

## ABSTRAK

Krisis energi global dan meningkatnya tekanan terhadap ketergantungan BBM mendorong percepatan pengembangan kendaraan listrik di Indonesia. Di tengah dinamika global dan dorongan kebijakan strategis nasional, industri *Battery Electric Vehicle* (BEV) menunjukkan perubahan struktur persaingan yang signifikan, ditandai oleh meningkatnya jumlah pemain, inovasi produk, dan masuknya merek-merek baru yang agresif melalui skema impor dan insentif fiskal. Penelitian ini bertujuan memahami dinamika persaingan tersebut serta mengidentifikasi arah niat adopsi konsumen terhadap BEV. Pendekatan *embedded mixed-methods* yang berfokus pada analisis kualitatif sebagai lapisan utama melalui Lima Kekuatan Porter dan PESTLE untuk memetakan intensitas persaingan melalui wawancara mendalam dengan *industry experts*, sementara struktur pasar dianalisis secara kuantitatif menggunakan *Herfindahl-Hirschman Index* (HHI) dan *Concentration Ratio* empat pemain terbesar (CR4). Lapisan kuantitatif tambahan dilakukan melalui survei berbasis kerangka *Combined TAM-TPB* untuk memahami persepsi dan niat adopsi konsumen terhadap BEV.

Hasil penelitian menunjukkan bahwa persaingan industri BEV semakin intens seiring masuknya banyak merek baru, terutama dari Tiongkok, menawarkan harga kompetitif dan fitur unggul. Insentif fiskal menurunkan hambatan masuk, Dukungan insentif fiskal menurunkan hambatan masuk sehingga mendorong penyebaran pangsa pasar, tercermin dari penurunan HHI (0,2513 menjadi 0,1974), CR4 (85,1% menjadi 75,3%), menunjukkan struktur pasar masih berada pada kategori oligopoli ketat tetapi bergerak menuju tingkat persaingan yang lebih kompetitif. Analisis Porter menegaskan kuatnya ancaman pendatang baru dan posisi tawar pemasok pada komponen baterai. Analisis lingkungan eksternal mengonfirmasi bahwa faktor politik, insentif fiskal, dan agenda transisi energi menjadi pendorong utama ekspansi industri. Tantangan infrastruktur pengisian daya, ketergantungan teknologi impor, serta isu keberlanjutan sistem energi menjadi hambatan yang harus diantisipasi. Temuan C-TAM-TPB menunjukkan niat adopsi lebih dipicu oleh efisiensi biaya dan manfaat praktis. *Price value* menjadi determinan terkuat niat adopsi BEV, jauh melampaui faktor lingkungan, sementara pengaruh sosial ikut memperkuat minat dan hambatan terbesar tetap berasal dari kekhawatiran teknologi, infrastruktur, dan nilai jual kembali.

Berdasarkan temuan tersebut, penelitian ini merekomendasikan strategi bagi industri untuk memperkuat diferensiasi produk, meningkatkan keandalan baterai dan layanan *after-sales*, menjaga stabilitas harga, serta membangun kemitraan lokal untuk menekan biaya dan memenuhi target TKDN. Bagi regulator, konsistensi insentif, percepatan pembangunan infrastruktur pengisian daya, penyelarasan kebijakan energi, dan edukasi publik menjadi langkah penting untuk mempertahankan momentum adopsi BEV. Kolaborasi publik-swasta dalam pengembangan ekosistem, manufaktur baterai dipandang krusial agar transisi menuju kendaraan listrik berlangsung lebih inklusif, berkelanjutan, dan kompetitif.

**Kata kunci:** Mobil Listrik; Persaingan Industri; Lima Kekuatan Porter; PESTLE; Struktur Pasar; C-TAM-TPB

## ABSTRACT

*The global energy crisis and rising pressure to reduce dependence on fossil fuels have accelerated the development of electric vehicles in Indonesia. Amid global shifts and strong national policy support, the Battery Electric Vehicle (BEV) industry is experiencing significant changes in competitive structure, marked by a surge in new entrants, rapid product innovation, and the aggressive expansion of imported brands leveraging fiscal incentives. This study aims to examine these competitive dynamics and assess consumer adoption intentions toward BEVs.*

*A qualitatively driven embedded mixed-methods design was employed, with the primary qualitative layer using Porter's Five Forces and PESTLE frameworks to map industry rivalry based on in-depth interviews with industry experts. Market structure was analyzed quantitatively through the Herfindahl–Hirschman Index (HHI) and the four-firm Concentration Ratio (CR4), while an additional quantitative layer using a survey grounded in the Combined TAM–TPB framework captured consumer perceptions and adoption intentions.*

*The findings indicate that BEV industry competition has intensified due to the entry of numerous new brands—particularly from China—offering competitive pricing and advanced features. Fiscal incentives have lowered entry barriers and contributed to market-share dispersion, reflected in the decline of HHI (from 0.2513 to 0.1974) and CR4 (from 85.1% to 75.3%). Although the market remains a tightly concentrated oligopoly, it is shifting toward a more competitive structure. Porter's analysis highlights strong threats from new entrants and high supplier bargaining power for battery components. The external environment further underscores the pivotal role of political forces, fiscal incentives, and energy-transition agendas, alongside persistent challenges such as charging infrastructure gaps, technological dependence on imports, and sustainability concerns. The C-TAM-TPB analysis reveals that adoption intention is primarily driven by cost efficiency and perceived practical benefits. Price value emerges as the strongest determinant, surpassing environmental motivations, while social influence also plays a reinforcing role. Technological concerns, charging access, and resale-value uncertainty remain key inhibitors.*

*Based on these insights, this study recommends that industry players strengthen product differentiation, enhance battery reliability and after-sales services, maintain price stability, and pursue local partnerships to reduce costs and support domestic content requirements. For policymakers, maintaining consistent incentives, accelerating charging-infrastructure development, aligning energy-transition policies, and expanding public education are essential to sustaining BEV adoption momentum. Public–private collaboration in ecosystem development and battery manufacturing is deemed crucial to ensuring a more inclusive, sustainable, and competitive transition toward electric mobility.*

**Keywords:** *Electric Vehicles; Industry Competition; Porter Five Forces; PESTLE; Market Structure; Combined TAM-TPB*