

# Trend

/trend/

a general direction in which something is developing or changing.

Trend definition document #1

## Legislative and consumer demand for cleaner and safer vehicles

COX AUTOMOTIVE





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Craig has spent more than 30 years working in the automotive sector, including two decades with Cox Automotive brands. In his international role, Craig continues to lead the way in developing strategies to anticipate and respond to industry trends.

## Foreword: Introducing the Cox Automotive trend definition documents

There is no doubt that global events of 2020 and 2021 left a lasting mark on the automotive sector, causing organisations to pivot business models, upgrade supply chains, and review routes to market. However, while some behaviours may have been accelerated, much of these changes form part of bigger trends that were already being felt across the automotive ecosystem.

From increased automation and connectivity to the push for cleaner and greener motoring; digitisation of sales channels, through to empowered customers calling the shots, there is rising demand for flexibility and agility. The approaches which will deliver success for automotive manufacturers, fleets and retailers tomorrow are not the same as we've seen in the past.

In an era of significant volatility, uncertainty, complexity and ambiguity (VUCA – to coin a military and management acronym!), it isn't enough to sit back and watch what happens. As a global organisation, with businesses operating across the entire vehicle lifecycle, Cox Automotive has a significant role to play in identifying trends, challenges and opportunities which the sector will face over the coming years.

The automotive sector has a key role to play in the journey to zero emissions, with governments and legislators creating both push and pull forces on the industry. This will fundamentally change how we buy, sell, own and use vehicles. This short series of [trend definition documents](#), alongside our annual [Insight Report](#), is one way in which we are supporting partners and customers to set their strategy for success.

While we cannot and will not provide all the answers, this short series of automotive trend definition documents set out what we mean when talking about the biggest global issues of the day, and seek to help our customers navigate the complex path ahead of us. Over the coming pages, we explore one of these trends. We hope you'll then investigate the wider series (you can find them all here) and let us know what you think via our events and social channels.

# Definition

/dɛfɪˈnɪʃ(ə)n/

the act of defining a word, phrase, etc.

# Legislative and consumer demand for cleaner and safer vehicles

International legislation is mandating the eventual demise of the internal combustion engine (ICE). Technology is enabling vehicles that keep us safer and consumers are increasingly choosing vehicles that are cleaner to run and safer to be in. Implications for manufacturers, fleets, mobility providers, and retailers are huge – from developing new drivetrains and models through to managing ever more complex vehicles throughout their lifecycle. Plus, the timetable is tight.

At Cox Automotive, we are focused on several key areas within this trend:

- Understanding the market for used EVs
- Understanding the implications on the ICE vehicle parc - including values and disposal channels - as the focus shifts to EVs
- Managing safe and environmentally conscious transportation, storage, refurbishment, and disposal of battery-powered vehicles
- Managing the handling, inspection and safety checking of vehicles as they transition between users
- Understanding the implications of increasing vehicle complexity throughout the entire lifecycle
- Delivering a positive experience to first-time EV drivers at the point of handover

## Technology

/tɛkˈnɒlədʒi/

methods, systems, and devices which are the result of scientific knowledge being used for practical purposes.

## What do we mean by cleaner vehicles?

More than 30 nations, states and cities already have target ICE production end dates in place for cars, with more being added. Canada and the EU and are pushing to phase out ICE car sales by 2035, although there is country-level resistance for the latter. California and China are also looking to 2035, while Britain, Israel and India have a target for 2030. Norway and South Korea expect to reach zero new ICE sales by 2025. Meanwhile, many large cities are working to ban entry for ICE vehicles within an even shorter time frame, with most governments employing push and pull tactics to shift the vehicle parc.

Manufacturers are aware the clock is ticking. To decarbonise road transport by 2050, the transition to new electric and hydrogen vehicles must start now – together with building out the necessary infrastructure. High profile vehicle manufacturers, representing more than half of all vehicles sold globally each year, have indicated they will stop making or selling ICE vehicles altogether, with hybrid technology part of this transition. Targets range from this decade for Honda and Jaguar, the 2030s for Stellantis, Ford and Volvo, through to the 2040s for VW, Toyota and BMW.

Significant investment is taking place in large-scale battery gigafactories. Around 30 plants are expected to be operational across Europe by 2030, up from single figures today. Key locations include Germany, Hungary and Norway, as well as Italy, Poland and the UK. The US is likely to have around 10 operational plants by 2030, up from three today. China is out ahead with around 140 gigafactories anticipated in the next decade, from approximately 100 already up and running.

# Clean

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a clean fuel or chemical process does not create many harmful or polluting substances.

# What do we mean by safer vehicles?

The 2030 milestone is also significant for safer vehicles. The United Nations has a strategy to cut serious injuries and deaths by 50% from 2021 to 2030, as part of the Second Decade of Action for Road Safety. In addition to infrastructure and education, there is an increasing emphasis on vehicle technology and active safety systems as well as compliance with vehicle safety checks.

European legislation (General Safety Regulation) mandates various Advanced Driver-Assistance Systems (ADAS) in all new models from 2022. However, concerns remain, and the NHTSA in the US is requiring crash-reporting relating to advanced driving systems due to risks caused by the change in the way people drive vehicles and take responsibility for their actions.

Beyond the driver, increasing electronic complexity in vehicles means more conscious decisions need to be made about vehicle handling. One vehicle may have in excess

of 1,000 semiconductors, meaning a growing proportion of vehicle cost comes from electronics. Almost half of the technology in some vehicles is now electronic, with that figure rising. While full autonomy may yet be a way off, the pace of development in connectivity and safety systems will have a significant impact on a vehicle's second and third life. The requirement to ensure ADAS compliance and calibration is an increasingly important consideration within defleet, repair and aftermarket operations.

## Safe

/seɪf/

something that is safe does not cause physical harm or danger.

# Areas of focus

This trend - *legislative and consumer demand for cleaner and safer vehicles* – is stimulating and influencing a wide variety of micro-trends and areas of focus.

These include /



## What does this mean in practice?

The Intergovernmental Panel on Climate Change (IPCC) Report, August 2021, provided a reality check, outlining significant impacts on agriculture and health, as well as urban and coastal living, if greenhouse gas emissions reduction targets are not met. Robust solutions must be in place to encourage the adoption of lower and zero emission vehicles, and offer confidence to the mainstream driving community when it comes to increasing vehicle safety technologies.

Cox Automotive is investing in and battery lifecycle services – as evidenced by the [recent acquisition of Spiers New Technologies](#) – as well as charging and technical infrastructure for the vehicles in its care. Teams are being trained in how to effectively store, handle, service and move battery-powered vehicles and those with complex ADAS systems. Equipment is being sourced to support inspections and vehicle maintenance. Example contracts include an upcoming deal with [Electric Last Mile Solutions \(ELMS\)](#) in the US to service and repair electric delivery vans, including EV battery servicing and maintenance.

Cox Automotive is also partnering with global electric vehicle manufacturers, including US-based [Rivian](#), to better understand the potential for battery recycling into home storage and micro grid. EV values are a concern, particularly

when it comes to the second and third life for increasingly complex vehicles. Understanding the impact of battery health on residual values and wholesale/retail pricing is vital. With battery and electronic safety technology advancing so quickly, it is important that components are recycled or reused and waste to landfill is minimised.

Regular Cox Automotive market reports feature information on battery-powered and other alternative fuel vehicles, including values. Market insight and intelligence is available across the vehicle remarketing portfolio, whether customers are buying online or through physical auctions. The volumes behind the data are increasing.

## Practice

/'praktis/

the actual application or use of an idea, belief, or method, as opposed to theories relating to it.

# Resources and further reading

Now you've read our view, you may want to explore some further resources. We've found the following papers and articles valuable and insightful:

- To read more about the UN Sustainable Development Goals and the 2030 Agenda for Sustainable Development, visit [Transforming Our World](#)
- For the UN's latest assessment on climate change science, read the latest [Intergovernmental Panel on Climate Change Report](#).
- To read a summary of the ICE bans in place at the start of 2021, see this [CleanTechnica article](#) and [this summary](#) from the International Council on Clean Transportation (ICCT)
- For a summary of the [UN Draft Resolution for Road Safety](#), read [this article](#) from the United Nations Economic Commission for Europe:
- To read more about the industry's responses to ADAS technology, visit [this article](#) on EE Times
- To read more about investment in electric vehicle battery production, we recommend the following articles:
  - / Science Business: [UK plays catch up in global battery race](#)
  - / Automotive Logistics: [Electric vehicle supply chain analysis 2021](#)
  - / Climate Change News: [European battery gigafactories boom despite Covid slowdown](#)
  - / CIC energiGUNE: GIGAFATORIES: [Europe's major commitment to economic recovery through the development of battery factories](#)
  - / BBC News: Gigafactories: [Europe tools up against US and Asia as a car battery force](#)
  - / Car Magazine: [UK gigafactories: can its car makers compete in the battery arms race?](#)

## Reading

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the action or skill of reading.



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## More insight from Cox Automotive Europe

Cox Automotive has the broadest, deepest, most complete view of the entire automotive ecosystem. Using our data and expertise, we regularly publish meaningful and helpful insight outputs to help customers and other stakeholders stay abreast of the latest industry trends and topics.

### / Our annual Insight Report

Our annual Insight Report - published in partnership with Grant Thornton – brings together expert opinion from across the automotive industry, alongside our own data and analysis to provide a robust picture of the factors set to have the biggest impact over the coming year.

[View the Insight Report here](#)

### / AutoFocus

AutoFocus is a quarterly digital magazine that aims to share a fresh perspective on the latest new and used car market activity alongside timely and digestible analysis of the hot topics influencing our customers' decision making.

[Read the latest issue here](#)

### / The Fuel/hub

The Fuel/hub on the Cox Automotive Europe website aggregates fresh insight, knowledge and thought leadership content from our product brands, in addition to original Cox Automotive analysis and opinion.

[Visit Fuel/hub here](#)

If you'd like to understand more about Cox Automotive, our insights or solutions, please [contact us](#) and we'll be in touch to arrange a conversation.

# Insight

/'insAIt/

a chance to understand something or learn more about it.

# COX AUTOMOTIVE



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