

The electric revolution's coming, and it's on two wheels

The Asia-Pacific region's e-bike industry is ideally placed to be a driving force in the electric revolution globally

Tesla's stock surged to record levels, Geely-owned Volvo announced an all-electric fleet by 2030 and Volkswagen AG publicised plans for six new battery plants by 2025. All these recent business headlines reflect the growing momentum of everything "e(lectric)-mobility".¹

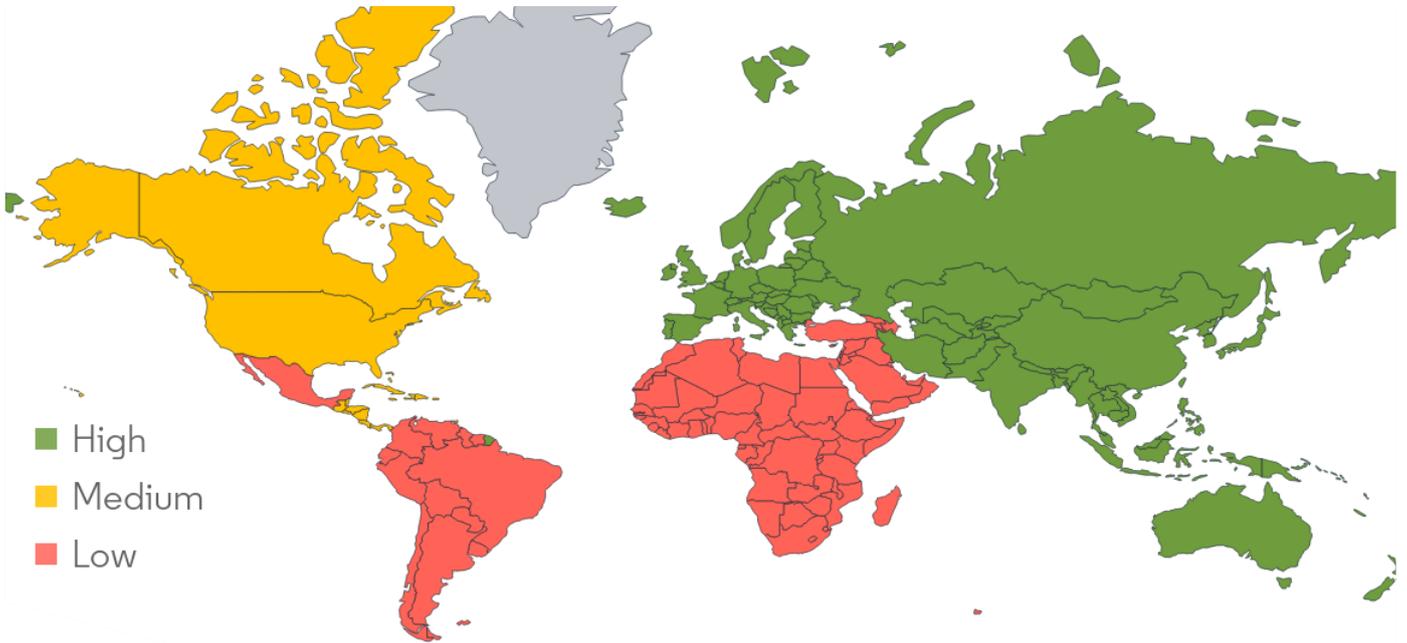
Although intriguing, these developments represent only a fraction of a much bigger and more complex global equation, encompassing technical innovation, climate change, urban development, sustainability, government policies, change of consumer behaviour and much more. Electric cars may dominate the headlines, but they are not leading the transition to electric vehicles.

Why? Cost and infrastructure issues are still plaguing electric cars' broad adoption. Instead, two-wheel vehicles like electric bicycles (e-bikes), electric scooters (e-scooters), electric motorcycles (e-motorcycles), and micro-mobility devices are leading the way.

When it comes to the number of vehicles on the road, electric two-wheel vehicles are way ahead of their four-wheeled counterparts. It is not in the metropolises of North America or the major cities in Europe where electric vehicles are making the biggest headway – it is in Asia and more specifically, China. In the UK, there are some 140,000 electric vehicles today – quite a surge from just 3,500 in 2013, but in China, 22.7 million of them were sold in 2018 alone – more than in the rest of the world combined.²

The surge of e-bikes is going beyond China. India, Indonesia, Vietnam, Thailand and other Asian markets are embracing electric two wheelers at scale. While the rest of the world is taking their first steps to an electric vehicle future, Asia is already walking at pace. Extending from its already impressive base, the Asia-Pacific market for e-bikes is expected to grow at a CAGR of 10.1% between 2020 to 2027 and to reach US\$10.26 billion by 2027.³

Figure 1: E-bike market – growth rate by region (2021-2026)



Source: Mordor 2020.

The other main growth area is Europe, with the Netherlands and Germany currently leading the charge. More than 40% of the bicycles sold in the Netherlands last year were electric. In Germany, a third of the 4.3 million new bicycles sold had a battery, according to the country's industry association.⁴

An important consumer market, the Asia-Pacific region also is a production hub for e-bikes and related components, like battery cells and charging infrastructure.

Opportunities for investors

With major suppliers like Bosch, Liv Cycling (EnergyPak), Panasonic, Samsung SDI, and Shimano Inc. commanding more than 70% of the global market for e-bike battery packs, the segment is moderately consolidated. But there are still exciting opportunities for investors.

The e-bike battery pack market offers a dynamic growth outlook with a predicted compound annual growth

rate of 13% for the five-year period ending in 2026. Commitments like Samsung SDI's plan to invest US\$1.15 billion into battery production capacities in Xian and Tianjin, China are testament to that potential.⁵

Closely connected to power cells is the market for charging equipment. The market is young, and its potential is largely untapped as yet. Critical areas like speed of charging to reduce vehicle downtime, improved convenience from wireless and on-demand mobile charging, more efficient charging through grid and renewables integration are some of the opportunities. Innovations in these areas are just beginning to emerge and their broad scope creates a highly diverse market with hundreds of competitors.

It should come as no surprise that, in addition to native players like Merida, Shimano or Samsung, international players are also strengthening their presence in the region. Bosch eBike Systems for example opened its new Asia-Pacific

headquarters in Taichung, Taiwan in 2020. It is the latest milestone in a continually growing footprint in Asia-Pacific, after successful market entries in Australia, Japan and New Zealand within the last six years.⁶ Continental also has corporate offices in China, South Korea and Vietnam.

Companies which are successfully competing in the e-bike market already are enjoying the benefits. Giant Manufacturing, the US\$4 billion Taiwanese group, saw revenue jump 55% year-on-year in June 2020. Accell, the US\$730 million parent to brands such as Raleigh and Sparta, earned more than half its revenue from e-bikes last year.⁷

Other companies outside the core bike industry are taking note and trying to hop on the bandwagon. Traditional car and motorcycle manufacturers are among them.

General Motors (GM), Ford Motor Company in partnership with Pedego, Peugeot, Volkswagen, Ducati Motor

Holding in partnership with Thok, all introduced e-bike offerings of some sort in the last two years. Jeep unveiled its efforts as part of a 2020 Super Bowl advertisement, the most expensive TV advertising time available in the US.⁸

The appeal goes beyond the immediate, established players within the mobility sector though. The technological advances brought about by e-bikes have given other industries, as well as private and institutional investors, food for thought.

The future of e-bikes

Where the bicycle's design has arguably remained constrained to a dual triangle frame and a pair of wheels for most of its existence, the e-bike provides the opportunity to create a gadget which can build in software appeal and tech-ready hardware.

This explains the attraction for Foxconn Technology, the main assembler of Apple products, who has joined forces with a fellow

Taiwanese hardware firm, Yageo Group, to delve further into electric vehicle production.⁹

It is part of the rationale as to why Groupe Bruxelles Lambert (GBL), which owns the lion's share of Adidas, took a controlling stake in Canyon Bicycles in late 2020. Joining GBL as an investor is Tony Fadell, a former Apple executive, renowned for his work inventing the iPod and NEST (the temperature-control device). One of Canyon's most recent projects was a prototype for an "electric pedal car", which was rumoured to now receive significant funding following the acquisition.¹⁰

Investors are betting on the continuation of this growth trend. Shares in Giant Manufacturing have risen 43% so far this year and are now valued at 26 times Daiwa Capital Markets' forecast earnings for 2021. Shimano, the US\$19 billion Japanese group which controls roughly half the global market for bicycle components, trades on a forward multiple of 35 times, according to Refinitiv data.¹¹

In summary, the Asia-Pacific region is in a prime position to not only benefit from continued sales growth in the e-bike sector, but also harness significant investment and innovation. We're looking forward to seeing where e-bikes will take investors in the coming years.

Sources:

- 1 Bloomberg, 2020.
- 2 Wired - KATIA MOSKVITCH, Mar 2019.
- 3 Data Bridge Market Research - Asia-Pacific E-Bike Market - Industry Trends and Forecast 2021 to 2027 - August 2020.
- 4 Reuters - E-bikes give the two-wheeled market a jolt - Peter Thal Larsen - July 2020.
- 5 Mordor Intelligence - E-BIKE BATTERY PACK MARKET - GROWTH, TRENDS, COVID-19 IMPACT, AND FORECASTS (2021 - 2026) - 2020.
- 6 www.bosch-ebike.com/au/news/new-asia-pacific-headquarters, June 2020.
- 7 Reuters - E-bikes give the two-wheeled market a jolt - Peter Thal Larsen - July 2020.
- 8 Navigant Research - E-Bikes Offer New Revenue Opportunities for the Automotive Industry - Ryan Citron - 2020.
- 9 Forbes - Apple Contractor Foxconn Pushes Further Into Electric Vehicle Production - Ralph Jennings - October 2020.
- 10 www.fabbaloo.com, January 2021.
- 11 Reuters - E-bikes give the two-wheeled market a jolt - Peter Thal Larsen - July 2020.

To find out more visit
COLUMBIATHREADNEEDLE.COM



Important Information: For use by Professional and/or Qualified Investors only (not to be used with or passed on to retail clients). This document is intended for informational purposes only and should not be considered representative of any particular investment. This should not be considered an offer or solicitation to buy or sell any securities or other financial instruments, or to provide investment advice or services. **Investing involves risk including the risk of loss of principal. Your capital is at risk.** Market risk may affect a single issuer, sector of the economy, industry or the market as a whole. The value of investments is not guaranteed, and therefore an investor may not get back the amount invested. **International investing** involves certain risks and volatility due to potential political, economic or currency fluctuations and different financial and accounting standards. **The securities included herein are for illustrative purposes only, subject to change and should not be construed as a recommendation to buy or sell. Securities discussed may or may not prove profitable.** The views expressed are as of the date given, may change as market or other conditions change and may differ from views expressed by other Columbia Threadneedle Investments (Columbia Threadneedle) associates or affiliates. Actual investments or investment decisions made by Columbia Threadneedle and its affiliates, whether for its own account or on behalf of clients, may not necessarily reflect the views expressed. This information is not intended to provide investment advice and does not take into consideration individual investor circumstances. Investment decisions should always be made based on an investor's specific financial needs, objectives, goals, time horizon and risk tolerance. Asset classes described may not be suitable for all investors. **Past performance does not guarantee future results, and no forecast should be considered a guarantee either.** Information and opinions provided by third parties have been obtained from sources believed to be reliable, but accuracy and completeness cannot be guaranteed. This document and its contents have not been reviewed by any regulatory authority.

In Australia: Issued by Threadneedle Investments Singapore (Pte.) Limited ["TIS"], ARBN 600 027 414. TIS is exempt from the requirement to hold an Australian financial services licence under the Corporations Act and relies on Class Order 03/1102 in marketing and providing financial services to Australian wholesale clients as defined in Section 761G of the Corporations Act 2001. TIS is regulated in Singapore (Registration number: 201101559W) by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289), which differ from Australian laws.

In Singapore: Issued by Threadneedle Investments Singapore (Pte.) Limited, 3 Killiney Road, #07-07, Winsland House 1, Singapore 239519, which is regulated in Singapore by the Monetary Authority of Singapore under the Securities and Futures Act (Chapter 289). Registration number: 201101559W. This advertisement has not been reviewed by the Monetary Authority of Singapore.

In Hong Kong: Issued by Threadneedle Portfolio Services Hong Kong Limited 天利投資管理香港有限公司. Unit 3004, Two Exchange Square, 8 Connaught Place, Hong Kong, which is licensed by the Securities and Futures Commission ("SFC") to conduct Type 1 regulated activities (CE:AQA779). Registered in Hong Kong under the the Companies Ordinance (Chapter 622), No. 1173058.

In EEA: Threadneedle Management Luxembourg S.A. Registered with the Registre de Commerce et des Societes (Luxembourg), Registered No. B 110242 44, rue de la Vallée, L-2661 Luxembourg, Grand Duchy of Luxembourg.

In UK: Issued by Threadneedle Asset Management Limited. Registered in England and Wales, Registered No. 573204, Cannon Place, 78 Cannon Street, London EC4N 6AG, United Kingdom. Authorised and regulated in the UK by the Financial Conduct Authority.

In Switzerland: Issued by Threadneedle Portfolio Services AG, Registered address: Claridenstrasse 41, 8002 Zurich, Switzerland.

This document is distributed by Columbia Threadneedle Investments (ME) Limited, which is regulated by the Dubai Financial Services Authority (DFSA). For Distributors: This document is intended to provide distributors' with information about Group products and services and is not for further distribution. For Institutional Clients: The information in this document is not intended as financial advice and is only intended for persons with appropriate investment knowledge and who meet the regulatory criteria to be classified as a Professional Client or Market Counterparties and no other Person should act upon it. **Columbia Threadneedle Investments is the global brand name of the Columbia and Threadneedle group of companies.**
columbiathreadneedle.com Issued 05.21 | Valid to 12.21 | J31497 | APAC_EMEA 3560122