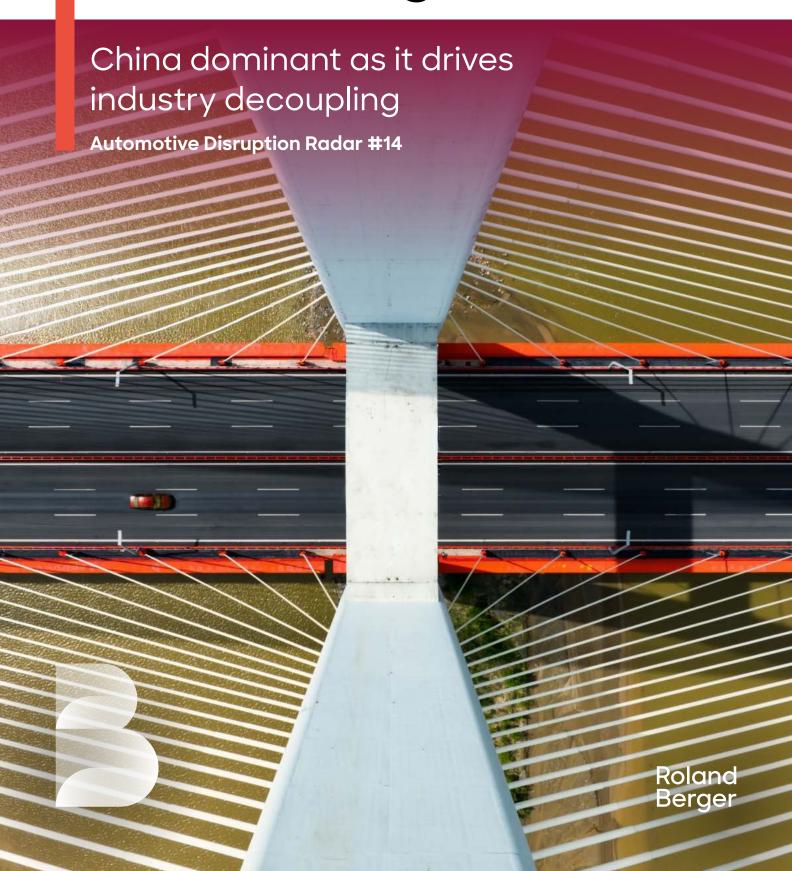


# In the driving seat



# Welcome back

ack with fresh momentum and sharper insights, the ADR is ready for its next chapter. In recent years, electrification has been a dominant force in the automotive industry, as highlighted by Roland Berger's publications, including the EV Charging Index and the Battery Monitor. Now, as autonomous mobility gains traction and other technical and consumer trends begin to shift, the ADR is rejoining Roland Berger's knowledge portfolio to comprehensively track the evolution of the industry.

#### Still out in front

Roland Berger's Automotive Disruption Radar has been leading the way in industry intelligence since its inception in 2017. Now including 22 countries, it offers a regular, ongoing assessment of change within the global automotive industry to support decision making. Every edition draws heavily on a comprehensive survey of around 1,000 people in each country to monitor 26 key industry indicators – from EV sales to venture capital investment. The results are used to score each country and facilitate in-depth analysis.

After eight years and 13 editions, the 14th edition of the ADR has been updated and the scaling of selected indicators has been adjusted. The changes reflect the rapidly evolving nature of the industry, particularly around EVs and regulation, while still allowing comparisons with past editions (see full explanation at end). The result is a more focused, relevant and revealing insight into the evolution of the global automotive industry.

In line with past editions, this overview provides analysis of the top performers, biggest improvers and strugglers among the countries, as well as looking at stand-out findings from the survey. Also as usual, it includes a feature on a key current theme - this time, regional decoupling in the industry.

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# **Key findings**

#### CHINA IN POLE POSITION:

The overall average score across the 22 participant countries and 26 industry indicators increased from 44.2% in ADR13 (2023) to 54.6% in ADR14 (2024). China topped the rankings, followed by South Korea and the Netherlands; Singapore was pushed out of the top three for the first time since 2021. Norway and Sweden were among the biggest improvers in the topranking group, driven by their strong performance in electrification indicators.

#### PROGRESS IN AUTONOMOUS TECH OUTPACES CUSTOMER CURIOSITY:

Customer interest in autonomous vehicles (AVs) has stagnated since ADR13, with preference and curiosity indicators largely flat. But there has been good progress on the technology side: in particular, hype around artificial intelligence (AI) boosted venture capital investments in autonomous driving and indicators for patent activities surged, recording the highest scores across all major automotive markets. The number of test roads for autonomous vehicles also increased, as did the regulatory framework conditions for commercialization.

#### **ELECTRIFICATION SLOWING BUT STABLE:**

While OEMs continue to expand their electric vehicle (EV) portfolios, overall consumer interest in EVs remains largely stable. Notably, core automotive markets such as Germany, Japan and the United States (US) are experiencing a decline in preference for EVs. In China, however, consumer enthusiasm remains consistently high, with battery electric vehicle (BEV) sales now making up 25% of total vehicle sales, compared to 22% in ADR13. Europe has stagnated at 12%. On the regulatory front, increased EV adoption has contributed to a global reduction in road transport emissions compared to ADR13.

#### PRIVATE CARS ARE STILL KING:

Individual transport modes persist as the preferred means of transport, with indicators for shared mobility and multimodal travel remaining low. This is particularly the case in mature automotive markets such as the US, Japan, Germany and China. Continued reliance on private vehicles reflects both cultural habits and structural limitations in shared mobility infrastructure.

#### **REGIONAL DIVIDE IS GROWING:**

The global automotive market is increasingly polarized, with several "decoupled" regional ecosystems emerging. For example, China's dominance in key indicators (especially around technology, infrastructure and customer interest) is helping it to outpace stagnating Western counterparts. Chinese OEMs have doubled down on their domestic market while continuing to make inroads into the European market, putting pressure on European OEMs. European players also remain dependent on China for much of their EV and autonomous driving technology.

# Under the hood: Scores, rankings, winners and losers

China reclaims pole position, France and Italy are the big improvers overall, while the US drops down

# 1.1/ The top performers

After being knocked off pole position by Singapore in ADR12 and 13, China has reclaimed top spot with a score of 87 (out of 130). The country's resurgence was driven primarily by its strong performance in technology and infrastructure indicators, underscoring its leading position in the now key areas of electrified and automated mobility. For example, it achieved a perfect score in patent activity, and boasts a dynamic venture capital environment focused on AI. Both point towards the nation's strategic ambition to lead in technological innovation. In addition, consumers in the world's leading producer of automobiles show a strong willingness to embrace next-generation EVs. This is backed up by a robust automotive ecosystem, with OEMs offering extensive EV portfolios and a well-developed charging infrastructure. > A

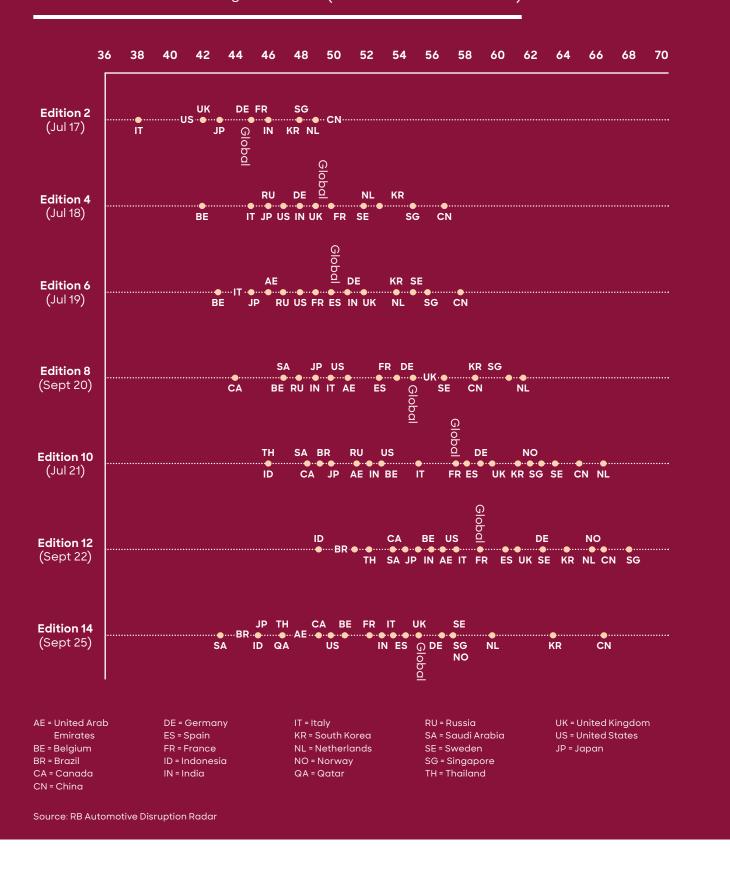
South Korea (83 points) maintained its second-place ranking from ADR13 thanks to solid scores in technology-focused indicators, automotive industry activity and consumer openness to evolving automotive trends. These were supported by the country's significant role as a leading global vehicle exporter, particularly to markets such as the US. However, going forward, this makes it sensitive to external factors such as tariffs and trade disputes.

The Netherlands (78 points) advanced significantly, climbing five positions from ADR13 to achieve third place in ADR14. This achievement was made possible by widespread adoption of digitalized mobility planning, reduced road transport emissions facilitated by a high penetration of low-emission zones and ambitious European Union (EU) vehicle CO, emission standards.

Norway and Sweden (75 points) also rose through the rankings compared to ADR13, finishing in joint fourth position with Singapore, the ADR13 leader. Germany (74 points) followed close behind, maintaining its position within the leading group thanks to efficient and rapid type approval processes for autonomous driving functions, strong patent activity and a globally renowned, export-oriented OEM sector. However, consumer interest in shared mobility in the country has declined, and there remains a notable reluctance to engage with innovative offerings such as digital sales channels for vehicle purchases. This mood reflects the urgent transformation needs of the German automotive industry, which demand significant investment from all stakeholders, including OEMs, OESs, customers and the state.

# A ADR score evolution: China is back on top after dominating the early ADR editions

Overall score evolution through 14 editions (% of max. achievable score)



## 1.2/ The big improvers

Compared to ADR13, the automotive ecosystem in several countries - particularly in Europe - has advanced towards a more progressive and innovation-driven landscape. For example, France, Belgium and Italy (68, 66, 69 points) climbed from lower positions into mid-table in ADR14, powered by a growing consumer acceptance for EVs and a rise in absolute sales of EVs and plug-in hybrids compared to ADR13. France and Italy, in particular, displayed notable progress in automated driving, reflecting increased consumer readiness and substantial investments in AI. Both countries achieved top scores in technology-related indicators for the first time, while patent activity also increased. >B

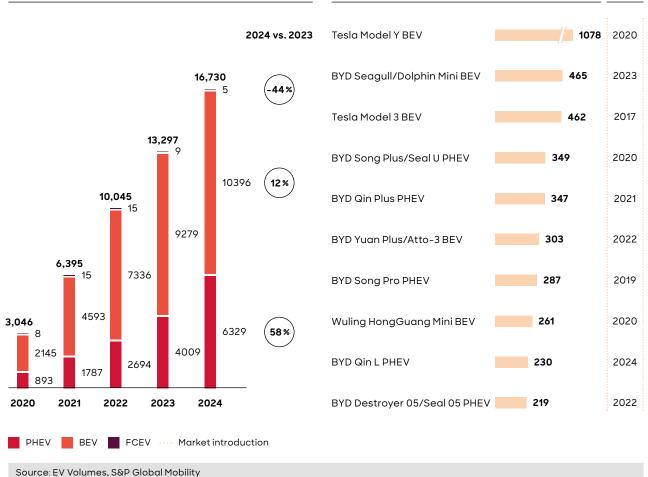
Meanwhile, Norway and Sweden's ascent into the top tier was driven by progress in digital mobility planning, enhanced charging infrastructure and a continued surge in potential EV buyers. The latter now exceeds 50% in Sweden and 65% in Norway.

# Buying power: Sales of EVs across the 22 ADR countries jumped sharply between 2023 and 2024, with Tesla and BYD leading the way

Total EV sales in 22 ADR countries ['000 units]

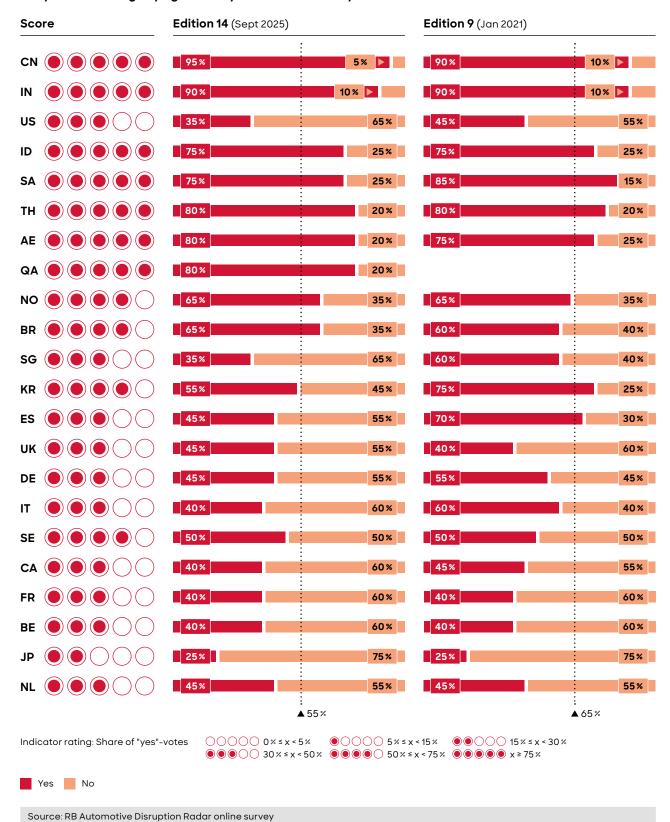


Top 10 EV models sold in 2024



# C Interest in EVs: Several major markets, including the US, Germany and Italy, saw a fall in enthusiasm for buying an EV compared to ADR9 from 2021 EVs: Share of potential buyers

Are you considering buying a battery electric vehicle as your next car?



## 1.3/ The strugglers

At the other end of the rankings, several countries have experienced a noticeable decline in momentum since ADR13. Most notably, the US has lost ground, alongside the United Arab Emirates (UAE), Qatar (both 61 points) and Saudi Arabia (56).

In the US (65), indicators reveal a downward trend in consumer interest, as well as the adoption of new mobility concepts, shared mobility services and multimodal travel. Despite this trend, companies are increasing their investments in autonomous ride-hailing services (such as Waymo, Tesla), aiming to develop a profitable business model for autonomous driving. In general, the US requires region-specific differentiation, yet concerns surrounding EV adoption have also grown nationwide. This decline may be linked to a shift in policy direction under the new US administration, which is adopting a more conservative stance on automotive disruption. For example, EV incentives introduced under the 2022 Inflation Reduction Act (IRA) and the potential easing of fuel economy standards are expected to be curtailed.  $\triangleright C$ 

The drop in rankings of the Middle Eastern countries is mainly attributable to rising transport emissions. In the UAE, acceptance of new mobility solutions such as demand-responsive transport and public transit has diminished, while reliance on private vehicles continues to grow. Similarly, in Qatar, indicators show a decline in shared mobility vehicle usage and a waning interest in automated driving technologies.

# Stand-out trends from the ADR14 survey

Al development and investment are booming, but mobility services are stalling as private cars make a comeback

Continued zealous backing of AI technologies and rising skepticism of mobility and digital automotive services were the two big themes in ADR14. Regarding the AI boom, indicators reflecting venture capital investment in AI and patent activities related to autonomous technology consistently scored at top levels across the majority of surveyed countries and showed significant improvement over ADR13. This trend underscores the accelerating integration of AI into both core driving tasks and across the entire automotive value chain. ▶ D

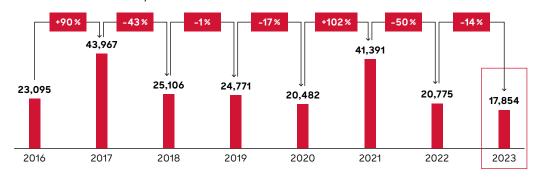
In the competitive race towards autonomous driving, AI is a fundamental cornerstone, delivering critical technological capabilities such as advanced perception, precise real-time decision making, enhanced adaptive learning and training of algorithms. Additionally, AI improves vehicle communication and behavior prediction, contributing to safer and more efficient navigation. These capabilities have the potential to significantly enhance vehicle autonomy, safety and reliability. Furthermore, by progressively embedding AI across all stages of their value chain, automotive players can structurally transform their operations, bolster competitiveness and substantially improve efficiency and performance.

While technical developments in AI are racing ahead, consumers themselves are less enthusiastic about new mobility technologies. Indicators showing consumer preferences for digital sales channels declined globally and shared mobility services remain at a low level.

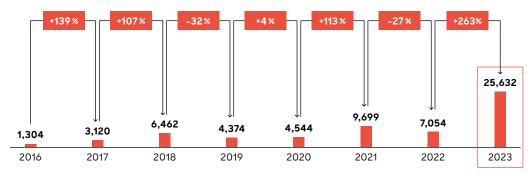
# Investors target Al: Venture capital investment in Al soared in 2024, while funds pumped into mobility technologies fell

Venture capital investment in mobility and AI since 2016<sup>1</sup> [USD m]

#### Total VC invest Mobility



#### Total VC invest Artificial intelligence<sup>2</sup>



- 1 Analysis on disclosed amounts
- 2 Including investments in smart cars, AI in transportation and autonomous vehicle technologies, and AI infrastructures (natural language processing, computer vision, etc.)

Source: Tracxn

While new modes of mobility – such as micromobility, car sharing and air mobility – are expected to gain traction in urban centers, the private car continues to play a central role in individual mobility. This demonstrates the persistence of traditional ownership models amid evolving behaviors.

# Feature: Decoupling of the automotive industry

As China begins to dominate the auto industry, four distinct

regional ecosystems are developing around it

The ADR14 survey shows that the automotive industry is continuing to transform. While one would expect the industry as a whole to evolve as new technologies, methods and challenges emerge, what's remarkable from the latest results is that it is beginning to decouple. China is now the leader, with Europe taking a back seat and the US increasingly isolated. In this short feature, we look at the reasons and drivers for this, and assess the implications for OEMs and suppliers.

## 3.1/ A changing landscape

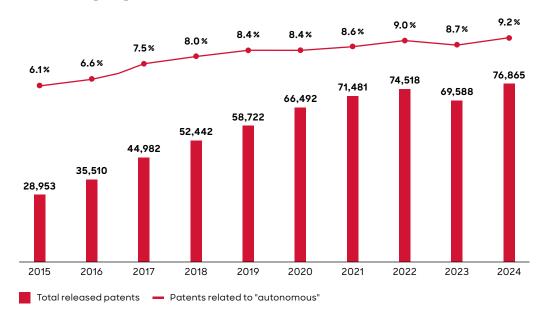
The automotive industry is undergoing a significant transformation driven by four key megatrends – it is becoming Polarized, Automated, Connected and Electrified (PACE – for more details, see Roland Berger's Automotive Outlook 2040 study). These forces will shape the future of the industry through 2040, driving advancements across the globe.

Autonomous driving is a prime example. In the US, companies like Waymo and Tesla are aggressively scaling up autonomous vehicle deployment. Waymo, for example, is expanding its robocab fleet from around 700 vehicles in 2023 to 1,500 by 2025, aiming for 3,500 by 2026, while Tesla is preparing to deploy 1,000 robocabs in direct competition with traditional ridesharing leaders such as Uber and Lyft. Both companies offer their services on public highways. Meanwhile, China is racing ahead with its autonomous driving technologies, with BYD introducing Level 2+ (advanced driver assistance) systems as standard and Baidu's autonomous driving initiative, Apollo, achieving significant milestones recently and targeting global expansion. In Europe, BMW and Mercedes now offer Level 3 (conditional automation) systems as a premium add-on in Germany. **E** 

However, recent geopolitical events have introduced new complexities that will directly impact the PACE trends. In particular, countries are increasingly prioritizing national interests, leading to protectionist policies that restrict the flow of goods, technology and talent across borders. The ongoing tensions between the US and China highlight the pressures. As a result of these challenges, separate regional ecosystems are emerging in the automotive industry.

# The number of patents filed for autonomous functions as a share of total patents has slightly increased since 2021

Share of autonomous vehicles/functions in total released patents in scope [#, %]



Source: Google Patents

## The decoupled regions

Four distinct ecosystems are now evolving: the US, Europe, China and Japan/South Korea. Each is developing differently and will be impacted in different ways by the new landscape.

#### **ISOLATED US:**

Strong protectionist policies mean that local growth is expected to be restricted to mainly US OEMs. While the slowdown for European and Japanese/Korean OEMs with local production is likely to be limited to pure import models, Chinese imports will be hit hard due to trade barriers that specifically target the country. Imports will continue to focus on large vehicle models rather than small ones because of local preferences.

#### **DEPENDENT EUROPE:**

The automotive landscape in Europe is becoming increasingly challenging, characterized by stagnant volumes and persistent cost pressures. Chinese OEMs, including BYD, Nio and MG, are gaining significant market share, posing a risk to domestic brands. To maintain their competitive edge, European OEMs are forming joint ventures with Chinese counterparts, as seen with companies like Polestar, Smart and Leapmotor. However, this strategy may come at a cost, as Chinese OEMs are assuming development leadership in these partnerships, exemplified by collaborations such as VW with Xpeng, Audi with SAIC, Mercedes with Geely, and BMW with Great Wall. In response, European OEMs are shifting their focus towards local distribution and preserving their industrialization advantages. They are also seeking to strengthen their positions by partnering with leaders in emerging automotive sectors, such as software and next-generation EV architecture. For instance, VW is collaborating with US-based Rivian, known for its software expertise, and has established a deal with Ford to enhance market access in Europe while simultaneously leveraging economies of scale on VW's MEB platform.

#### **DOMINANT CHINA:**

China is advancing significantly in international importance through its own brands as well as joint ventures, for example BYD, Nio and Leapmotor. Chinese companies have also dominated their domestic market for more than 18 months now and are expected to remain in leading positions. This has left European OEMs struggling to compete in Chinese markets, with many turning to Chinese-led joint ventures to try to keep market share (as seen in the Audi/SAIC tie-up). In the end, Chinese customers will decide whether the products will be attractive in terms of functions and price.

#### **CAUTIOUS JAPAN/KOREA:**

OEMs in both countries are expected to remain largely focused on their own domestic markets. However, there have already been attempts to break out from this isolation, as evidenced by a 2024 deal between Toyota and Tencent, through which the Japanese carmaker will use Tencent's AI and cloud technology to make its vehicles more appealing to Chinese customers. Merger talks between the Japanese OEMs Honda and Nissan were initiated in a bid to secure competitiveness in the global market for both firms; however, these ultimately failed due to disagreements over the target structure of a joint company. >F

#### **Regional dynamics** Sales and import ban for Chinese OEMs are gaining connected vehicles from in importance in Europe with China due to security risks own brands **OEM** origin China/ Chinese Chinese Chinese Chinese OEMs Europe JVs **OEMs OEMs OEMs** $\oplus \oplus \oplus$ $\oplus$ $\oplus$ $\oplus$ $\oplus$ China European European European European/ European **OEMs** OEMs **OEMs** Chinese **OEMs OEMs** 0 O $\oplus$ $\oplus$ Europe US OEMs US OEMs US/Europe US OEMs US OFMs JVs US Japanese/ Japanese/ Japanese/ Japanese/ Korean OEMs Korean OEMs Korean OEMs Korean OEMs Japan/ Korea Japan/Korea US China Europe **Receiving market** 🕀 🕀 😝 Growth of origin-receiving balance 🛑 🖨 🖨 Decline of origin-receiving balance

#### 3.3/ Decoupled but not separate

Source: RB Automotive Disruption Radar

As evidenced by the strong links between European and Chinese OEMs, the decoupling is not simply a case of each region acting independently. There is both divergence and convergence.

#### **CONVERGENCE ON GENERAL TECHNICAL TRENDS**

Regional ecosystems rely on many of the same fundamental technical systems. For example, centralized or zonal computing architectures and high-speed Ethernet-based in-vehicle networks (such as automotive Ethernet, CAN-FD) are broadly similar globally. In addition, the industry is largely converging on Cellular V2X (C-V2X) as the primary standard for vehicleto-everything communication. Meanwhile, China is leading battery market development and setting trends with its direct access to critical raw materials and intensive technical know-how. ▶G

#### **DIVERGENCE IN STANDARDS, POLICIES AND CYBERSECURITY**

China is rapidly developing its own ecosystem, driven by national policies emphasizing selfreliance in semiconductors, software and cybersecurity standards. Additionally, the country imposes strict local data storage laws and unique cryptographic standards. As a result, non-Chinese players operating in the country are having to fall into line with its practices. Chinese-specific technical standards (for example, cybersecurity regulations GB 44495-2024, dedicated SDV APIs and locally developed AI chips) mean global OEMs frequently maintain parallel E/E development tracks and need to deploy separate cybersecurity and telematics solutions for China-specific models.

F

**Automotive world** 

# G All hooked up: There has been a big leap in V2X communication since the first ADR, with companies such as Volvo and Mercedes leading the way

Vehicle-2-vehicle communication: Model overview

Edition 1 (Ion 2017)																						
Edition 1 (Jan 2017) Steps	ВЕ	BR	ES	CA	FR	DE	ID	IT	JP	NL	NO	sg	SE	тн	UK	US	CN	SA	ΑE	IN	KR	QA
1 First V2V functions in market																						
25% of models with V2V																						
3 10 % of models with V2V										<b>O</b>												
4 20 % of models with V2V										•												
<b>5</b> V2V mandated in place										•												
<b>Edition 14</b> (Sept 2025)																						
Edition 14 (Sept 2025) Steps	BE	BR	ES	CA	FR	DE	ID	IT	JP	NL	NO	sg	SE	тн	UK	US	CN	SA	AE	IN	KR	QA
	BE	BR	ES	CA	FR	DE	ID	IT	JP	NL	NO	sg	SE	TH	UK		CN	SA	AE	IN	KR	QA
Steps			ES	CA    O													CN		AE	IN  O	KR	
Steps 1First V2V functions in market			ES	CA  O																IN  O	KR	
Steps 1First V2V functions in market 25% of models with V2V																				IN	KR  O	

#### Selected examples of V2V/V2X-equipped models

<b>Volvo</b> All vehicles featuring	<ul> <li>V2V system sharing hazard light, slippery road data and accident ahead alert</li> <li>V2V warning systems on all new models across Europe. Models based on SPA or CMA platforms (2016 onwards) can be retrofitted</li> </ul>
<b>Polestar</b> Unique model featuring	<ul> <li>Connected Safety</li> <li>V2V (or C2C) system, which effectively allows Polestar and Volvo vehicles to collectively pool their data about road conditions</li> </ul>
<b>Volkswagen</b> Golf, ID.3, ID.4 featuring in selected countries	<ul> <li>802.11p-based V2X</li> <li>Extend situational awareness beyond the line of sight of the driver or the embedded sensors</li> <li>Share basic safety messages: broadcasted from the car or from roadside units equipped with DSRC radios</li> <li>Receive hazard warnings: e.g. car ahead braking suddenly or motorcycles approaching from the opposite direction</li> </ul>
<b>Mercedes-Benz</b> All vehicles featuring	<ul> <li>Live traffic service</li> <li>PRE-SAFE safety system</li> <li>DISTRONIC adaptive cruise control</li> <li>Forward messages about road conditions, accident ahead to other vehicles</li> </ul>
<b>Toyota</b> Prius PHV, Prius, Crown, Alphard, Vellfire, Harrier, Mirai <sup>1</sup>	<ul> <li>Pre-Collision System (PCS)</li> <li>Dynamic Radar Cruise Control (DRCC)</li> <li>Communicating Radar Cruise Control</li> <li>Emergency radar notification</li> </ul>
Other brands starting to feature V2V/V2X models in selected countries	<ul> <li>GM (Cadillac CTS in the US &amp; Canada; Buick GL8 in China)</li> <li>HiPhi (HiPhi X - potential V2X-ready platform)</li> <li>NIO (ET7 - V2X-capable architecture)</li> <li>Xpeng (P7 - AI-powered driver-assist system with V2X-enabling sensors)</li> <li>Ford (models in the US and China with V2X tech since 2022)</li> <li>BMW Group and Stellantis testing NTN satellite connectivity</li> </ul>

<sup>1</sup> featuring in selected countries

Source: RB Automotive Disruption Radar

Outside China, Europe, the US, Japan and Korea remain closely interconnected and generally aligned with international standards (such as ISO, AUTOSAR, UNECE regulations). Despite the increasing decoupling, they favor interoperability and convergence to reduce complexity and costs.

#### **DIVERGENCE IN SOFTWARE AND DEVELOPMENT SPEED**

There is significant divergence in vehicle software platforms, cloud connectivity and applications. China's distinct digital ecosystem, with its reliance on local leaders such as Baidu, Alibaba and Tencent, creates the need for unique middleware, operating systems (HarmonyOS, AliOS) and application layers among Western players, separate to their favored stacks (such as Android Automotive with Google services).

In terms of development speeds, China is pulling away from other regions. Cycles among Chinese OEMs are twice as fast as those of their European counterparts (24-40 months vs. 48-60 months), giving them a competitive edge.

# 3.4/ How to navigate the decoupling

The regional decoupling has several key strategic implications for OEMs and suppliers. Below we look at solutions and mitigating strategies.

#### **PARTNERSHIPS:**

Region-specific joint ventures - such as VW and Xpeng, and Toyota and Tencent - are a good example of how Western OEMs are making strategic adaptations to manage China's separate ecosystem requirements. These partnerships enable non-Chinese OEMs to comply with local standards and policies without completely fragmenting their global operations.

#### **DUAL-STACK STRATEGY:**

To mitigate technological divergence, OEMs should anticipate maintaining two main technology stacks - one for China, one for everywhere else - particularly at the software, cybersecurity and data-service layers. This strategy should include leveraging common hardware and base architectures to minimize redundancy and costs.

#### **SELECTIVE CONVERGENCE:**

Companies should proactively engage in global alliances that promote interoperability and common foundational technologies (AUTOSAR, 5GAA, SDV Alliance) to reduce the complexity and costs caused by divergent regional regulations.

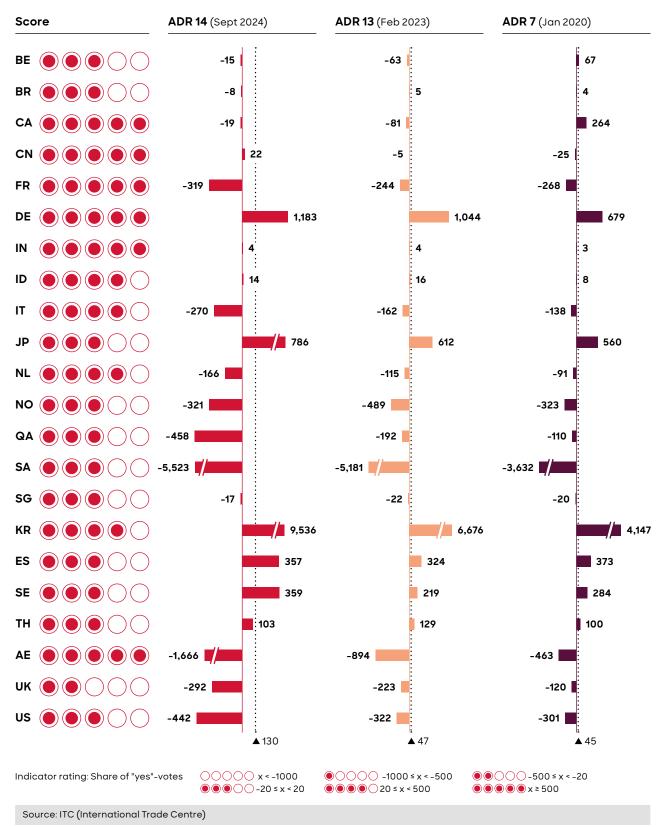
#### **PREPAREDNESS:**

Geopolitical factors, such as export controls and cybersecurity regulations, may drive deeper decoupling. Management teams should therefore monitor developments closely and remain agile to rapidly evolving technical standards and regional ecosystems. In addition, collaborating with local OEMs in regions with stronger protective measures is beneficial in preparing and mitigating tariff risks and export controls. ▶ H

H Balancing act: South Korea leads in trade balance per capita since 2020 followed by Germany and Japan, while Saudi Arabia has a strong negative trade balance

Trade balance – Value per capita [USD]

Are you considering buying a battery electric vehicle as your next car?



# Recommendations

With its consistent top performance in recent ADR rankings, China has now sealed its position as global disruptor-in-chief in the automotive industry. The country is now the dominant force in several areas, from EV sales and battery production to autonomous driving and digitalization. Its focus on self-sufficiency means other regions are having to fall into line behind it, driving the decoupling trend. Non-Chinese OEMs and suppliers must act now to ensure they keep up. Three areas will be key:

- While complete global decoupling in automotive electrical/electronic architectures is unlikely and undesirable due to economic pressures, a nuanced and strategic divergence in software, cybersecurity and development speed - especially between China and the rest - is clearly underway
- OEMs and suppliers need to strategically balance localized compliance and innovation requirements with global platform efficiency
- A coherent "global yet local" approach, facilitated through strategic partnerships and targeted investments, will be crucial to navigating this evolving landscape effectively.

#### WHAT IS THE ADR?

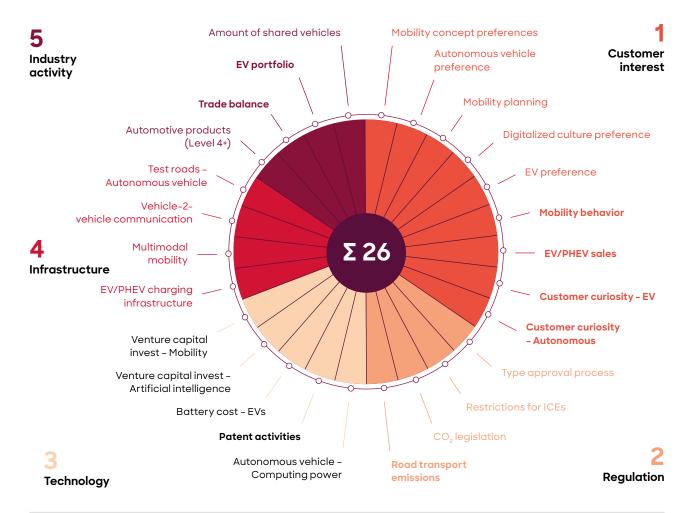
The Automotive Disruption Radar is a biannual analysis of market trends related to disruption in the global automotive industry, first undertaken in January 2017. Its latest findings are based on field research and a survey of more than 22,000 car users across 22 continuously monitored markets (Belgium, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, the Netherlands, Norway, Qatar, Saudi Arabia, Singapore, South Korea, Spain, Sweden, Thailand, UAE, UK, US). Information is also drawn from external sources, such as leading mobility experts and major industry reports. Each nation is scored along 26 indicators, grouped into five dimensions.

The ADR aims to answer key questions such as: which factors are driving change in automotive ecosystems; how do these factors evolve over time; and what can decision makers do to best manage disruption? Ultimately, the ADR is a go-to decision-making tool for senior executives in the mobility sector. For more information, visit the ADR's digital platform - automotive-disruption-radar.com

#### WHAT IS THE AUTOMOTIVE DISRUPTION RADAR COMMUNITY?

Roland Berger's Automotive Disruption Radar website is a one-stop shop for automotive industry data and analyses. It offers free access to data from the Roland Berger Automotive Disruption Radar. Via the platform, users can navigate past and current data, customize and download charts and even configure their own radar. In addition, the ADR website features curated thought-leadership articles by third-party contributors, often presenting alternative views, different angles and fresh insights. Visitors to the site can also access links to publications and videos produced by Roland Berger investigating a wide range of current topics in the automotive industry.

The "Automotive Disruption Radar" constantly analyzes market trends via 26 indicators in five dimensions – Regular updates to stay on the leading edge of the market



Source: RB Automotive Disruption Radar

#### A NOTE ABOUT THE CHANGES IN ADR14

To better reflect the rapidly changing automotive landscape, several indicators were updated, adjusted or removed for ADR14:

- Indicator 6: "Mobility behavior"; changed question in online survey
- Indicator 7: "EV/PHEV sales"; ADR10-13 scores adjusted to new scale
- Indicator 8: "Customer curiosity"; split into "8.1 Customer curiosity EV" and "8.2 Customer curiosity autonomous"; new scales
- Indicator 12: "CO<sub>2</sub> emissions traffic sector" replaced with "Road transport emissions (CO<sub>2</sub>) by country in relation to total car parc
- Indicator 14: "Patent activities"; new database
- Indicator 15: "Mobile network 5G coverage"
- Indicator 24: "R&D intensity Autonomous driving" replaced with "Trade balance of motor vehicles per country" new scale
- Indicator 25: "EV portfolio"; ADR11-13 scores adjusted to new scale

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