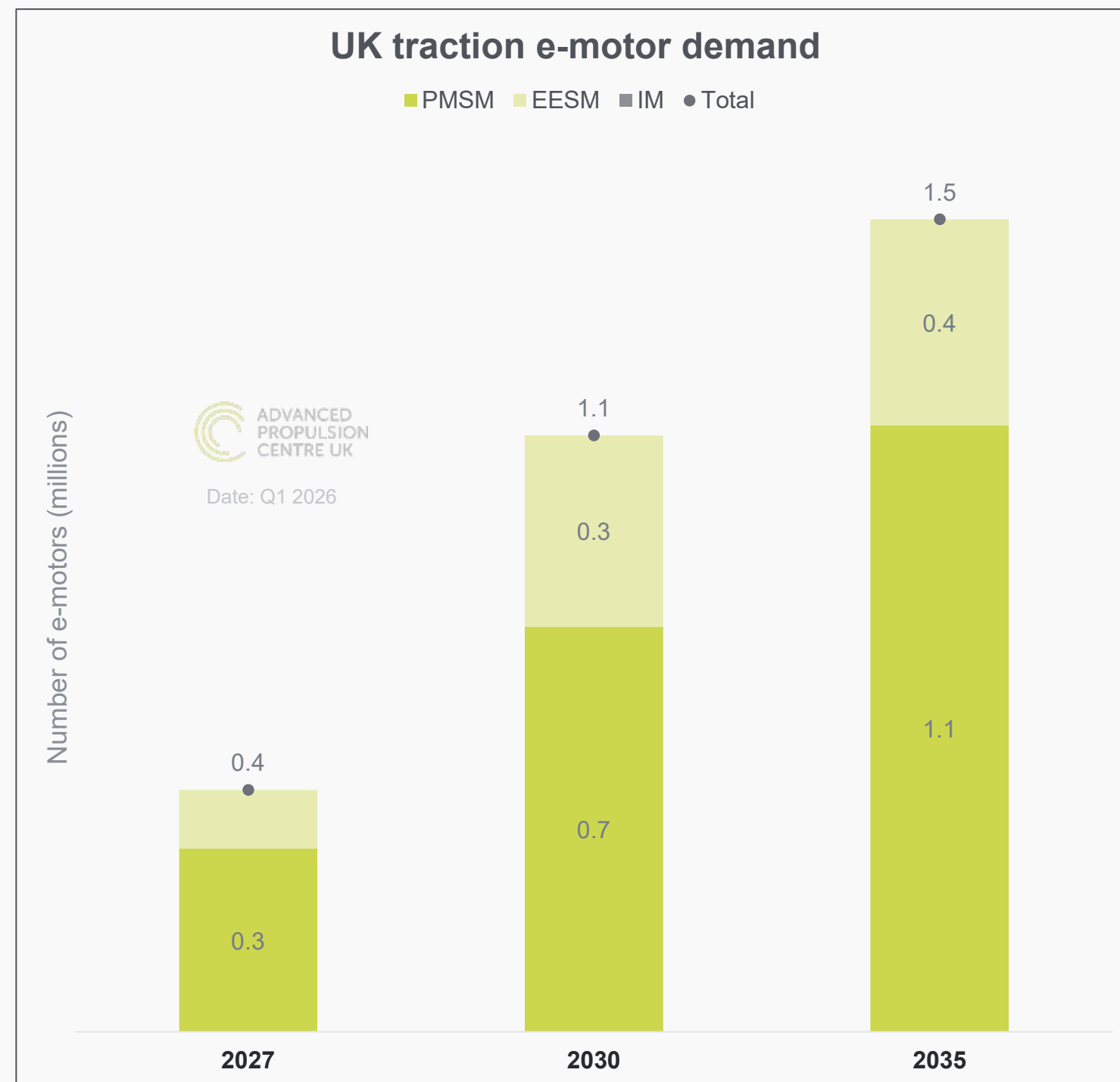
Source: APC Demand Databases using S&P Global AutoTechInsight (April 2026), Benchmark data (Q1 2026), BNEF forecasts (2026)  
 Note: Passenger cars & light commercial vehicles < 3.5t only, \*European forecast includes non-EU countries such as Turkey  
 Excluding mild hybrid electric motors

# UK demand for traction electric motors

Passenger cars and light commercial vehicles (< 6 tonnes)

## Notable changes compared with previous quarter

- No significant changes compared to the Q4 2025 Demand Report



# Glossary

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<b>BEV</b>	Battery electric vehicle
<b>CAM</b>	Cathode active material
<b>EESM</b>	Electrically excited synchronous motor
<b>EOL</b>	End-of-life
<b>FCEV</b>	Fuel cell electric vehicle
<b>HPMS</b>	Hydrogen Processing of Magnet Scrap
<b>IAA</b>	Industrial Accelerator Act
<b>IM</b>	Induction motor
<b>LCE</b>	Lithium carbonate equivalent
<b>LF(X)P</b>	Lithium iron phosphate (LFP) lithium-ion cathode which can include manganese (LFMP)
<b>NCA</b>	Nickel cobalt and aluminium lithium-ion cathode
<b>NMC</b>	Nickel manganese cobalt lithium-ion cathode
<b>NMCA</b>	Nickel manganese cobalt and aluminium lithium-ion cathode
<b>MHEV</b>	Mild hybrid vehicle
<b>OEM</b>	Original equipment manufacturer
<b>Other-HEV</b>	Non-plug-in hybrid vehicles including full and mild hybrids that combine an internal combustion engine and a battery to deliver power
<b>PHEV</b>	Plug-in hybrid electric vehicle combining an internal combustion engine and an electric powertrain
<b>PM SM</b>	Permanent magnet synchronous motor
<b>REE</b>	Rare earth element
<b>xEV</b>	Electrified vehicle including BEV, PHEV, HEV, FCEV
<b>YoY</b>	Year-on-year

This Q1 2026 automotive demand forecast is provided by the Technology Trends team at APC.

Data sources have been used from Q1 2026 (January – March) and April 2026 forecasts.

If you have any questions or would like more detail on any of the graphs or data, please email: [info@apcuk.co.uk](mailto:info@apcuk.co.uk)