

Media release

- Hybrids will gain traction in market share in the near-term, giving way post-2027 to battery-electric vehicles
- Impact of turbulent year being felt globally, affecting short-term transition to electric vehicles, with recovery anticipated by 2035
- Investment needed in European and UK battery cell supply chains to meet future production demand
- A focus on the UK's competitiveness for LFP battery-cell chemistries following increased appetite from automakers

Annual UK vehicle production to hit 1.2 million by 2035, with battery electric vehicles growing in market share over the next decade

20 January 2025- Analysis from the latest Advanced Propulsion Centre UK (APC) quarterly demand report highlights that the UK is largely expected to hit 2035's predicted production volumes, specifically zero-emission vehicle (ZEV) production.

With legislation looming to ban the sale of fossil-fuel internal combustion engines (ICE) in the UK by 2035, the demand for battery electric vehicles (BEVs) will increase, which is reflected in this latest APC report analysis. However, while the forecast maintains previously reported 2035 figures, the increase in demand will be slower than previously anticipated, with global forecasts for 2027

and 2030 reducing by 14 percent and 12 percent respectively. In the short term, the demand for electric hybrids is where we will see increased growth, especially in Europe, but this will eventually give way to an increased appetite from consumers for BEVs. This increase indicates the importance of new investment with the development of battery-cell chemistries continuing at pace.

Julian Hetherington, Automotive Transformation Director at the APC, said:

"While it has been a turbulent 12 months in terms of geopolitical and economic events affecting the global automotive market, including the UK and especially our main export markets in Europe, it is reassuring to see our predicted figures for 2035 largely on track towards our prior forecast position in the Q1 demand report 2024, acknowledging some near-term reductions reflecting market conditions.

Aligned with the continuing demand for BEVs, we are also observing advances and innovations in battery chemistries, in particular the adoption of lithium-iron-phosphate (LFP) batteries, primarily driven by their cost-effectiveness and ease with which system-level safety performance can be achieved. Our forecasts indicate up to a 30 percent chemistry share for LFP across Europe, with up to a 25 percent share here in the UK by 2035. Globally, our analysis points to this being as high as nearly half of all BEVs, at a 45 percent share.

Because of this increased appetite for LFP chemistries, there is a focus within the report on the UK's competitiveness for LFP and lithium-manganese-iron-phosphate (LFMP) cells. Understanding this pull, and the potential for LFP and LFMP, highlights the importance of investment in the battery value chain for these chemistries both now and in the future."

The demand report forecasts that, globally, the battery demand for passenger cars and light-duty vehicles, such as small vans, will reach around 4 TWh by 2035 – a compound annual growth rate (CAGR) of 14 percent, with the UK and Europe showing a slightly higher CAGR of 17 percent.

Dr Hadi Moztarzadeh, Head of Technology Trends at the APC, added:

"In the UK we expect to see growth in the market led by the introduction of new BEV models. Any expedited growth ahead of our predictions would lie in the introduction of more models than we are currently expecting. We can say with confidence that the outlook for the UK's production volumes looks positive, despite a shaky past 12 months and continuing near-term numbers stalling compared to what we had previously anticipated.

Looking further ahead to the end of the decade offers some comfort as we see steady growth in production volume. Globally, we forecast there will be 105 million cars and vans produced annually by 2035, of which nearly 50 percent will be BEV. Of this global total, we calculate that 1.2 million cars and vans will be produced each year in the UK, of which 1.1 million will be BEV.

The focus now will be on the supply chains and the ability within Europe and the UK to supply both battery cells and sub-components for localised vehicle production, as production in this area does not currently match the demand requirements. Investment is needed here to establish a resilient supply chain."

The report emphasises the necessary focus and investment required to develop the supply chain across Europe for cathode active materials (CAM) and anode active materials (AAM). It is focused on predictions for the automotive markets globally, in Europe and within the UK.

The APC's quarterly demand reports are prepared by a team of expert analysts. They are forward-looking documents produced to assess the current state-of-play of the UK automotive market, its supply chain and external influencing factors that impact production volumes and battery demand to 2035.

The APC is the organisation tasked by the UK government and the automotive industry to accelerate the transition to zero-emission transport solutions. It uses its unique knowledge gained from working closely with the global automotive industry to provide insight and forecasting to support government with strategic policy decisions and provide clarity to the industry about projected demand and product and technology roadmaps.

Read the Q3 Demand Report <u>here.</u>

Read our past Demand Reports here:

For an in-depth look at future battery developments for the automotive industry to 2040, see APC's <u>Electrical Energy Storage Roadmap</u>.