

ECONOMIST
INTELLIGENCE

EIU

Automotive in 2022

A report by EIU



The world leader in global business intelligence

Economist Intelligence offers deep insight and analysis of the economic and political developments in the increasingly complex global environment, identifying opportunities, trends and risks on a global and national scale.

Formed in 1946, EIU has become a valuable commentator, interpreter and forecaster on the accelerating phenomenon of globalisation, enabling businesses, financial firms, education institutions and governments to plan effectively for uncertain futures.

Actionable insights into the world's markets

The world's leading organisations rely on our subscription services for data, analysis and forecasts that keep them informed of emerging issues around the world.

We specialise in:

- **Country analysis**—access detailed country-specific economic and political forecasts, as well as assessments of the business environments in different markets with EIU Viewpoint;
- **Risk analysis**—our risk services identify actual and potential threats around the world and help our clients to understand the implications for their organisations. Available products include Country Risk Service and Risk Briefing;
- **Industry analysis**—five-year forecasts, analysis of key themes and news analysis for six major industries in 60 economies. These forecasts are based on the latest data and in-depth analysis of industry trends, available via EIU Viewpoint; and
- **Speaker Bureau**—book the experts behind the award-winning economic and political forecasts. Our team is available for presentations and panel moderation, as well as boardroom briefings covering their specialisms. Explore Custom Briefing for more speaker information.

Contact us

LONDON

Economist Intelligence
20 Cabot Square, London E14 4QW,
United Kingdom
Tel: +44 (0)20 7576 8000
e-mail: london@eiu.com

NEW YORK

Economist Intelligence
750 Third Ave, 5th Floor,
New York NY 10017, United States
Tel: +1 212 541 0500
e-mail: americas@eiu.com

HONG KONG

Economist Intelligence
1301 Cityplaza Four 12 Taikoo Wan Road Taikoo
Shing, Hong Kong
Tel: + 852 2585 3888
e-mail: asia@eiu.com

GURGAON

Economist Intelligence
Skootr Spaces, Unit No. 1 12th Floor, Tower B,
Building No. 9 DLF Cyber City, Phase - III Gurgaon -
122002 Haryana,
India
Tel: +91 124 6409486
e-mail: asia@eiu.com

DUBAI

Economist Intelligence
PO Box No - 450056, Office No - 1301A Aurora
Tower Dubai Media City Dubai,
United Arab Emirates
Tel: +971 4 4463 147
e-mail: mea@eiu.com

For more information on our solutions and how they can help your organisation, please visit www.eiu.com/n/.

Automotive in 2022: back to near-normal

Key forecasts

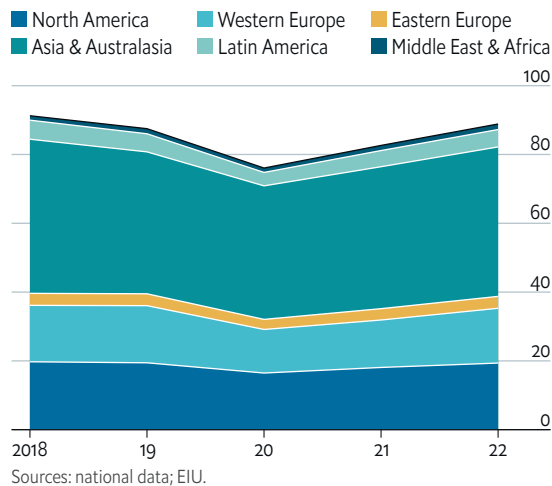
- Global sales of new vehicles will rise by 7.5% in 2022, taking them back past 2019 levels. The recovery will be led by Asia and North America.
- Many vehicle makers will still struggle to meet recovering demand amid continuing supply-chain disruptions.
- Global sales of new electric vehicles (EVs) will continue to soar, rising by 51%. New emissions rules will force carmakers to make far-reaching decisions about their fossil-fuel models.

Global sales of new vehicle will surpass 2019 levels

Recovery in global automotive markets will continue in 2022, with new-vehicle sales racking up similar growth rates to those of 2021. EIU expects new-car sales to rise by 7.8%, year on year, while sales of new commercial vehicles (CVs) will increase by 7.1%. This will take total sales back past 2019 levels, reversing the pandemic-induced slump of 2020.

However, the extent of the rebound will vary widely by region, depending on the pace of the economic recovery, as well as the depth of the slump they have endured. Indeed, new-vehicle sales in North America and Asia have already regained the ground they lost in 2021. In 2022, it will be the turn of the Middle East and Eastern Europe, but Western Europe and Latin America will have to wait until 2023 to return to pre-pandemic levels. China alone will account for 30% of sales in 2022 (although its share has fallen from 33% since 2020), while the US will take 19%.

New-vehicle sales will surpass 2019 levels
(sales by region; m units)



Supply-chain bottlenecks will widen the demand-supply gap

The global recovery in vehicle sales will be dampened by supply-chain volatility in the automotive industry. A global shortage of semiconductors, a key automotive component, will continue to hit automakers' ability to service rebounding demand. We expect the chip crunch to last well into 2022, before easing in the last six months. We are also expecting prolonged shortages of magnesium, an essential component for producing aluminium alloys used in vehicles. Production in China, which accounts for 87% of global supply, is being affected by power shortages that could extend throughout the first

quarter of 2022. In addition, EV makers are running short of lithium and cobalt, which are crucial for battery manufacturing.

The widening demand-supply gap will push up the prices for new as well as used car models, and will result in long waiting periods for customers. Mercedes-Benz (owned by German manufacturer Daimler) says some of its buyers will have to wait more than a year for their models to be delivered. By then, investment into production of these commodities should start to yield results, and prices will start to fall quickly in response.

EV sales will continue to soar

The one bright spot for automotive during the pandemic was EV sales, which grew by 42%, even as global automotive markets shrank. Growth accelerated still further in 2021, forcing us to raise our forecasts, but will slow slightly in 2022 as the base for comparison rises. Even so, we expect new-EV sales to rise by 51% worldwide, accounting for around 9% of total new-car sales. In summary, EVs are finally becoming serious market disruptors.

The market will continue to be dominated by China and Europe, accounting for around 80% of sales between them. However, the US is catching up rapidly. In August, the US government announced a non-binding goal to make EVs account for half of new-vehicle sales by 2030. In 2022, if legislation is approved, it will start implementing a US\$174bn investment programme to make that happen.

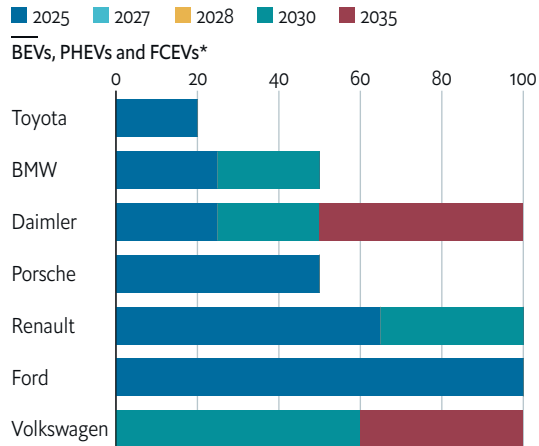
Governments will raise long-term targets for clean vehicles

In 2022 we expect governments across the world to set more stringent regulations to reduce transport emissions. These will include measures to accelerate the adoption of EVs and more deadlines for the phase-out of internal combustion engines (ICE). As a result, we expect carmakers to expand their EV launch plans.

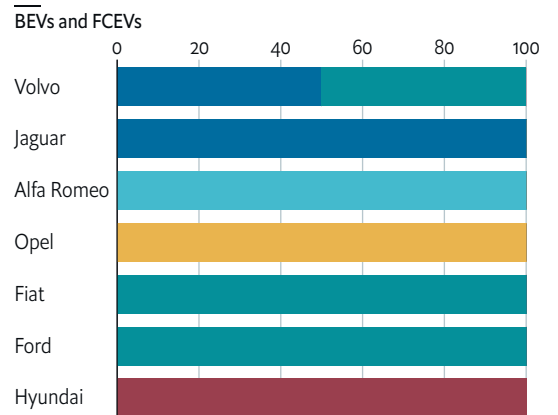
The US Environmental Protection Agency (EPA) has already proposed tougher vehicle-fuel economy standards for passenger cars and light trucks for model years 2023-26, reversing standards set by the previous administration. These regulations are likely to be finalised by early 2022. The EPA also plans to finalise the Clean Trucks Plan in 2022, which aims to reduce emissions from new heavy-duty vehicles starting with model year 2027. Meanwhile, the European Commission's 'Fit for 55' proposal calls for the phase-out of ICE vehicles by 2035. The EU will also extend its Emissions Trading System (EU ETS) to cover road transport.

As is the case with existing fuel-efficiency rules, these requirements are likely to be most stringent in developed countries. This opens up a dilemma for carmakers about whether to retire their fossil-fuel models entirely, or to shift these production and sales operations to developing countries. We do not, for example, expect EV sales in India to reach over 50% of the new-car market until around 2040. Given the long timelines involved in retooling plants, some of those decisions over future production will have to be made in 2022.

Carmakers in Europe promise electric switch
 (electric vehicle targets by year; % of total sales)



Sources: company reports; EIU.



*Battery electric vehicles (EVs); plug-in hybrid EVs; fuel-cell EVs.

What to watch for in 2022

China will lift investment caps for foreign

carmakers: Several foreign carmakers are likely to increase their stakes in their car-production joint ventures (JVs) in China, after the country removes the 49% cap on ownership from January 2022. The move follows similar changes for EVs (in 2018) and CVs (2020). Full ownership will provide foreign carmakers with an opportunity to expand their presence in the Chinese automotive market and compete with domestic manufacturers.

Technology companies will move into EV

manufacturing: The much-heralded trend of EV manufacturing is gathering pace, bolstered by the news that Foxconn (Taiwan) has unveiled three EV prototypes. Apple, a US-based electronics company, is expected to build a beta version of its secret “Apple Car” in 2022, while Sony (Japan) and Xiaomi (China) may accelerate their own EV plans.

Car-hire fleets will go electric: In October 2021 Hertz, a US car-rental company, said it plans to offer 100,000 Tesla EVs to drivers by end-2022, along with a recharging network. Rival Avis has hinted it may follow suit.

Self-driving cars will edge forward: Honda (Japan), BMW and Mercedes (Germany) will be among those testing level-3 autonomous vehicles (at level 3, the car is responsible for avoiding obstacles) in 2022. Regulators in California (US) and Germany will allow limited commercial deployment. China’s New Taxonomy of Driving Automation for Vehicles will also come into effect on March 1st 2022, underpinning future regulations in the area.

Fuel-cell EVs (FCEVs) go off-road: Hyundai (South Korea) wants to apply hydrogen fuel-cell technology to all its commercial vehicles by 2028. In 2022 it will start testing the Grenadier FCEV off-roader, the fruit of its partnership with INEOS, a hydrogen-fuel supplier. An FCEV Range Rover, from Indian-owned Jaguar Land Rover, is on a similar schedule. The less rugged Honda Clarity, however, will end production in 2022.

New technologies

Recent EV recalls have shed light on a common hazard of using lithium-ion batteries: they may burst into flames. In 2022 EV makers will experiment with **other types of batteries**, including lithium-iron phosphate (LFP) and solid-state batteries. Tesla is moving to LFPs in most of its models, and has placed an order for 45 GWh-worth (enough for 400,000 vehicles) from China’s Contemporary Amperex Technology for 2022. Toyota (Japan) is working on a solid-state battery EV, and aims to begin sales in Japan in 2022. Although both battery types are less fire-prone than lithium-ion, they are currently costlier. However, ramped-up investment may bring costs down.

Another development to watch is the expansion of **connected-car technology**. For instance, Apple is planning to team up with carmakers to expand the reach of what the iPhone, its flagship mobile phone, can do in a vehicle. This may include controlling air conditioning and adjusting seats, as well as accessing the speedometer, satnav, temperature, and humidity-sensor readings. The resulting data will add to Apple’s own analytics.

Understand a country's political, policy and economic outlook with the world's best forward-looking analysis and data. Our award-winning expertise looks at global dynamics that impact your organisation, helping you to operate effectively and plan for the future. Included in our service:

- Global and regional outlook spanning politics, economics and market-moving topics
- Daily insights on the developments that impact the future outlook
- Executive summaries of country forecasts over the medium-term outlook
- Medium-term country forecasts on ~200 countries' political and economic landscape
- Long-term country forecasts on the structural trends shaping ~80 major economies
- Industry analysis on the outlook for 26 sectors in ~70 markets
- Commodity forecasts on supply, demand and prices of 25 critical goods
- Macroeconomic data on forecasts, as well as historic trends
- Industry data on demand and supply of key goods, now and in the future
- Proprietary ratings on the business environment
- Thematic analysis of the cross-cutting issues that our experts expect to shape the global outlook

How EIU Viewpoint helps you to stay ahead

Unparalleled coverage - global, regional and country-level analysis for nearly 200 markets. 20,000 data series every month, led by our worldwide network of expert analysts and on the ground contributors

360-degree view - our approach is unique; deliberately designed to intersect politics, policy and the economy, our methodology leads to a more nuanced perspective than simple number crunching

Beating consensus - with over 70 years of experience, we have a track record of making bold calls and getting them right

Evidence-based insights - our editorial team is fiercely independent and rightly so. This ensures you can trust our analysis and apply the insights it offers with confidence.

Find out more information about our service features, delivery platforms and how EIU Viewpoint could benefit your organisation by visiting:

eiu.com/viewpoint

Copyright

© 2021 The Economist Intelligence Unit Limited. All rights reserved. Neither this publication nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of The Economist Intelligence Unit Limited.

While every effort has been taken to verify the accuracy of this information, The Economist Intelligence Unit Ltd. cannot accept any responsibility or liability for reliance by any person on this report or any of the information, opinions or conclusions set out in this report.