

Electric Tractor Market by Propulsion (Battery, Hybrid & Hydrogen), Capacity (100kWh), Chemistry (LFP & NMC), Hybrid Tractor (100HP), Function (Agriculture, Utility & Industrial) and Region - Global Forecast to 2030

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Abstracts

The electric tractor market is estimated to grow from USD 0.7 billion in 2024 to USD 3.4 billion by 2030, at a CAGR of 28.3%.

The increasing demand for precision agriculture, stringent emission norms and regulations, development in battery technology, and customized electric tractors used in greenhouses, vineyards, & dairy applications will drive the electric tractors market in coming years. In addition, OEMs are showcasing their prototypes for hybrid, hydrogen, and electric tractors, creating a lucrative environment for the widespread adoption of electric tractors globally.

'The 51–100 HP hybrid electric tractor segment would be the fastest-growing market.'

Hybrid tractors with 51-100 HP power output have a wide range of offerings, efficiency, and versatility, which makes them ideal for small to medium-sized farms and diverse agricultural tasks. These hybrids integrate diesel engines with electric power systems, reducing fuel consumption and emissions while maintaining performance. Hybrid tractors are commonly used in the Americas and Europe to cater to mixed farming and livestock operations, aligning with sustainability goals and regulatory requirements. Mixed farming involves various tasks such as fieldwork, planting, harvesting, and livestock management, where 51-100 HP hybrid tractors offer the versatility needed to perform these tasks efficiently, making them ideal for mixed farming operations where flexibility is essential.

Mixed farming is widespread in North America, particularly in regions with a temperate climate conducive to crop cultivation and livestock grazing. States like Iowa, Nebraska, & Kansas, known for their corn and soybean production alongside beef and dairy farming, are prime markets for 51-100 HP hybrid tractors. Also, some European countries, like France, Germany, and the UK, have a long history of mixed farming practices. Europe also has some major vital players who are into manufacturing hybrid tractors named Landini, AUGA, Steyr, Antonio Carraro, HAV, and International Tractors Limited, who are continuously innovating and introducing advanced hybrid tractors tailored to the needs of European farmers. For instance, companies like Antonio Carraro launched the TTR 7600 Infinity, a wide-track, reversible drive tractor with a hybrid mechanical-hydrostatic transmission. It has a 75 HP Kohler turbo STAGE 5, 4-cylinder engine, 16V, and 2482 cc. Also, Landini showcased the REX4 Electra at EIMA 2021 in October 2021. This hybrid electric tractor had a nominal output of 50kW (67HP). Adding further, an Indian company named HAV also launched its three models, S1 Series 45, S1 Series 50, and S1 Series 55, hybrid electric tractors in August 2021. This vehicle reduces emissions to some extent and increases fuel efficiency.

Moreover, advancements in battery technology and electric drivetrain systems drive the growth of hybrid electric tractors in this segment. These examples showcase the growing interest and investment in hybrid electric tractor technology, paving the way for a more sustainable future in agriculture.

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