



## **Stars Aligning**

### in 2023

Despite continuous geopolitical instability and consumer confidence trailing prepandemic levels, the year 2023 saw a rise in new car sales in Europe.

Increased competition and consumer options propelled the electrification trend forward, with Tesla and Chinese manufacturers leading the way. This was evident in Euro NCAP testing, as several Chinese and electric vehicles dominated the results. 2022 was a record year for Euro NCAP in which 73 cars were rated. In comparison to 2023, Euro NCAP only released 18 safety ratings, of which 17 were for new car models. The latter were put to the test using the most recent revisions to the protocols, which contain multiple new and updated requirements for collision avoidance, crash protection, and post-crash safety. In collision avoidance, we included new motorcycle scenarios and a scenario against 'dooring' - both of critical importance for more vulnerable road users. We also included the evaluation of vehicle submergence counter measures in the updated 2023 rating, which with the increase of flooding due to global climate change has become essential. Furthermore, Euro NCAP upgraded ADAS ratings for commercial vans, released six new Assisted Driving gradings, and redesigned and enhanced the Euro Rescue app for first responders.



Euro NCAP assessments in 2023 were tougher than previous years due to expanded safety requirements and new test scenarios – I am happy to see carmakers are still prioritising safety and achieving impressive results, delivering the latest solutions for consumers.

**Dr. Michiel van Ratingen** Secretary General



#### 2023 in review

# BEST PERFORMER OF 2023

Overall, the latest models scored very well against the latest criteria: 14 cars rated 5 stars (82%) and three cars achieved 4 stars (18%). There were no cars lower than 4 stars. Due to the lower numbers of results published in each category, Best in Class could not be awarded in 2023. However, the best all-round performer of the year was the VW ID.7, winning top slot by a hair's breadth from the NIO ET5.





AFTER A FEW FALSE
STARTS A DECADE
OR SO AGO, CHINESE
MANUFACTURERS
ARE HERE TO STAY,
COMPETING WELL
WITH ESTABLISHED
BRANDS IN EUROPE

Dr. Aled Williams, Programme Director

# CHANGING CONSUMER CHOICE

Last vear saw a continuation of the market trend towards bigger and heavier cars like SUVs. The share of new models in the category of off-roaders grew from 13% in the period 2009-2013 to 43% in the period 2019-2023, while the share of superminis and MPVs dropped from 20% to 8% and 24% to 6%. respectively. With post-pandemic vehicle supply issues and inflation already pushing new car prices higher, the removal of cheaper models means drivers will find it increasingly difficult to get their hands on small, affordable vehicles. Additionally, the electrification of the fleet has added about 200 kg to the average category weight, exacerbating safety concerns related to vulnerable road user crashes.

#### 2023 in review







#### NEW BRANDS

New electric vehicle brands are expanding quickly in the European market. Consistent five-star ratings have helped Chinese firms to restore their once tarnished image. Nine of the seventeen cars rated (52%) in 2023 were produced in China, while one was from Vietnam. Overseas companies becoming more prevalent on the European market is a continuing trend.



Euro NCAP signs MoU with ANCAP

### NEW PARTNERSHIPS

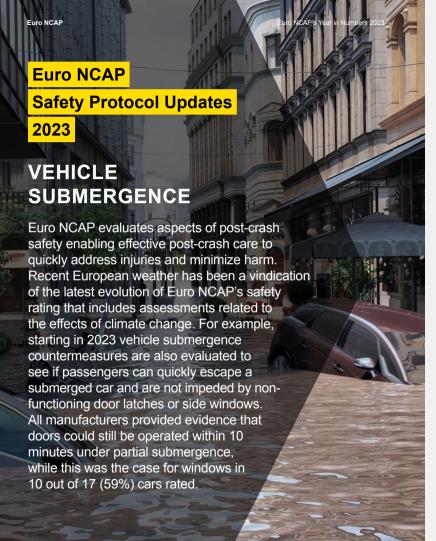
In 2023, Euro NCAP continued to expand and strengthen global alliances. Part of the mandatory rating tests for domestic manufacturers can now be completed in the Shanghai region thanks to the co-approval of the Shanghai Motor Vehicle Inspection Centre (SMVIC), A Memorandum of Understanding (MoU) was signed by Euro NCAP and the recently formed Taiwan NCAP. Additionally, Euro NCAP renewed the partnership with the Australasian NCAP, opening the door for future increased cooperation between the regional organisations.

### **ELECTRIC VEHICLES**

The race to electrification is increasing the number of electric car models available on the market. In 2023, the number of new full-electric car models rated reached 14, a share of 82% and more than double the number relative to 2022. There were two models that offer different engine options, including plug-in hybrid, full-electric, diesel and gasoline. Of the 17 cars that were rated, only one was a full hybrid.

#### DRIVER MONITORING

Almost all of the cars rated in 2023 were rewarded for a driver monitoring system Driver monitoring is an important step in the process towards assisted and automated driving as the condition of the driver must be known before the car can hand back control. Most of the cars tested had direct monitoring systems, which could detect some level of driver distraction while those with indirect systems – relying on inferences drawn from lane position. steering inputs, and etc. - could monitor only driver fatique. So far, no car has been able to detect sudden driver incapacitation, and this is an area of safety that is likely to develop quickly in the years ahead.





### CHILD PRESENCE DETECTION

The goal of Child Presence Detection (CPD) technology is to stop heat stroke deaths in children. These systems are crucial and life-saving in the hot summer months as they identify a child's presence in the car and notify the owner or third-party services before it's too late. Last year, Euro NCAP awarded CPD systems in five cars (29%), most of which are based on simple door logic and applicable to rear seats only. Seven cars (41%) offered a more advanced direct sensing system, although none was fully compliant with Euro NCAP protocol requirements.



#### MOTORCYCLE-DETECTION AEB

Many motorcycle crashes are caused by motorists who fail to spot motorcycles in traffic when they turn, change lanes, move through an intersection, or merge. Euro NCAP has included critical motorcycle scenarios to their AEB and lane assistance testing to address these collisions. Overall results are excellent, showing that automakers are now engineering crash avoidance systems with motorcycle riders in mind



#### PEDESTRIAN AND CYCLIST PROTECTION

Dooring is one of the most common crashes for bicycle riders and can cause serious injury or fatality. To warn riders in the "door zone" and/or to stop high-risk abrupt door openings, new safety systems have been added to vehicles. 14 vehicles have dooring prevention systems installed, 13 of which are based on information and/or warning, while the Lexus RZ already has an active sudden opening prevention system in place.

### 2023 in Review

### TRUCK SAFETY

Euro NCAP believes evaluating and enhancing the safety of heavy and commercial trucks can lower traffic-related fatalities and assist many European countries and cities in reaching their Vision Zero goal in road casualties. Thanks to a new Truck Safe rating system, all stakeholders involved in the freight business will soon be able to recognize and evaluate the safety level of the equipment in their heavy truck fleets. This will not only increase driver safety but also encourage a market for safety, enabling manufacturers to develop and improve their products within a defined safety framework based on Euro NCAP principles.

Euro NCAP's Year in Numbers 2023

For more information, access

Safer Trucks - On the road to Vision Zero here.

## COMMERCIAL VAN SAFETY

The Commercial Van Safety Rating was introduced by Euro NCAP in 2021 with the goal of giving fleet managers more safety information and making driving safer for van drivers and other road users. When Euro NCAP reexamined the van results a year later, they found significant gains in system availability and performance. To drive further improvement. the standards for these ratings were further tightened in 2023. In December, the Ford Transit Courier delivery van was awarded the first platinum medal under the new stricter rules and became the winner of this year's What Van? Awards.





#### 25 YEARS OF TESTING

Euro NCAP has been testing the safety performance of cars for over 25 years, introducing together with carmakers such innovations as E-call, assisted driving technologies and vulnerable road user (VRU) protection. The commitment of manufacturers has been shown by their continued involvement in Euro NCAP's testing programme.

### Brands with the most tested models

- 1. **VW** 58 models
- 2. Ford 50 models
- 3. Mercedes-Benz 48 models

#### 902 car models tested of which

- 1. Renault Megane 10 times
- 2. VW Golf 9 times
- 3. Honda Civic 8 times

#### **Euro NCAP Outreach in 2023**

Over 90% of media downloads worldwide are from Europe and Asia, where Euro NCAP ratings are most popular.

Euro NCAP continues to influence vehicle design across the world. Of the 18 cars tested in 2023, 9 cars were engineered in China, 3 in Germany, 2 in Japan, and 2 in South Korea. The VinFast VF8 was the first ever Euro NCAP car from Vietnam.

### Top website visits

Car safety ratings

- 1. CHERY OMODA5
- 2. Tesla Model Y
- 3. Dacia Duster

Commercial Van ratings

- 1. FIAT Ducato
- 2. Ford Transit Courier

Assisted Driving tests

- 1. Nissan Ariya
- 2. Renault Austral

### Most watched on Youtube

Since 1997

Volvo XC90

48,140 hours of total watch time

In 2023

BYD SEAL

**2,358.2** hours

of total watch time

#### A quick glance at the European market

Most popular car sold in Europe<sup>1</sup>

- 1. Tesla Model Y 196,556
- 2. Dacia Sandero 171,460
- 3. VW T-Roc 156,907

More than 11 million new cars were registered in Europe from January to September 2023 (ACEA)

(1) Data gathered between Q1 and Q3 of 2023.

### WHAT TO LOOK OUT FOR IN THE FUTURE

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Driving

Next year, we are likely to see more new automotive brands, Chinese and electric powertrains that will continue to enter the European market and pique consumer interest. Euro NCAP aims to ensure that these vehicles are equipped with the latest safety specifications and solutions. Euro NCAP will continue to act as a standard bearer for safety, aligning with other NCAPs from around the world together with industry, regulators and automakers at NCAP24, the Global NCAP World Congress (23-25 April) in Munich, Germany. Safety technologies are always evolving and we are getting ready for the next stage in our Vision 2030, which will result in the launch of a New Rating Scheme in 2026. Whatever your journey in 2024, drive safely.

Percentage of European car sales based on its valid star rating





About Euro NCAP

consumers with an independent assessment of the safety level of the most popular vehicles

sold in Europe.

Euro NCAP is a catalyst

for encouraging significant safety improvements to new vehicles design. We hope

that when buying new vehicles. Euro NCAP will help

you choose for safety.

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