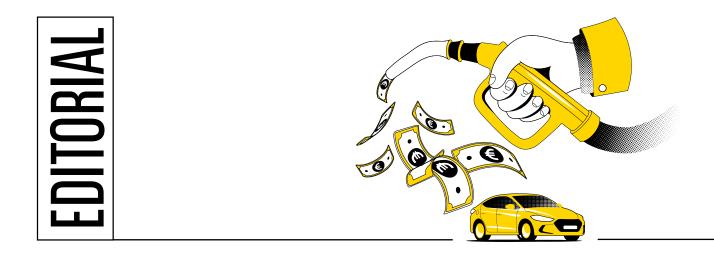


An international survey conducted in 18 countries



Since its creation, L'Observatoire Cetelem has always kept its finger on the pulse of developments in the automotive world, while also endeavouring to predict where the industry is headed. In a year that has seen the world hit by a succession of economic and geopolitical crises – after two years dominated by the global pandemic – it is clear that this pulse is no longer beating particularly strongly.

Motorists have been left voiceless as the output of automakers has gone into limp mode, primarily due to the issues affecting the supply of electronic components. Despite expressing strong demand for new vehicles, the travails of the sector have meant that their needs have often remained unfulfilled. What's more, many manufacturers had chosen to focus on profit margins rather than sales volumes. And when the energy crisis, high inflation and the war in Ukraine came along, these same motorists found themselves at an even greater loss when the second-hand market also fell foul of these issues.

If there is one central lesson to be learned from L'Observatoire Cetelem de l'Automobile 2023, it is that motorists have been hit hard by the rise in fuel prices, to the point where running a vehicle is becoming increasingly unviable and where many are doubting whether they will continue to use one in the future.

The idea of governments offering support whatever the cost, an approach that will have marked French history during the Covid era, is now being explored both on a personal level with regard to motorists and on a global level with regard to manufacturers. Could it be that the sector as a whole is heading towards a dead end and that motorists are gradually learning to live without their cars? Could one possible saviour come in the form of electric vehicles – the purchase of which has been encouraged by generous public subsidies and will soon be mandated by regulations – if they cease to be luxury products accessible only to those who are comfortably off? Is soft mobility on its way to becoming a credible alternative to the automobile?

This latest edition of *L'Observatoire Cetelem de l'Automobile* seeks to draw insights that will be crucial to the future of the automotive industry.

Flavien Neuvy, Head of L'Observatoire Cetelem

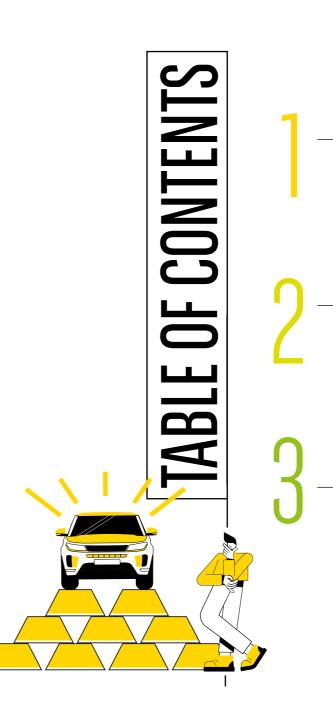
L'OBSERVATOIRE CETELEM

Founded in 1985 and headed by Flavien Neuvy, L'Observatoire Cetelem is an economic research and intelligence unit of BNP Paribas Personal Finance.

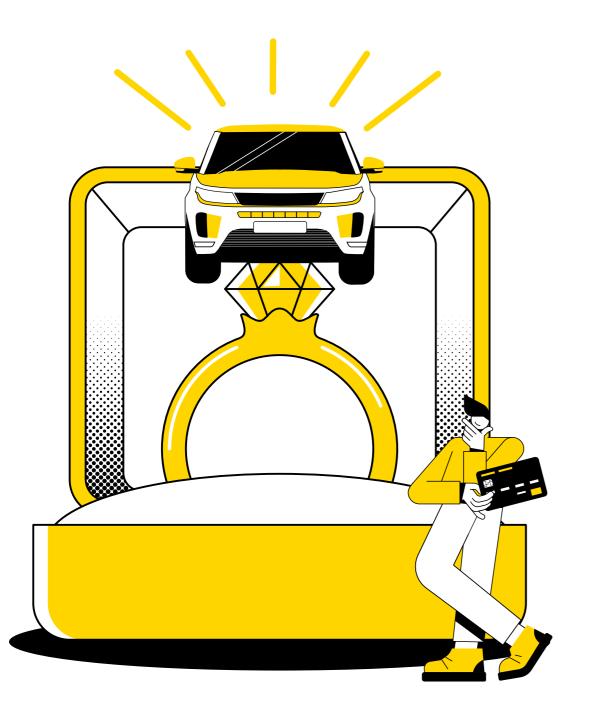
Its mission is to observe, analyse and interpret shifts in consumption patterns in France and abroad. To fulfil this ambition, L'Observatoire Cetelem has set up a range of tools that rely on diverse and complementary content, including:

- **The Observatoires**: Two highly respected annual surveys conducted internationally: a worldwide survey on the automotive market (18 countries) and a European survey on consumer trends (17 countries).
- **The zOOm surveys, which focus on lifestyles** and explore major themes ("The French and their finances", "Treating oneself in times of crisis", etc.) in three stages, by seeking the opinion of French consumers via three-wave surveys.





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ARE CARS BECOMING A LUXURY?

Although there have been signs in recent years that car sales are running out of steam, and not only because of the Covid crisis, motorists still seem unwilling to live without a vehicle, despite the financial burden that purchasing and using a car entails. The main driver of these budgetary tensions is fuel, with prices at the pump having risen dramatically. This new 2023 edition of L'Observatoire Cetelem de l'Automobile demonstrates that people are prepared to travel less to avoid too much financial suffering, but also that they do not want to be alone in taking action.

L'Observatoire Cetelem 2023

A must-have item

General context

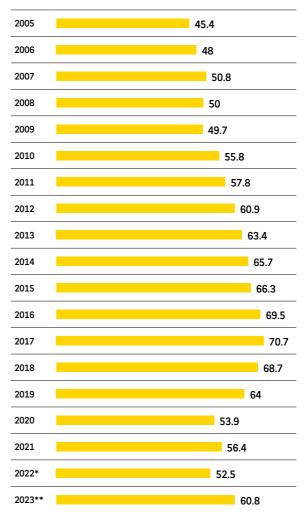
A STRUGGLING MARKET

Could the golden age of the automobile be behind us, at least in terms of sales? This is the message one might take away after glancing at global new passenger vehicle sales over the last few years. The curve illustrating these figures since 2005 appears to have peaked in 2017, when around 70 million units were sold **(Fig. 1)**. The sales bounce observed in 2021, following the Covid crash of 2020, has failed to mask the market's decline. What's more, supply chains are not expected to return to normal in the foreseeable future, particularly when it comes to semiconductors and vehicle deliveries.



Fig. 1 / Context

Global new passenger vehicle sales, 2005-2023 In millions of units.



Source: OICA.

* Estimate. ** Forecast.

L'Observatoire Cetelem 2023

The sales bounce observed in 2021, following the Covid crash of 2020, has failed to mask the market's decline

China and the United States, the world's two largest markets, saw their sales peak in 2017 (25 million vehicles sold) and 2016 (18 million), respectively. This was followed by a sharp drop that cannot be blamed solely on the Covid pandemic **(Fig. 2)**.

The situation has been less clear cut in Europe, Japan and Brazil, but the overall picture is more or less the same. Indeed, all the countries surveyed posted their highest sales figures before 2021, with fortunes varying from one year to the next **(Fig. 3)**.

Fig. 2 / Context

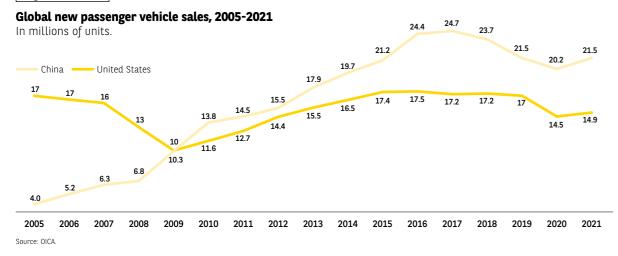
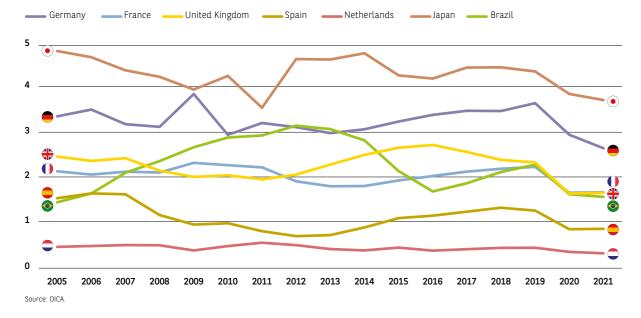


Fig. 3 / Context

Global new passenger vehicle sales, 2005-2021

In millions of units.

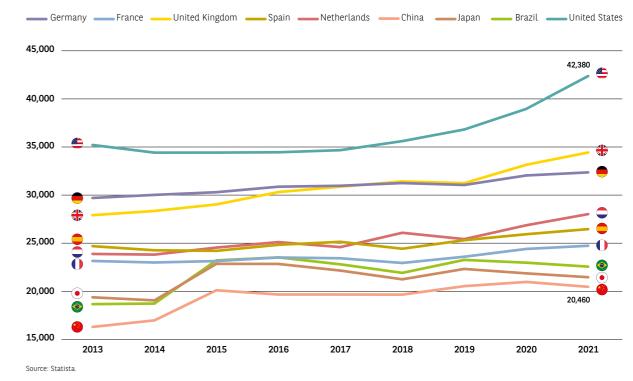


THE EVER-RISING PRICE OF NEW VEHICLES

While sales volumes have fallen, the same cannot be said for the price of new cars. In most of the countries covered by this survey, prices have been rising steadily for almost a decade, with increases of over 20% in China, the US and the UK. In France,

Fig. 4 / Context

Change in the average price of new vehicles $\ln \varepsilon.$



Germany and Spain, price rises have been more gradual, but they remain significant (7%, 9% and 7% respectively). Only in Brazil and Japan, where trends have been strikingly similar, has the price curve remained relatively flat in recent years, after a sharp increase in 2015 (Fig. 4).

WIDE VARIATIONS **IN AVERAGE PRICES**

Against this backdrop of rising prices, the average sum paid by the motorists surveyed for this edition of L'Observatoire Cetelem is €16,181, a figure that is slightly higher in Europe (€16,712). This narrow difference between the two main geographical regions under consideration, Europe and "the rest of the world", can be largely explained by the very high average price of €27,794 observed in China, the world's largest market (Fig. 5).

This is a relatively new market in which new-car sales have been particularly strong compared to other countries. With the exception of Poland, the European country where the average price of a vehicle is the lowest (€7,964), one must head to the emerging economies of Brazil, Mexico and Turkey to find the lowest average prices. In contrast, Germany, where large saloon cars reign, Norway, where electric cars are king, and the United States, the world's second largest market, post an average price of over €20,000. At €16,553, France is in line with the average figure.

Fig. 5

How much did you pay for this vehicle (total price minus any discounts offered and negotiated)? Share of respondents who have at least one car.

In €.

	[
	EUROPE	€16,712	18-COUNTRY AVERAGE	€16,181
Germany	•		20,084	
Austria			18,340	
Belgium	•		18,800	
Spain	•		18,666	
France	0 -		16,553	
Italy	0 -		17,259	
Norway	+ -		20,169	
Netherlands		15,194		
Poland	$\overline{}$	7,964	Ļ	
Portugal	۲		16,110	
United Kingdom			14,696	
Turkey	C	9,6	80	
South Africa			13,093	
Japan	•		16,946	
China	e			27,794
United States			20,278	
Mexico		10),459	
Brazil		9,10	57	

Source: L'Observatoire Cetelem de l'Automobile 2023.

A WEIGHTY PRICE

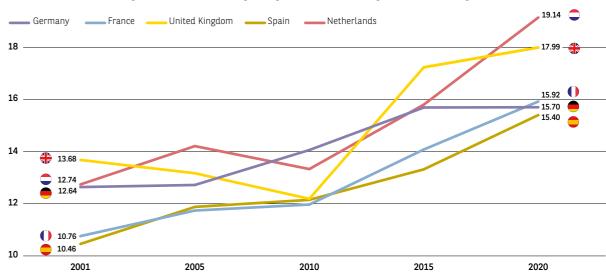
The 2022 edition of L'Observatoire Cetelem focused on the SUV craze. This is a class of vehicle whose weight is an inherent characteristic. Given that this edition centres on costs, we thought it would be interesting to examine how the price per kilogramme of vehicles has evolved over the last few years. Isn't this the ratio to which consumers refer when they do their food shopping (Fig. 6)?

It is worth noting that despite the rise of SUVs, which became slightly leaner between 2011 and 2020 in their petrol and diesel guises, but

Fig. 6 / Context

Change in the average price per kg of cars

Ratio between the average price and the average weight of a new passenger vehicle. In \notin /kg.



Source: ICCT.

became heavier when equipped with electric motors, due to the presence of batteries, the average weight of European vehicles has remained stable since 2011, at under 1,400 kg.

However, the price per kilo of cars has risen steeply over the last decade, driven by the cost of materials and equipment that improve quality. For instance, prices in the UK have risen by almost 30%. In France, the increase has been a little less dramatic, at around 25%, with the price per kg reaching €15.92. Incidentally, this is the same price as a kilogramme of minced beef.

A purchase that is not taken for granted

A REASONABLE PRICE... SECOND HAND

The steady increase in the price of cars does not appear to overly trouble those who own one. 6 out of 10 respondents believe that they paid a reasonable price for their vehicle. Europeans are considerably more likely to hold this view (7 out of 10). If we examine the results in greater geographical detail, we see that the Portuguese and Austrians are the most satisfied (8 out of 10), while the Brazilians and South Africans are far more split (4 out of 10) (Fig. 7). It is apparent throughout this report that these two countries often coalesce around certain views.

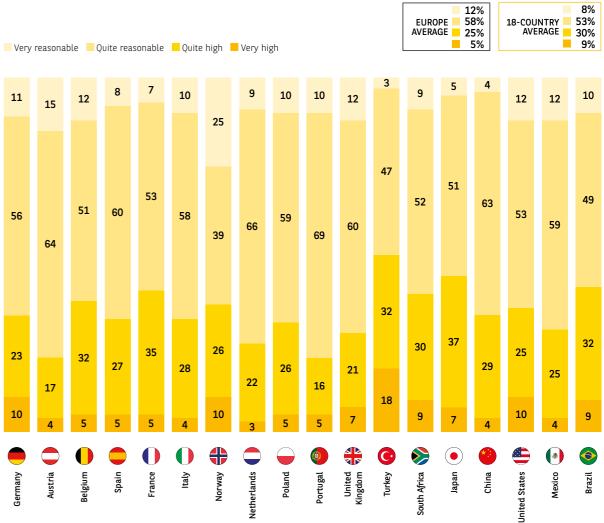
However, a more detailed analysis of the data uncovers a clearer divide between buyers of used cars and those who buy new vehicles. 77% of the former say they are happy with the price they paid for their vehicle, compared with just 57% of the latter. This is a substantial gap and one that can be observed in all the countries surveyed.



6 out of 10 respondents believe they paid a reasonable price for their vehicle.

Fig. 7

When you purchased your vehicle (new or used), did you think the price was ...? Share of respondents who have at least one car and financed it other than by leasing. In %.



Source: L'Observatoire Cetelem de l'Automobile 2023

TAKING A FINANCIAL HIT IS UNAVOIDABLE

However, a reasonable price does not necessarily make a car easy to purchase. Although buying a car may generally seem affordable, it requires sacrifices that make owning a vehicle less enjoyable. 7 out of 10 motorists believe that it can be done, but not without a degree of financial sacrifice (Fig. 8). On this issue, respondents in Europe and in the rest of the world are more or less in agreement. One country stands apart somewhat, by offering a much more positive outlook. Only 53% of Chinese respondents believe that buying a car and making financial sacrifices go hand in hand, but more importantly, 44% think that it is feasible for everyone. Constantly and rapidly improving access to cars for a broad section of the population in recent years is undoubtedly a factor in these responses.

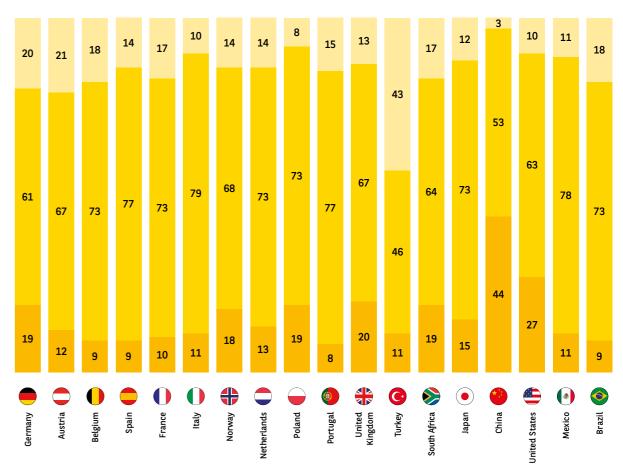
In contrast, 43% of Turks believe that buying a car is only for those who can afford it, compared with an overall average of only 15%. The tough economic and financial circumstances the country has been facing for many months now go a long way to explaining this result. With inflation rising at a rate far beyond that of other countries and the value of the Turkish lira falling sharply, it is difficult for the population to be optimistic about buying a car. It should also be noted that the feeling that cars are only for the wealthy is generally more pronounced among non-vehicle owners, with 3 in 10 being of this opinion.



Fig. 8

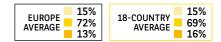
Do you believe that owning a car is...? To all respondents. In %.

The preserve of wealthier individuals Achievable, but only through financial sacrifices Financially achievable for everyone



Source: L'Observatoire Cetelem de l'Automobile 2023.

L'Observatoire Cetelem 2023



AN EFFORT RATE THAT IS PEAKING

According to motorists, buying a car is achievable but requires sacrifices to be made. The indicator appropriately named the "effort rate" shows this in stark relief. Measured by calculating the ratio between the price of a car and the average annual income, this rate is close to or greater than 1 in some countries (Fig. 9): buying a car costs some individuals their entire annual wage.

In the absence of homogeneous global statistics, establishing precise and accurate trends for this effort rate over time is almost impossible. However, when one considers the stagnation – or even the reversal – of income rises in recent times, together with the increasing amount of technology that goes into cars, electric vehicles in particular, it is not difficult to imagine how tough these rates are becoming.

In Europe alone, car prices have risen twice as fast as household incomes, and that was before the 2020-2022 price shock triggered by the pandemic and its impact in terms of restricting supplies. When the effort required becomes too great, people give up on the idea. When will breaking point be reached?

Fig. 9 / Context

Effort rate* for the purchase of a new passenger vehicle in 2021

In 2021				18-COUNTRY AVERAGE	104%
111 /0.					
Germany		83			
Austria		71			
Belgium		79			
Spain		106			
France	0	73			
Italy	0	87			
Norway		64			
Netherlands		64			
Poland	\bigcirc		216		
Portugal	٢	141			
United Kingdom		96			
Turkey	C			445	
South Africa	>				590
Japan	\bigcirc	79			
China			2	93	
United States		65			
Mexico	۲		2	96	
Brazil	6			353	

18-COUNTRY

Source: Statista.

* Effort rate for new passenger vehicles: ratio between the average price of a car in 2021 and the annual net income per capita in 2019.

Indispensable just as they are

MOTORISTS ARE NOT PREPARED TO GIVE UP THEIR CARS

Cars are considered accessible if certain sacrifices are made, but they remain fundamentally expensive in the eyes of motorists, even if the consensus is that they remain essential. Three-quarters believe it is impossible or almost impossible to do without a car, a view commonly held in European countries and the rest of the world alike.

The populations who are the most attached to their vehicle(s) can be found in the Netherlands, Austria, Belgium and South Africa. The Brazilians, Japanese and Norwegians are the least likely to feel this way. In France, the figure is consistent with the average, with 72% of respondents being unable to imagine a car-free existence (**Fig. 10**).

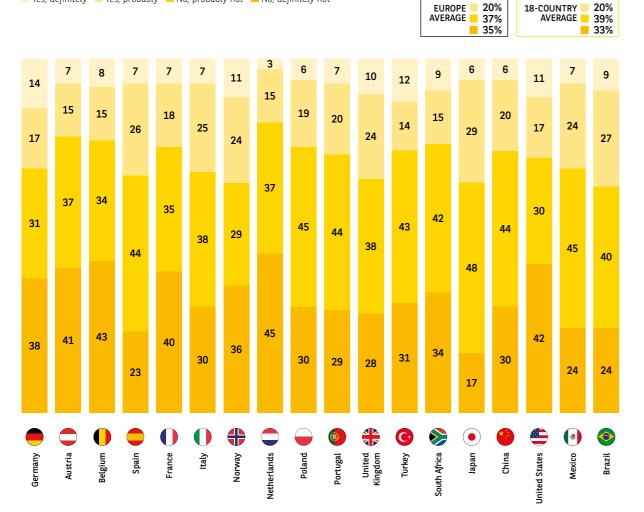
As one might intuitively assume, residents of rural areas are significantly more likely to be car friendly. 77% cannot imagine living without a car, compared with only 70% of urban dwellers. The highest proportion can be found in the Netherlands, while Turkey and Mexico boast the lowest. The contrasts are starker when we compare the different generations. 34% of under-35s would be prepared to no longer own a car, compared with just 26% of over-35s. In Germany and Norway, 1 in 2 people can see themselves doing so, versus only 1 in 4 in Turkey and 1 in 5 in China. In France, 4 out of 10 under-35s hold this view.

72% of motorists cannot see themselves living without a car.

Would you be willing to never own a car again?

Share of respondents who have at least one car. In %.

Yes, definitely Yes, probably No, probably not No, definitely not



8%

8%

Source: L'Observatoire Cetelem de l'Automobile 2023

PEOPLE LOVE CARS JUST AS THEY ARE

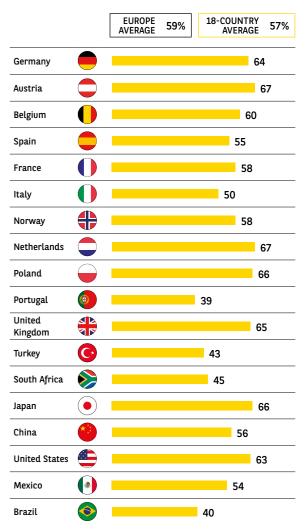
So we have seen that cars are considered indispensable, but this is even truer in their current guises. In this sense, whether it be in terms of equipment, on-board technology or innovation, automakers have done an excellent job of convincing a majority of motorists not to abandon the advances made. Indeed, 6 out of 10 respondents chose not to forego certain items of equipment or features when they bought their vehicle, for the sake of paying less. There are significant geographical disparities, however, with the least economically developed countries proving less intransigent. In Brazil, Turkey, South Africa, but also Portugal, only 4 out of 10 motorists chose not to forego these features, whereas in Austria, the Netherlands, Japan and Poland, the figure is close to 7 out of 10 (Fig. 11).

Only a few percentage points separate buyers of new and used vehicles, with 55% of the former choosing not to give up these features, compared with 59% of the latter. It is obviously a stretch to ask a used-car dealer to remove an optional extra so as to lower the price. However, this is easier to do in the case of a new car, before the purchase order has been signed.

Fig. 11

When you last bought a vehicle, did you forego certain features and characteristics in order to reduce its purchase price?

Share of respondents who have at least one car and who answered "No". In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.

Using your car: the costs add up



While consumers may consider the price of vehicles to be relatively reasonable, the same cannot be said for their running costs. In addition, there are marked differences from one type of expense to the next.

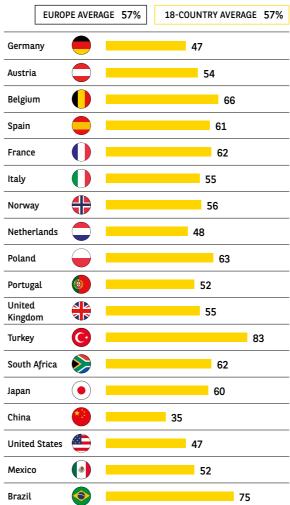
Expensive overall

A SIZEABLE COST BURDEN

A majority of motorists are adamant that the overall cost of owning a vehicle is high relative to the finances at their disposal. 6 out of 10 are of this opinion. This is a minority position in only three countries, with the Chinese being the least likely to complain about the high cost of motoring. Conversely, the Turks, for the reasons mentioned previously, as well as the Brazilians, are overwhelmingly likely to decry the sizeable budget required (**Fig. 12**).

Fig. 12

With respect to the finances at your disposal, would you say that the overall cost of owning this vehicle is...? (Taking into account the purchase price, instalment payments, upkeep, fuel, parking costs, road tolls, etc.) Share of respondents who have at least one car and who consider the cost to be "High". In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.

If we look purely at the monetary data, automobilerelated expenses are the highest in the USA, Austria and Norway, at nearly €2,000 per year (Fig. 13). However, if we take into account net annual income per capita, the cost burden of using a car (fuel, upkeep and insurance) looks very different. Americans spend the smallest proportion of their earnings on their vehicle (6.4% of their total annual budget). The figure is twice as high for their neighbours in Mexico (13.3%). In France, motorists spend 7.7% of their annual budget on their vehicle.

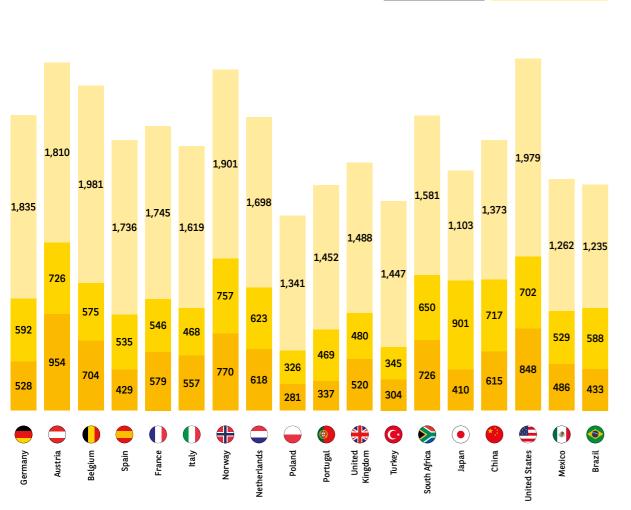
AN EVER GREATER FINANCIAL BURDEN

Not only are cars expensive to run nowadays, but these costs continue to rise. More than 8 out of 10 respondents believe this to be the case, with only a tiny minority being of the view that running costs have fallen. In all the countries surveyed, the majority of respondents feel that the cost of using a car is on the up (**Fig. 14**). Not surprisingly, given the economic circumstances they face, the Turks are very much of this opinion (95%). Almost as many South Africans agree. One has to go to Asia, specifically Japan and China, to find motorists who are less scathing in comparison, with just under 7 out of 10 respondents stating that motoring costs have increased.

Breakdown of the annual cost of using a vehicle by type of expense

Share of respondents who have at least one car. In €.

Fuel Upkeep and repairs Insurance



Source: L'Observatoire Cetelem de l'Automobile 2023.

Fig. 14

€1,598

€583 €572

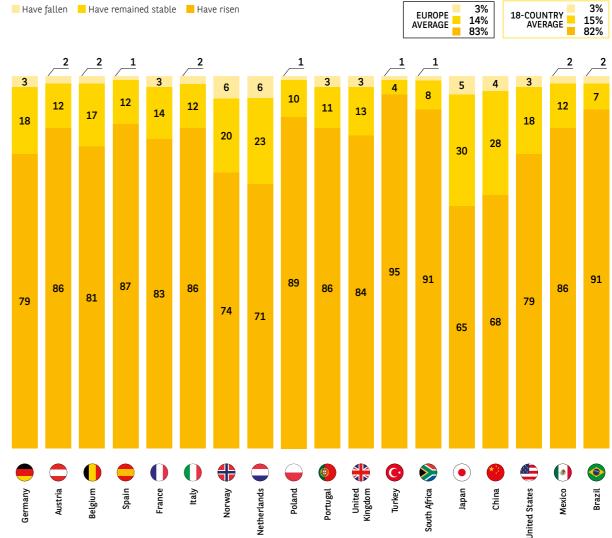
18-COUNTRY AVERAGE

€1,692

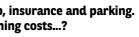
€553 €572

EUROPE AVERAGE

The main costs involved in using a car are fuel, upkeep, insurance and parking. In recent years, would you say that your vehicle's running costs ...? Share of respondents who have at least one car. In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.



DEPRECIATION: A HIDDEN COST OF MOTORING

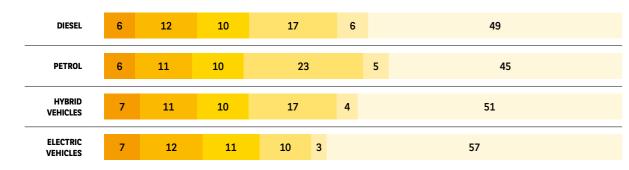
Another way of considering vehicle budgets is to include not only running costs but also the losses incurred. With this in mind, vehicle depreciation emerges as the number one budget killer in European countries, depriving motorists of financial leeway when buying their next car. Depreciation is particularly high on the latest electric models, given the greater rate of obsolescence of innovative high-tech products (Fig. 15).



Fig. 15 / Context

Estimated breakdown of vehicle running costs

Interest Repairs, maintenance, tyres Insurance Fuel/energy Road tax Depreciation

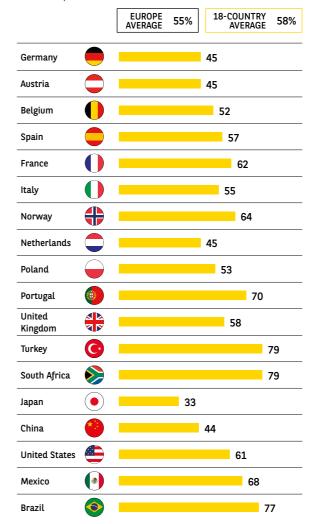


Source: LeasePlan 2021

Fig. 16

Have you ever avoided travelling because of transport costs, regardless of the means of transport in question?

Share of respondents who answered "Yes". To all respondents. In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.

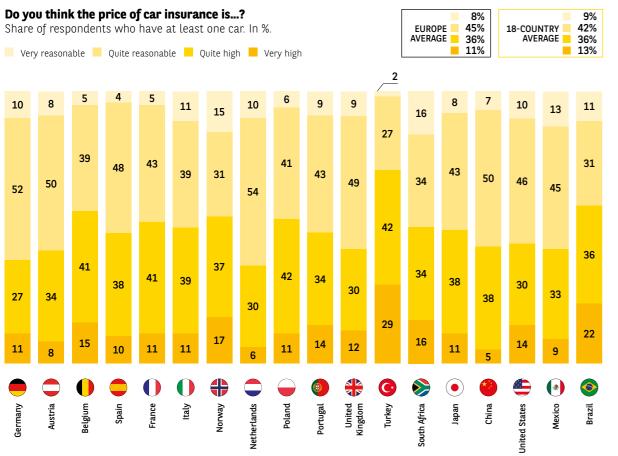
COSTS PUT PEOPLE OFF

Broadly speaking, cost is an issue that affects mobility as a whole. Nearly 6 out of 10 people say they have previously decided not to travel because of the cost involved, regardless of the mode of transport used (Fig. 16). In those countries with the least resilient economies, such as Turkey and South Africa, this proportion rises to almost 8 out of 10. The figure for France is close to the overall average.

Nearly 6 out of 10 people say they have previously decided not to travel because of the cost involved.

Insurance and upkeep, two costs that are still deemed reasonable

Fig. 17



Source: L'Observatoire Cetelem de l'Automobile 2023

NO INSURANCE AGAINST HIGH COSTS

Insurance is the number one item of expenditure examined by L'Observatoire Cetelem de l'Automobile 2023. Its cost is considered high by almost 1 in 2 respondents (Fig. 17). At the risk of repetition – and this will not be the last time it occurs – the Turks are the most likely to describe this cost as excessive (71%), while the Germans are the least likely to do so (38%). The geographical breakdown of views on this topic reveals that a majority of respondents in several European countries believe that insurance is too expensive. This is notably the case in Belgium and Norway. Just over 1 in 2 French respondents are also of this belief.

And yet, there is no real correlation between the cost of insurance and the sense that one is paying too much for it. At almost €1,000 per year, Austrians incur the highest insurance costs, but they are among the least likely to consider the price excessive. At the other end of the scale, the Poles are among the most critical, despite paying the least for their policies. Once again, the French pay close to the average, with an annual spend of €579 **(Fig. 18)**.

The Austrians incur the second highest insurance costs relative to their income per capita, just ahead of the Mexicans (2.5% and 2.8%, respectively). The Poles bring up the rear in this ranking (1.1%).

Fig. 18

How much does your car insurance cost you per year?

Share of respondents who have at least one car. In €.

		EUROPE AVERAGE €572 18-COUNTRY AVERAGE €572		
Germany		528		
Austria		954		
Belgium		704		
Spain		429		
France	0	579		
Italy	0	557		
Norway		770		
Netherlands		618		
Poland	\bigcirc	281		
Portugal	()	337		
United Kingdom		520		
Turkey	C	304		
South Africa	\mathbf{i}	726		
Japan	$\textcircled{\bullet}$	410		
China	(615		
United States		848		
Mexico		486		
Brazil		433		

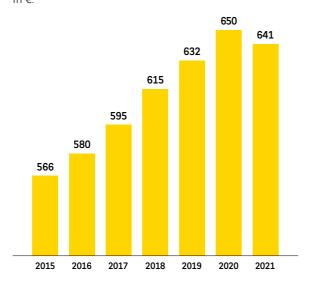
Source: L'Observatoire Cetelem de l'Automobile 2023.

IS THE INCREASE IN CAR INSURANCE PRICES SET TO BE REVERSED?

Having risen for six years in a row, car insurance premiums fell slightly in France in 2021, saving motorists an average of €9 compared with the previous year (Fig. 19). While the constant rise observed since 2016 was caused primarily by the soaring price of spare parts and the passing on of additional costs relating to other types of insurance (direct or indirect consequences of natural disasters, Covid, etc.), the reason for the fall recorded in 2021 is altogether different. Indeed, the global health crisis, the travel restrictions to which it led and the widescale adoption of remote working have contributed to a significant reduction in traffic volumes and, therefore, in the number of insurance claims and payouts. There has also been growing competitive pressure within the car insurance sector, with the arrival of new entrants who are cutting prices by applying new "pay as you drive" or "pay how you drive" models, where rates depend on the amount a car is used or the owner's driving style.

Fig. 19 / Context

Change in the average annual car insurance premium in France, per driver În€



Source: lelynx.fr.

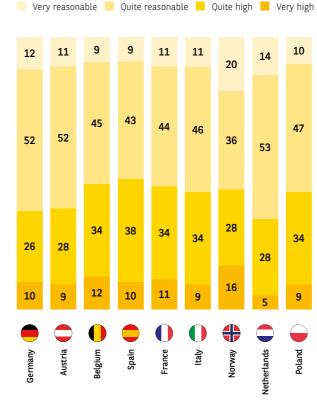
REPAIRS: A LESSER EVIL

When it comes to upkeep and repairs, the second biggest expense item for vehicle owners, the views of motorists are more measured, with just over 4 in 10 deeming their cost too high (Fig. 20). Once again, the Turks top the list (72%), followed this time by the Japanese, who are also up in arms about high prices. Meanwhile, the Americans and the Brits do not appear to suffer excessively from the financial outlay involved (30% and 34%). What of the French? They fall into line with the average, of course.

Judging by the cost of vehicle repairs and the proportion of average income that they represent, the Japanese seem to have good reason to be annoyed. With a mean spend of €901 per year, they are well ahead of every other country, followed at

Fig. 20

Do you consider that the amount you spend on servicing and repairing your vehicle each year is...? Share of respondents who have at least one car. In %.



a distance by the Norwegians and the Austrians. Once more, the Poles spend the least of all the populations surveyed (€326), but the Turks are only just ahead of them in terms of expenditure (Fig. 21).

12% 11% 18-COUNTRY 45% AVERAGE 32% EUROPE 47% AVERAGE 31% 10% 12% 3 2 9 10 11 10 13 15 23 37 37 47 43 53 49 51 35 28 32 ortugal United Singdom China Mexico Brazil Turkey uth Africa

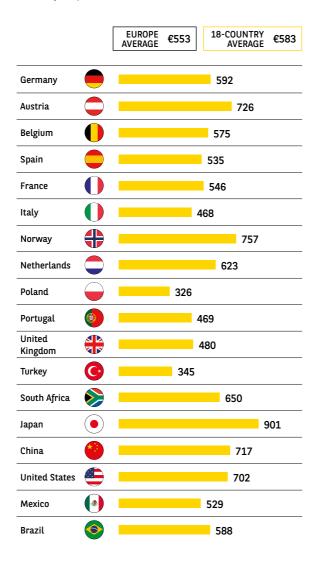
If we look at the repairs-to-income ratio, the Japanese sit in second place, with the Mexicans taking the lead once again (2.7% and 3.1% respectively). And we find the same two countries at the foot of the ranking: Poland and the United States.

It should also be noted that spending on repairs is very similar regardless of whether vehicles are bought new or used. New cars are usually booked in for regular servicing at dealerships, which comes at a cost, while second-hand vehicles tend to be repaired more frequently, but at cheaper prices.



Fig. 21

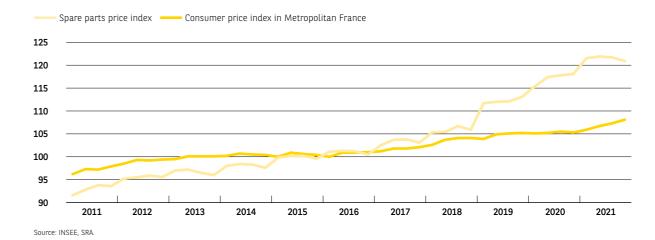
How much do you estimate that you spend on servicing and repairing your vehicle each year? Share of respondents who have at least one car. In €.



Source: L'Observatoire Cetelem de l'Automobile 2023.

Fig. 22 / Context

Spare parts price index in France (excluding VAT and on a like-for-like basis) compared to the consumer price index 2015 = 100.



SPARE PARTS PRICES SKYROCKET

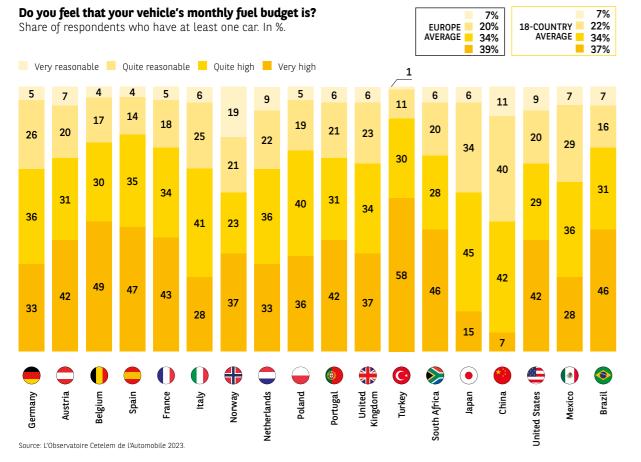
It isn't just cars that are becoming more expensive every year: spare parts prices are rising too. Several coinciding factors have contributed to an increase of almost 30% over the last decade (Fig. 22). Vehicles are becoming better equipped and parts are increasingly sophisticated and complex to produce. Recent shortages (affecting electronic chips in particular), longer lead times and soaring raw material costs all explain the recent surge in prices. The monopoly enjoyed by automakers when it comes to spare parts is also regularly

singled out as a cause of inflated prices for consumers. The liberalisation of the car parts market by the "Climate and Resilience" Act of 22 August 2021 could help reverse the trend (in France). However, progress looks set to be slow and gradual, since the legislation will only cover the automotive glass market as of January 2023. In the meantime, to help lighten the bill, consumers can rely on local mechanics. Indeed, since 2017 the latter have been required to provide an alternative quote based on the use of second-hand parts, which are obviously less expensive.

Fuelling the problem



Fig. 23



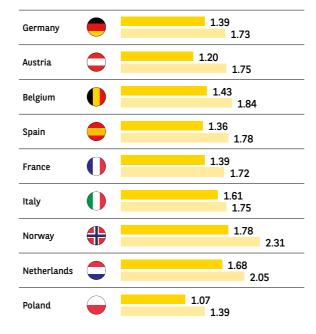
PETROL, MY DEAR!

While the cost of insurance and repairs is a matter for some debate, the same cannot be said for fuel. The findings are clear: 7 out of 10 motorists feel that their fuel budget is high **(Fig. 23)**. China is the only country surveyed in which this is not a majority-held view, although not by

Fig. 24 / Context

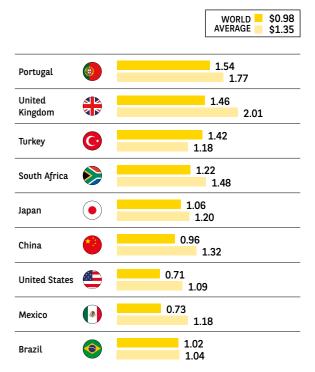
Price of a litre of petrol at the pump In \$.

2016 August 2022



Source: TheGlobalEconomy.

much, given that 49% of Chinese motorists agree with the suggestion. In every other country, it is unquestionable, especially in Turkey where 9 out of 10 people believe the cost is high. The Japanese and Mexicans are a little less vehement, although they are not as measured as the Chinese.



SPECTACULAR PRICE RISES

A quick glance at diesel prices at the pump in several of the countries surveyed goes some way to explaining the feelings of motorists **(Fig. 24)**. In Japan, price rises have indeed remained relatively contained. Conversely, in the United States and Mexico prices have risen by more than 50%, causing consumers in those countries to forget how low they still are compared to other countries.

This increase has had a direct impact on the distances motorists drive. In France, an extra euro on the price of a litre of diesel prompts motorists to travel 1,000 fewer kilometres per year in the short term. Over the long term, such a price increase reduces the average annual distance travelled by 7,500 kilometres.

THE IMPACT OF PRICES AT THE PUMP VARIES

In concrete terms, the average monthly fuel budget of motorists in the 18 countries covered by L'Observatoire Cetelem de l'Automobile 2023 is €133. Although prices have skyrocketed everywhere, there are significant differences between the countries, and not always where one would expect them **(Fig. 25)**.

Fig. 25

How much does refuelling your car cost you per month?

Average value. Share of respondents who have at least one car. In €.

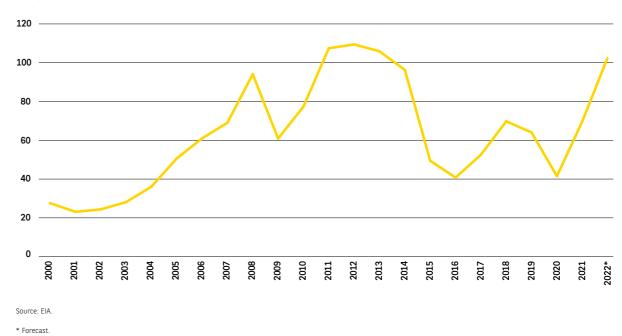
		EUROPE AVERAGE	€141	18-COUNTRY AVERAGE	€133
Germany				153	
Austria	\bigcirc			151	
Belgium	\bullet			16	5
Spain				145	
France	0			145	
Italy	0			135	
Norway	+			158	
Netherlands				141	
Poland	\bigcirc			112	
Portugal	٢			121	
United Kingdom				124	
Turkey	C			121	
South Africa				132	
Japan	$igodoldsymbol{ heta}$		g	92	
China	6			114	
United States				16	5
Mexico				105	
Brazil	6			103	

Source: L'Observatoire Cetelem de l'Automobile 2023.

Motorists in Japan are relatively unmoved by the impact of high fuel prices and it is they who report the lowest estimated monthly expenditure: €92. In all other countries the figure exceeds €100, in some cases by a significant margin. In Belgium and the United States, the leading pair in this particular ranking, spending on fuel totals €165 a month. In most EU countries, Portugal and Poland aside, monthly fuel budgets are fairly similar.

Fig. 26 / Context

Change in the price of a barrel of Brent crude oil In \$ per barrel.



PRESSURE ON CRUDE OIL PRICES

On 24 February 2022, the day on which Vladimir Putin announced the launch of a "special operation" in Ukraine, the price of a barrel of crude oil exceeded \$100 for the first time in 7 years. After several years of prices staying below \$80, we appear to be entering a highly uncertain period. Today's geopolitical and economic cocktail could hold many more surprises (Fig. 26).

Cutting costs, at any cost



Taking personal action

MOTORISTS ARE TAKING MEASURES

Faced with an economic situation that is looking ever bleaker, motorists are far from complacent. They believe that the cost of running their vehicle is too high. 6 out of 10 are adopting measures to limit these costs (Fig. 27). This reaction has been particularly strong in the four countries with the weakest economies, with three-quarters of South Africans, Brazilians and Mexicans taking specific action, and an even higher proportion of Turks. Of the remaining countries, France is home to the largest majority of individuals who are keen to act (7 out of 10). The central focus placed on fuel prices during the lengthy electoral period that preceded this survey may well have had something to do with this result. In contrast, the Japanese, British, Austrians and Dutch show less gusto.

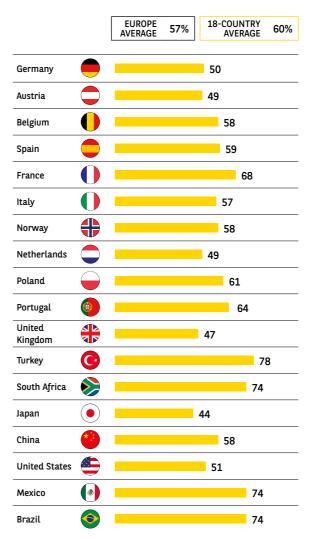
AN ASSAULT ON FUEL CONSUMPTION

Take measures? Sure, but how? One need not be psychic to guess where people are concentrating their efforts. The answer is obvious from the previous pages. According to 65% of respondents, the main priority is to reduce fuel expenses (Fig. 28). The Japanese are the one exception. As we have seen, they do not appear to be suffering unduly from prices at the pump, while in every other

Fig. 27

Do you take measures to reduce the cost of using your vehicle?

Share of respondents who have at least one car and who answered "Yes". In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.

country fuel costs have caught people's attention far more than any other factor. And, for once, Europe is where the desire to limit fuel spending is the most powerful. An analysis of every other cost item reveals local variations. In France, reducing the amount spent on motorway tolls,

a French speciality, is the second-highest priority. In Belgium, Brazil and the Netherlands, spending less on parking comes second. In Italy and Japan, the concern is more with bringing down the cost of insurance.

PRIORITY NO. 1: DRIVE LESS TO CONSUME LESS

To lower their fuel bill, motorists are willing to consider several options, the first being the most obvious: driving less. 6 out of 10 people have embraced this measure. The consensus is broadly in favour of this approach, the exceptions being Japan and China, where 1 in 3 and 1 in 5 motorists, respectively, are willing to consider it. Along with the South Africans, the French are the most likely to reduce the mileage they cover (69% and 65% respectively).

So motorists are keen to drive less, but 46% of respondents are also interested in comparing fuel prices and searching for the cheapest service stations.

Which types of expense are you most interested in reducing?

Share of respondents who have at least one car and have taken measures to reduce the cost of using their vehicle.

		Fuel (diesel, petrol, etc.)	Upkeep and maintenance	Insurance	Toll roads (motorways)	Parking fees (renting a space, parking in town, etc.)
Germany	•	63%	24%	24%	13%	23%
Austria		75%	26%	24%	10%	15%
Belgium	•	71%	15%	17%	20%	35%
Spain	•	68%	27%	23%	18%	26%
France	0	67%	18%	12%	37%	30%
Italy	0	68%	26%	30%	19%	24%
Norway	()	67%	23%	15%	22%	22%
Netherlands	\bigcirc	68%	15%	18%	12%	34%
Poland	$\overline{}$	71%	24%	21%	20%	22%
Portugal	٢	61%	27%	20%	28%	24%
United Kingdom	4 <u>Þ</u> 7 Þ	61%	23%	20%	12%	24%
Turkey	C	65%	40%	19%	21%	22%
South Africa	>>	66%	39%	23%	17%	19%
Japan	•	49%	25%	32%	20%	24%
China	6	62%	44%	26%	17%	30%
United States	e	63%	34%	25%	16%	16%
Mexico		59%	38%	18%	20%	28%
Brazil	(58%	29%	19%	20%	43%
EUROPE AVERA	GE	67%	23%	20%	20%	26%
18-COUNTRY A	VERAGE	65%	28%	21%	20%	26%

Source: L'Observatoire Cetelem de l'Automobile 2023

Paradoxically, this means that they are driving further and therefore burning more fuel to do so. This option is much less appealing to the Turks and South Africans.

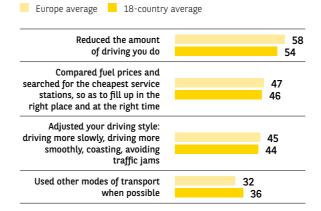
An almost identical proportion of motorists (44%) are willing to change their driving style. This means driving more smoothly and more slowly. Norwegians, many of whom use electric vehicles, are not particularly inclined to take their foot off the accelerator or drive less aggressively (24%).

On these three points, the difference between residents of rural and urban areas is significant. 61% of rural inhabitants plan to drive less, compared with 51% of

Fig. 29

What measures have you taken to reduce fuel costs?

Share of respondents who have at least one car and have taken measures to reduce the cost of using their vehicle. Select one or more answers. In %.



city dwellers. When it comes to searching for cheaper fuel and driving in a way that is more economical, the gap is smaller (4% and 6%, respectively).

Looking at the ranking of measures people are prepared to take, switching to other modes of transport is another fairly popular option (36%), particularly among urban dwellers (39% vs. 27% of country dwellers), but it is clear most of all that certain ecofriendly solutions are of little interest to motorists.

Choosing a more fuel-efficient vehicle appeals to only 1 in 5 people and ridesharing to only 1 in 10. However, the figure for the latter reaches 1 in 5 in Turkey, South Africa and Mexico (**Fig. 29**).

ded using fuel-hungry uch as air conditioning	26 30
r a more fuel-efficient vehicle	20 23
Used ride sharing	11 12
Converted your car ethanol (FlexFuel unit) or electric (retrofit)	6 8
we taken no measures	3 2
Other	2

REPAIRING YOUR OWN CAR IS ALWAYS A WINNER

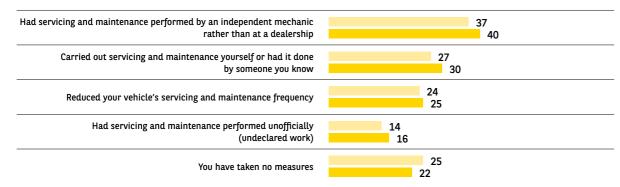
Focusing on upkeep and maintenance is another possible avenue for cost-cutting motorists **(Fig. 30)**. Car dealership networks bear the biggest brunt of this self-sufficient approach. Of those motorists who seek to lower costs, almost 4 in 10 opt to have their vehicle serviced and repaired by independent mechanics. The two Iberian nations are where dealer networks have the most to worry about. DIY maintenance is also popular, with 3 in 10 motorists stating that they are prepared to get their hands dirty. The highest proportions of home mechanics are to be found in China and the United States. A quarter of those surveyed put their faith in an even more radical solution: reducing the amount of vehicle servicing and maintenance performed. More than 4 out of 10 Turks are tempted by the idea.

Fig. 30

What alternatives have you chosen to reduce the cost of upkeep and maintenance?

Share of respondents who have at least one car and have taken measures to reduce the cost of using their vehicle. Select one or more answers. In %.

Europe average 18-country average



Source: L'Observatoire Cetelem de l'Automobile 2023.

FEWER SAVINGS ARE EXPECTED ON THE INSURANCE SIDE OF THINGS

The third stage of the cost reduction rocket, i.e., spending less by making savings on insurance, is a somewhat trickier proposition (Fig. 31). It is worth noting first of all that 24% of those who seek to cut costs have taken no steps in this direction, with Europeans being the most reluctant to do so. 6% have even decided to drive uninsured.

The main way of saving money on insurance is to compare deals (32%), something that has been embraced in a very uneven way. Indeed, 47% of drivers in Turkey choose to do so, compared with just 19% in the Netherlands. Purely for financial reasons, 17% have also decided to downgrade their cover by going for a third-party policy.

Another route people go down is to regularly switch insurers (19%), with the Chinese and the British leading the way in this area. Also popular among some motorists is parking their car in a secure location, which is the best way of avoiding accidents (17%). Tailored insurance, including policies linked to the mileage covered, appeals to 12% of respondents.

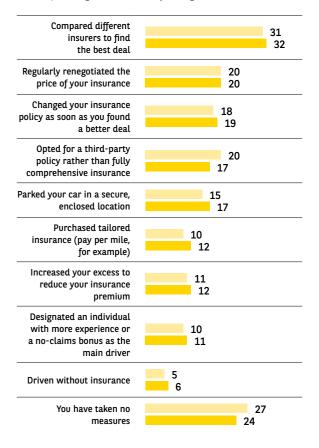
Fig. 31

What measures have you taken to reduce car insurance costs?

Share of respondents who have at least one car and have taken measures to reduce the cost of using their vehicle.

Select one or more answers. In %.

Europe average 18-country average



Source: L'Observatoire Cetelem de l'Automobile 2023.

Action is expected from carmakers and governments

While motorists are doing what they can to lower the cost of using their vehicle, they also expect governments and brands to offer their support on this issue.

1 in 2 motorists would like governments to cap fuel prices.

GOVERNMENTS MUST ACT

The main type of measure people would like governments to take is financial, with respondents keen first and foremost to see fuel prices capped (Fig. 32). 1 in 2 motorists would like to see this happen. Rural dwellers are the most likely to be in favour of such a policy, particularly in France, where 67% are of this view. The Purchasing Power Act passed by the French parliament on 4 August this year includes a measure that grants a discount on the price of fuel, having seemingly taken these demands into account. By contrast, motorists in both China and Japan are less fervent in their desire to see fuel prices limited (36%).

Again on the financial front, close to 4 out of 10 motorists would like to see the government lower the various taxes car users are charged. The Poles are the least likely to hold this view, contrary to the Brazilians.

Two other measures achieve almost equal levels of popularity: just over 1 in 5 respondents would like public transport to be developed further and support to be offered to those who purchase electric vehicles. Both solutions are favoured by urban dwellers. When it comes to improving public transport, the opinions of the Chinese and Americans are at odds (36% vs. 15%). As regards support for those who switch to an electric vehicle, Spain and Germany are at opposite ends of the scale (31% and 14%).

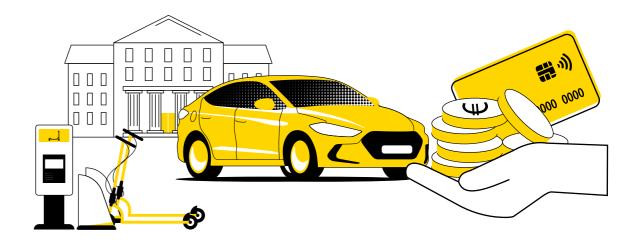
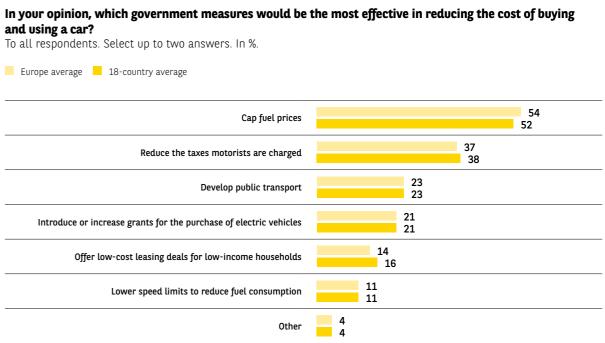


Fig. 32



Source: L'Observatoire Cetelem de l'Automobile 2023

L'Observatoire Cetelem | 2023

CARMAKERS NEED TO PUT THEIR HANDS TO THE WHEEL

If motorists expect a great deal from governments, they also believe that brands should not simply sit back and watch, buoyed by their strong results (more on this later). It is clear that they too will need to place an emphasis on the fuel factor (Fig. 33). 64% of those surveyed are of the view that manufacturers should primarily be designing more fuel-efficient vehicles. This is an opinion shared by almost twice as many people as the next item in the list, further evidence of the immense importance that motorists place on this issue. Not surprisingly, the Norwegians and Americans are the least likely to back this kind of measure (56%

and 53%). The former is a nation of electric vehicle users, the latter a land of cheap fuel.

Another approach, which aims to reduce fuel consumption via a different route, is to design lighter vehicles (32%). This is an avenue favoured in Germany, which is renowned for its large saloon cars.

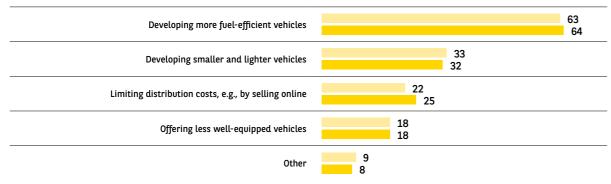
Limiting distribution costs and reducing the quantity of equipment fitted to vehicles receives far fewer positive responses, another sign that manufacturers should really be directing their energy towards improving fuel economy, which has a clear day-to-day impact.

Fig. 33

In your opinion, which measures by carmakers would be the most effective in reducing the cost of buying and using a car?

To all respondents. Select up to two answers. In %.

Europe average 18-country average



Source: L'Observatoire Cetelem de l'Automobile 2023

6 OUT OF 10 PEOPLE have decided not to travel in the past because of the cost of using their car

لسل

S

3 IN 4

MOTORISTS

could not live

without their car

7 OUT OF 10 MOTORISTS believe their fuel budget is too high



ACCORDING TO 7 OUT OF 10 MOTORISTS

buying a car is possible but requires financial sacrifices

MORE THAN 8 OUT OF 10 MOTORISTS

believe that running costs are increasing





1 IN 2 PEOPLE

believe car insurance is expensive

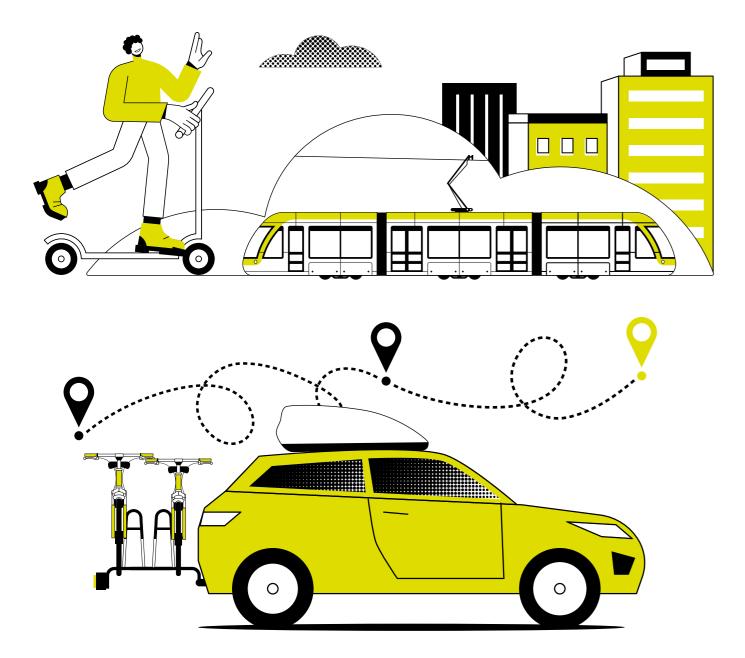
MORE THAN 6 OUT OF 10 MOTORISTS

want carmakers to produce more economical vehicles

1 IN 2 PEOPLE

want governments to take action on the price of fuel





OTHER MOBILITY Solutions, used In a comple-Mentary way

Going back in history, especially pre-history, mankind was nomadic. Mobility was essential to both the survival and security of humans. Since the early 20th century, this mobility has been embodied by the automobile. Every day and during the weekends and holidays, cars are a central part of people's journeys. However, under the direct influence of structural economic, environmental and societal changes, of which climate change is one of the most striking examples, behaviours and practices are evolving. The automobile's influence is being eroded. The development of public transport and the emergence of soft mobility, particularly in towns and cities, are increasingly providing natural and complementary alternatives to cars, which are seeing their central role in society diminish.

L'Observatoire Cetelem 2023



It's hard to live a carless life

At the heart of people's journeys...

UNBRIDLED PRACTICALITY

In every imaginable day-to-day situation, cars unquestionably remain the ideal mode of transport. This is especially true when shopping or enjoying sporting activities (Fig. 34). 9 out of 10 respondents say they use their vehicle often or very often in these cases. When they go away for the weekend or on holiday, 8 out of 10 choose to go by car. This proportion drops slightly when it comes to



daily journeys, including commuting. In these situations, three-quarters of people use their car. It is worth noting that this score is down by 5 points compared to last year, presumably due to the impact of the global health crisis, which led to fewer people travelling to their workplace.

With such high scores, it makes sense that the differences between countries are smaller. The Austrians, the French and the British are slightly less likely than average to use their cars on a daily basis (63%, 64% and 64%), unlike the Chinese, the Mexicans and the South Africans (90%).

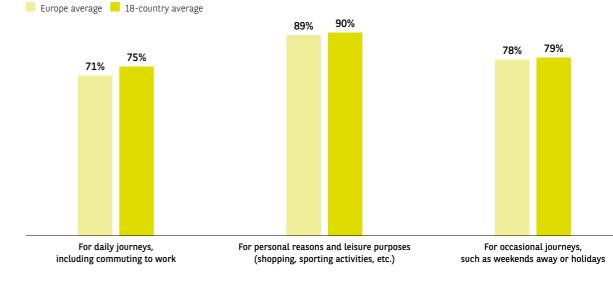
MORE AT HOME ON RURAL ROADS THAN ON CITY STREETS

The types of roads motorists use reveals a clearer geographical divide. Indeed, the Europeans tend to use their cars equally in urban and rural environments, while the rest of the world use their vehicles mainly in towns and cities. If we consider the world as a whole, 1 in 2 people say they use their vehicle in both urban and rural settings. The countries where car use is more varied tend to be

Fig. 34

Would you say that you use your car ...?

Share of respondents who have at least one car. Share who answered "Regularly" or "More often". Give one answer for each type of journey.

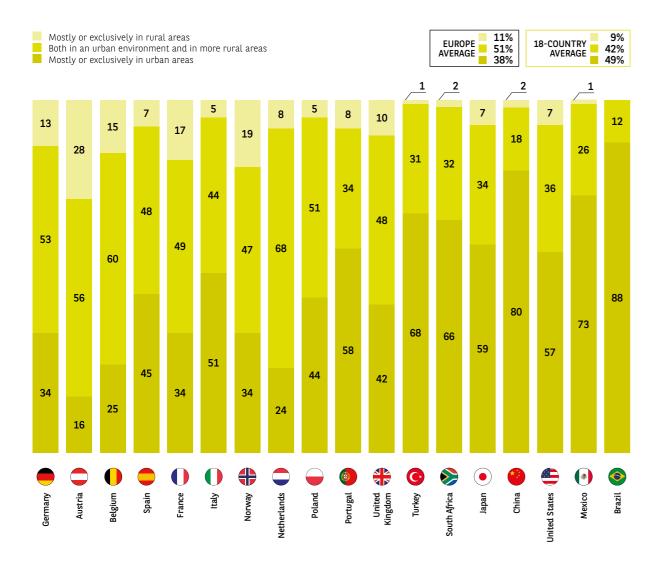


Source: L'Observatoire Cetelem de l'Automobile 2023

the smaller nations in terms of size, as illustrated by the fact that 68% of Dutch and 60% of Belgian drivers use their vehicle in both rural and urban environments (Fig. 35). The countries where people drive their cars primarily, not to say exclusively, in urban areas tend to be those containing vast expanses of land and numerous megacities, such as Brazil and China (88% and 80%).

What do you use your vehicle for?

Share of respondents who have at least one car. One answer only.

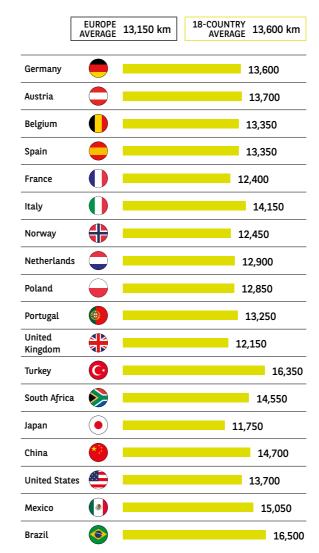


Source: L'Observatoire Cetelem de l'Automobile 2023

Fig. 36

How many kilometres do you estimate that you cover in your vehicle per year?

Share of respondents who have at least one car. In km.



Source: L'Observatoire Cetelem de l'Automobile 2022

THE BIGGER THE COUNTRY, THE MORE PEOPLE DRIVE

One measure of automobility is the distance travelled. According to the data collected, motorists drive an average of 13,600 km a year in the countries surveyed **(Fig. 36)**. And once again, there is a correlation between the size of the country and the number of kilometres driven. The top four nations in this particular ranking are Brazil, Turkey, China and Mexico, the 5th, 37th, 4th and 14th largest countries in the world, respectively. Italy sits in 5th place, pulling off the "feat" of surpassing the United States, the world's 3rd largest country in terms of surface area. It is interesting to note that France lies at the bottom of this ranking, with an average of 12,400 km travelled per year.

"

The average distance covered by motorists in Europe is 13,150 km per year.

THE FRENCH DRIVE LESS

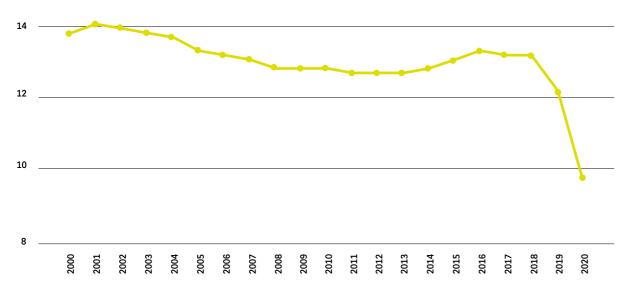
As we have just established, the French are not the most avid motorists. The trend over the last 20 years, in terms of the mileage they cover, does nothing to suggest that this will change any time soon. Over this period, the data collected by the SDES (a French data and statistical analysis service) points to a decline that has been further exacerbated by Covid. The average distance travelled in 2020 dipped below the 10,000 km mark, from almost 14,000 km in the early 2000s (Fig. 37). The rapid rise of remote working during the pandemic is the crucial factor that explains this significant drop. The next few years will tell us whether this is a temporary blip or a major societal change.

... for daily journeys cars face a challenge



Fig. 37 / Context

Change in the average annual distance driven in France Average distance. In thousands of km.



Source: SDES.

SOFT MOBILITY IS GAINING GROUND

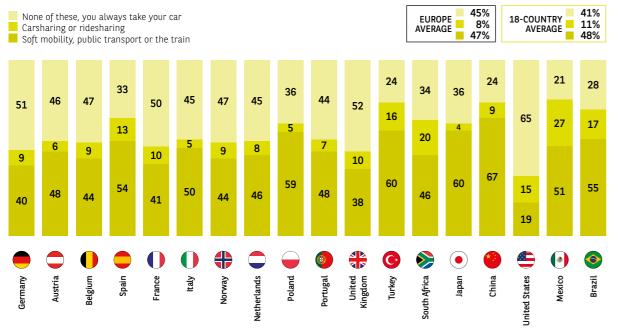
The fact that motorists frequently use their cars does not prevent them from sometimes turning to other forms of mobility (Fig. 38). Thus, while 4 out of 10 motorists would never give up their car, almost half of those surveyed embrace soft mobility, public transport or train travel alongside motoring. In four of the countries surveyed, a majority of respondents prefer to use their car: the UK, Germany, France and, most fervently, the USA. Meanwhile, China, Turkey and Japan are where we find the highest proportions of motorists who use soft mobility solutions or public transport. Carsharing and ridesharing still only appeal to a relatively small percentage of motorists (11%). Less economically developed countries seem to be the keenest on these modes of transport, probably because it is common for people there to travel in mini-buses or family cars that are used in a similar way.

These overall results conceal a clear divide between rural and urban areas. 56% of those who live in the country invariably use their cars on a daily basis, compared with only 35% of city dwellers. In France, the ratio is almost 2:1 (64% vs. 36%). Conversely, more than half of all urbanites opt for soft mobility, public transport or trains, with the figure for rural populations reaching just 35%.

We will examine this territorial divide in more detail later on.

Today, which mode of transport do you tend to use most often for your daily journeys, including commuting, instead of using your car?

Share of respondents who have at least one car. In %.

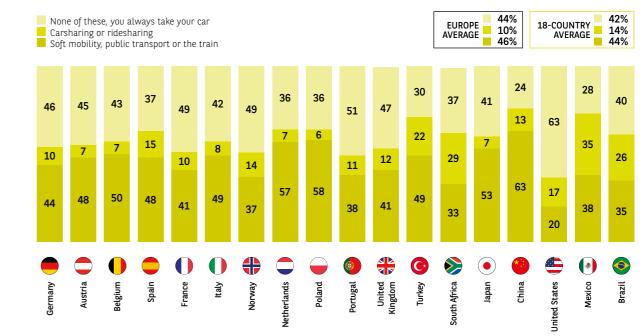


Source: L'Observatoire Cetelem de l'Automobile 2023.

More than 4 out of 10 people always use their car for their daily journeys.

Fig. 39

(shopping, sporting activities, etc.) instead of using your car? Share of respondents who have at least one car. In %.



Source: L'Observatoire Cetelem de l'Automobile 2023

AN EVEN BALANCE WHEN IT COMES **TO LEISURE AND HOLIDAY USE**

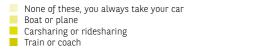
The results for private journeys and leisure travel are no great departure from the previous figures (Fig. 39). The scores are more or less the same, with 42% always using their car and 44% opting for soft mobility, public transport or the train. From one country to the next, the balance is practically identical.

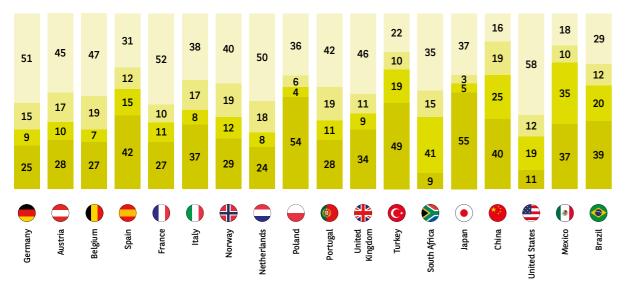
Today, which mode of transport do you tend to use most often for personal reasons and leisure purposes

Do weekend trips or holidays move the needle? Not really. Here again, 4 out of 10 people invariably use their car for these purposes. For long distances, trains and coaches appear to be serious competitors of the automobile (Fig. 40).

Today, which mode of transport do you tend to use most often for occasional journeys, such as weekends away or holidays, instead of using your car?

Share of respondents who have at least one car. In %.





39%

33%

18-COUNTRY 13%

AVERAGE 15%

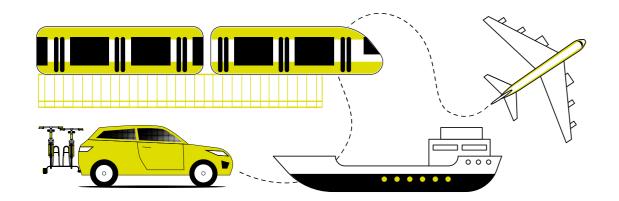
44%

33%

EUROPE 14%

AVERAGE 9%

Source: L'Observatoire Cetelem de l'Automobile 2023.



The mobility mix: an urban trend

The uneven emergence of soft mobility

MARKED GEOGRAPHICAL DISPARITIES

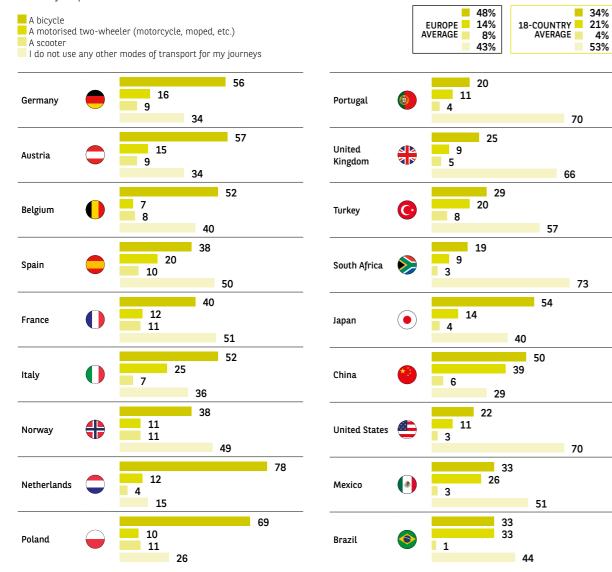
The relative dominance of cars for everyday use, going away on holiday and leisure purposes has done nothing to halt the rising popularity of soft mobility. Indeed, with almost 1 in 2 people using a bicycle, scooter or motorised two-wheeler, it is clear that this is not just a niche preference, but a real and increasingly appealing alternative. Admittedly, this is more prevalent in European countries. Moreover, the disparities are more significant than for most of the other topics examined by this survey so far. In the Netherlands, where 85% L'Observatoire Cetelem 2023



of respondents have made soft mobility a part of their lives, this is a widespread societal attitude in all parts of the country (see below). The Chinese, who tend to be just as readily associated with cycling, but also the Poles, favour soft mobility as a complement to car use. In contrast, the Americans, Portuguese and South Africans have been slow to embrace these modes of travels (1 in 3). In France, half of the motorists questioned claim to have done so **(Fig. 41)**.

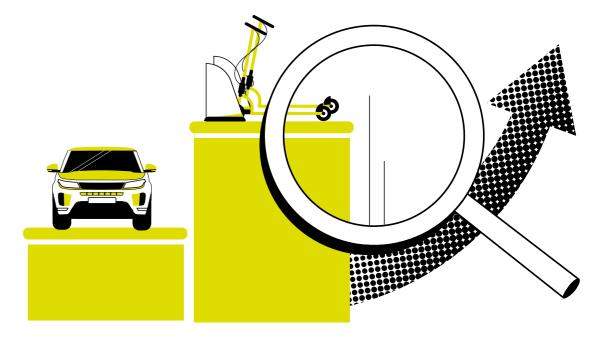
Other than your car, what modes of transport do you use to make your journeys?

Share of respondents who have at least one car. In %.



4%

53%



EVER INCREASING APPEAL

Even more positively, these greener approaches to mobility are gradually gaining ground. Soft forms of mobility are increasingly being used by almost a third of the motorists surveyed, a figure higher than the share who say they are using them less and less. As for all the other items, the proportion of motorists who no longer use certain means of transport is higher than the proportion who now use them more frequently (Fig. 42).

However, public transport, trains and coaches have been newly embraced by 23%, 16% and 15% of respondents, respectively. Generally speaking,

the status quo remains to an extent, with about half of all car owners having made no changes to their travel habits.

To give a specific geographical example, respondents in Turkey seem to be the most willing to try every possible mode of transport that might offer a viable alternative to car use, which they consider too costly. Whether we are talking about soft mobility, public transport, trains, coaches, planes or carsharing, the Turks come top of the 18-country ranking. It is only beaten by China (by 2 pts) when it comes to ridesharing.

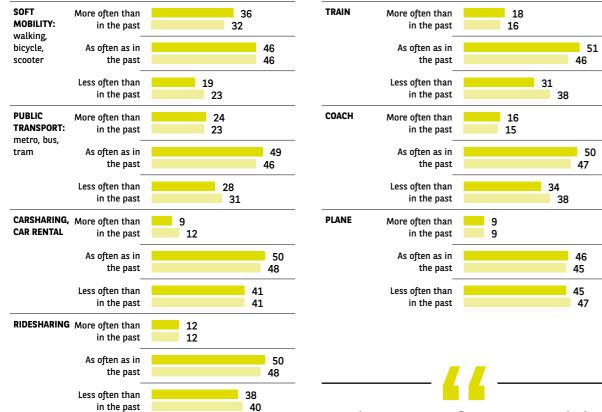
Source: L'Observatoire Cetelem de l'Automobile 2023.

Do you use the following means of transport as an alternative to travelling by car more or less often than in the past?

Share of respondents who have at least one car. One answer per mode of transport. In %.

Europe average 📃 18-country average

Source: L'Observatoire Cetelem de l'Automobile 2023



In the space of 5 years, e-bike sales have tripled in Europe.

THE ELECTRIC BIKE AND SCOOTER PHENOMENON

On the topic of soft mobility, it is worth taking a closer look at bicycle and scooter use in Europe.

When one thinks of cycling, one inevitably thinks of the Netherlands, a country with an average of 1.3 bicycles per capita and whose city of Utrecht boasts the world's largest dedicated bicycle parking area*. But if one talks about bicycles, it is impossible today to avoid combining it with the word "electric". In 5 years, European sales of electric pedal-assist bicycles (or e-bikes) have almost tripled and now comfortably exceed 3 million units per year (Fig. 43). As for traditional bicycles, their sales have remained relatively stable at 22 million in 2020, across 28 European countries.

Fig. 43 / Context

Sales of electric bicycles in Europe, 2006-2019

By comparison, Chinese sales of e-bikes alone reached 16 million units in 2020.

In France, they accounted for 24% of total sales in 2021. In Germany, the market share of e-bikes is even higher, at 40%. A report on mobility published in 2019 revealed that sales were highest in rural areas and among seniors. In the Netherlands, more and more traditional cyclists are also switching to e-bikes.

As for scooters, the picture is even rosier. In France, sales increased ninefold between 2017 and 2021. The million unit sales per year mark will very soon be passed.

* Source: deustschland.de

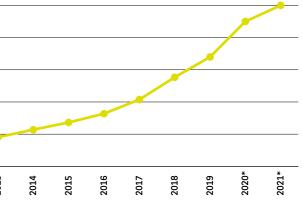
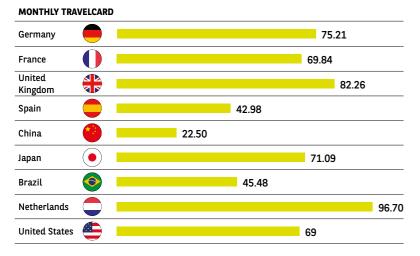


Fig. 44 / Context

Cost of alternative forms of mobility

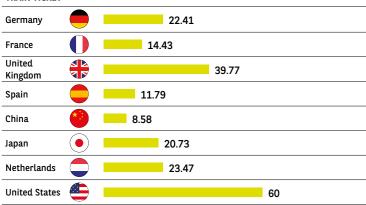
A "monthly travelcard" is a ticket that allows unlimited access to a transport network (e.g., the Navigo pass in France). The price of a train ticket is expressed per 100 km (/100 km).

The prices quoted for "self-service bike rental" are for a monthly subscription (where available). Price in €.





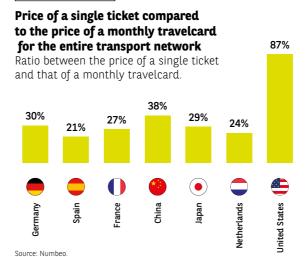
TRAIN TICKET



SELF SERVICE DIRE REIGIAL			
Germany		10	
France	0	3.10	
United Kingdom		8.77	
Japan	\bigcirc	4.93	
Brazil	\bigcirc	5.83	
United States		14.43	

SELE-SERVICE RIKE RENTAL

Fig. 45 / Context



Soft mobility and rurality do not mix

The previous results show that there are fundamental differences of opinion between the rural world and the urban world when it comes to soft mobility. Two specific findings uncovered by this survey support this analysis.

In terms of daily journeys, a stark difference can be seen between rural dwellers, who have no choice but to use a car, and urbanites, who can do

Sources: Monthly travelcards & single tickets: Numbeo. Train tickets: fleetlogging. Self-service bike rental: local websites.

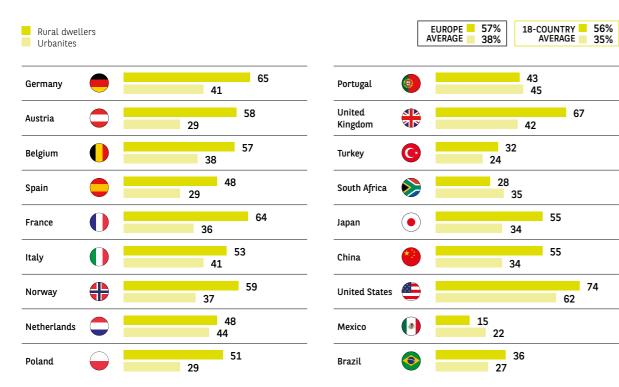
THE WIDELY VARYING COST OF **ALTERNATIVE FORMS OF MOBILITY**

Comparing the cost of alternative modes of transport reveals significant variations between the countries. It should be noted that France has put in place a number of incentives to encourage its citizens to switch to other modes of transport (Fig. 44 and 45).

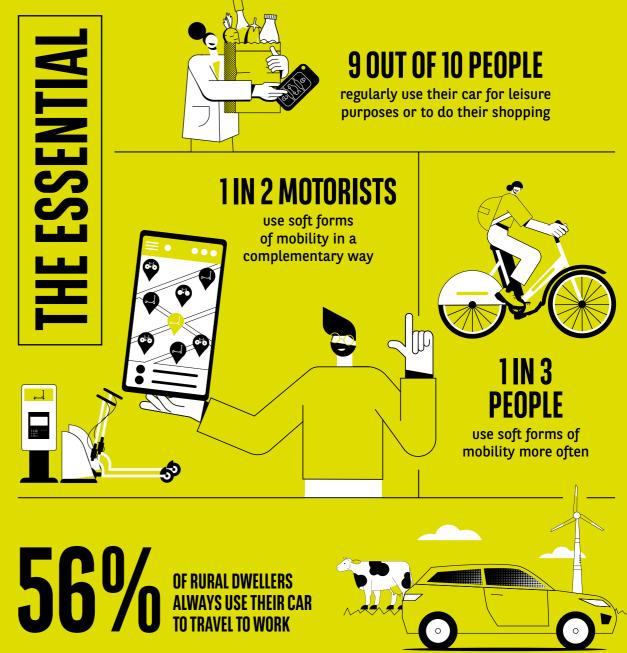
without one more easily. Indeed, 56% of those in rural areas rely on their vehicle each day, while this is true for just 35% of urban residents (Fig. 46). Daily car use in rural areas is primarily a Western phenomenon. This is backed up by the fact that the highest rates are to be found in the United States, the United Kingdom, Germany and France, four countries where the automotive sector plays a key economic role.

Today, which mode of transport do you tend to use most often for your daily journeys, including commuting, instead of using your car?

Share of respondents who have at least one car and who answered "None of these, you always take your car".



Source: L'Observatoire Cetelem de l'Automobile 2023.



L'Observatoire Cetelem 2023



ELECTRIC VEHICLES? SURE, BUT AT WHAT PRICE?

Economy, stupid. This now-famous sentence was written in 1992 by future President Bill Clinton's advisor James Carville, on a sign at their campaign headquarters in Little Rock. Looking at the results of this survey, his words seem more relevant than ever. Cars are expensive to buy, they are expensive to use, and this cost is becoming prohibitive for motorists, with many now fearful of being left by the wayside. While it is true that the inevitable and legally mandated development of electric vehicles points to a brighter future, manufacturers must avoid making the *stupid* mistake of ignoring what customers are saying about prices.

L'Observatoire Cetelem 2023

Cars: a source of exclusion?

Motorists are pessimistic about the future



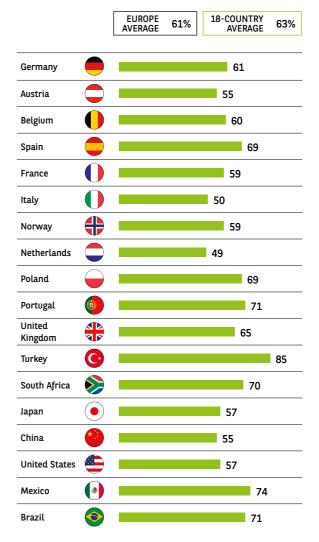
THE FEAR OF A CARLESS FUTURE

If cars are a source of financial pressure today, they are a cause for real concern about tomorrow, that's if the testimonies gathered for this 2023 edition of L'Observatoire Cetelem are to be believed. 6 out of 10 respondents say they fear that they will no longer be able to afford to own a car in the future (Fig. 47). We have seen how gloomy the Turks currently feel about day-to-day life, and they are equally dejected when they think about what awaits them. 85% share this fear of having to live without a car. The Mexicans, Portuguese, Brazilians and South Africans also feel pessimistic. The Netherlands is the only country where the majority are not of this view (49%). Italy and China post similar scores.

Fig. 47

Do you fear that you will be unable to afford to own a car in the future?

Share of respondents who have at least one car and who answered "Yes". In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.

Youth appears to be a significant factor when it comes to anticipating a potentially car-free life, with a gap of 10 points forming between the under-35s and over-35s (67% vs. 57%). Some nations go against the tide, with over-35s displaying greater pessimism than their juniors. This is the case in Turkey, once again, where 92% of over-35s fear that they will no longer be able to own a car, but also in China, South Africa, Poland and Portugal.

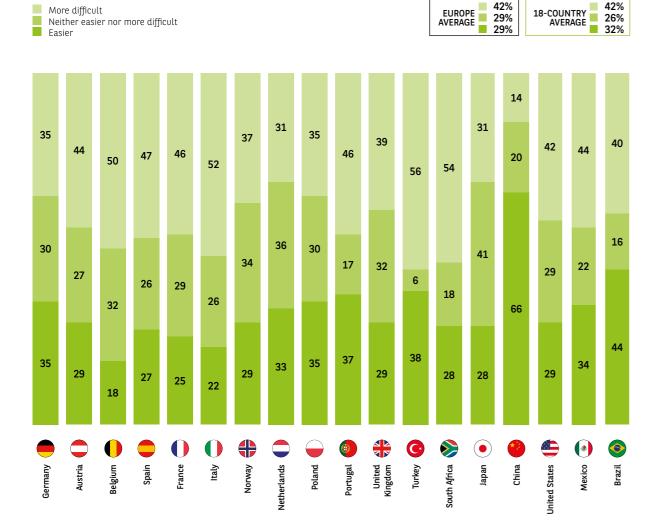
IT USED TO BE EASIER

When asked to think about the past, motorists express a degree of nostalgia and envy towards their parents. More of them believe that it is more difficult to own a car today than it was in the past (42% vs. 32%). The Turks, South Africans and Italians are the most likely to miss those "good old days". In contrast, the Chinese, who are relatively new to motoring, are decidedly positive about the present. Theirs is the only country in which a very broad majority believe that owning a car is easier today **(Fig. 48)**.

Fig. 48

Would you say that it is easier, in financial terms, for you to own a car today than it was for your parents at your age?

Share of respondents who have at least one car. In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.

THE AGE EFFECT

There is data to show that the age of car buyers is on the increase. The average age of new-car buyers in France in 1990 was 44. Today, the figure is 55. By way of comparison, the average age is 53 in Europe overall, 52 in Germany and 46 in Spain. This rising figure is due in part to the fact that young urban populations are now less dependent on cars for their daily travel needs.

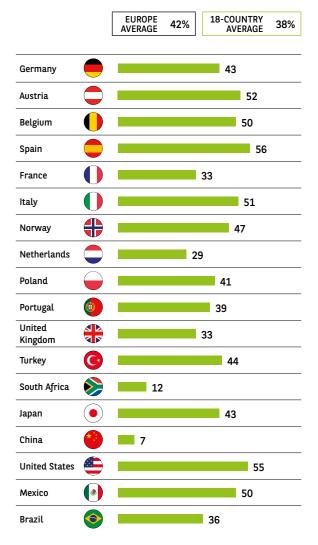
ARE CARS PASSÉ?

Some signs suggest that people are already moving away from car ownership. Nearly 4 out of 10 people who do not own a car today did own one in the past (Fig. 49). This shift away from the automobile is more marked in European and Western countries. This even describes the majority of such individuals in the US, Spain, Austria and Italy. In contrast, only a very small percentage of Chinese and South Africans are in this position. It should also be noted that the global rural/urban breakdown is not as clear cut here as it is on other topics. In seven of the countries surveyed, there are more rural than urban-based non-car owners who formerly had a vehicle.

Fig. 49

Have you owned a car in the past?

Share of respondents who do not have a car and who answered "Yes". In %.



Source: L'Observatoire Cetelem de l'Automobile 2023.

PERSONAL DIFFICULTIES ARE ON THEIR WAY

When they imagine themselves in a potentially car-free world, motorists focus primarily on the issues that will affect them personally, before thinking about other more general considerations. The possibility that they will be able to travel less easily is the first thing on their minds (**Fig. 50**). This answer tops the list in 15 of the countries surveyed. The second-biggest consequence of living car free, after restricted ease of travel, is that journeys become more arduous. That's according to motorists in 15 countries. It should be pointed out that these two criteria come either first or second in all the countries surveyed. There is less agreement among respondents as we move down the list, but they do highlight certain more positive consequences. The first is the fact that their budget would be reduced, thanks to fewer expenses. Next comes the environmental impact of having fewer cars on the road, which would lead to lower emissions.

Rural and urban dwellers rank these consequences in almost the same order, although the greater difficulty involved in getting around is mentioned more frequently by those in rural areas (17 out of 18 countries).

Fig. 50

Imagine that you no longer had access to a vehicle. What would be your first thought? Share of respondents who own a car.



Price, the glass ceiling of the automotive world

HIGH PRICES PROHIBIT OWNERSHIP

You don't have to look far to find reasons not to own a car. One crucial factor is the financial side of things. 6 out of 10 non-car owners state that they have to do without a car because of the high cost of both buying and owning one **(Fig. 51)**. In all countries, this is the factor that takes precedence over any other consideration. This reason is slightly more powerful for urbanites than it is for rural dwellers, since the parking costs they incur are undoubtedly greater (e.g., in 2019, a month in a car park cost €328 in the Netherlands, €255 in the UK and €157 in France*). From a generational standpoint, this cost weighs more heavily on the under-35s.

The second reason why people live without a car is the public transport network they have available to them (23%). Urbanites are much more likely to make this point. A geographical analysis shows that the Japanese are so satisfied with their public transport systems (51%) that this is their primary reason for not owning a vehicle. At the other end of the scale we find the Brazilians, few of whom are satisfied (9%).

Fig. 51

Why do you not own a car?

Share of respondents who do not own a car, but who owned one in the past. Up to 3 possible answers. In %.

You wouldn't be able to afford to own one	38
You consider that the public transport network is good enough for you to get around	23
You think the running costs are excessive	22
You think the cost of buying a car is excessive	21
You don't need one	20
You can't drive (disability, licence withdrawn, etc.)	15
Other	9
You believe that cars are harmful to the environment	8
You rent a car when you need one (traditional rental companies, peer-to-peer platforms)	6
You borrow someone else's car (family member, friend, etc.) when you need one	6
You use carsharing or ridesharing when you need to	4

Source: L'Observatoire Cetelem de l'Automobile 2023.

1 in 5 people state that they do not need a car, something that is more common among the over-35s. The inability to drive accounts for 15% of cases. Environmental considerations are barely mentioned. Only 8% of the people interviewed mention this issue.

* Source: Parkopedia.

BUYING NEW IS A TOUGH STEP TO TAKE

When it comes to switching from a used car to a new car, cause and effect are at play once again, but in even greater proportions. Indeed, 84% of those surveyed refuse to acquire a new vehicle for reasons of cost (Fig. 52). The distant cousins of Brazil and Portugal are almost unanimously of this opinion, as are the Mexicans. Only the Americans, with a score of 72%, are slightly less likely to bemoan this financial obstacle. The French find themselves 4 points below the average.

Fig. 52

You acquired a second-hand car. Did you give up on the idea of buying a new vehicle because you thought the cost was too high?

Share of respondents who own at least a used car and who answered "Yes". In %.

		EUROPE AVERAGE 83%	18-COUNTRY AVERAGE 84%
Germany			78
Austria			79
Belgium			82
Spain			85
France	0		80
Italy	0		88
Norway			78
Netherlands			82
Poland	\bigcirc		86
Portugal	(93
United Kingdom			83
Turkey	C		89
South Africa	\mathbf{i}		87
Japan	\bigcirc		81
China		Results insignificant (low number of respor	ndents)
United States			72
Mexico	۲		92
Brazil	6		95

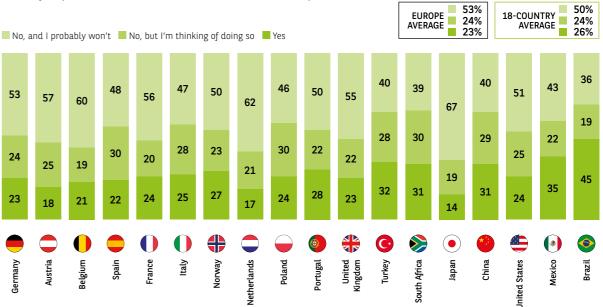
Source: L'Observatoire Cetelem de l'Automobile 2023.

CUTTING DOWN ON CARS

There is an even more drastic way of avoiding financial strife. This simple and radical solution is for a household to reduce its number of vehicles. 1 in 2 people have taken such action or have decided to do so in the near future (Fig. 53). Along with the usual guartet formed by Turkey, South Africa, Mexico and Brazil, the Chinese show a clear inclination to adopt this kind of measure. Conversely, the Japanese and Dutch are resolutely keen on the *status quo*. The European countries surveyed all display a similar level of enthusiasm in this regard.

Fig. 53

Have you reduced the number of vehicles in your household to cut your motoring budget? Share of respondents who have a car or have had one in the past. In %.

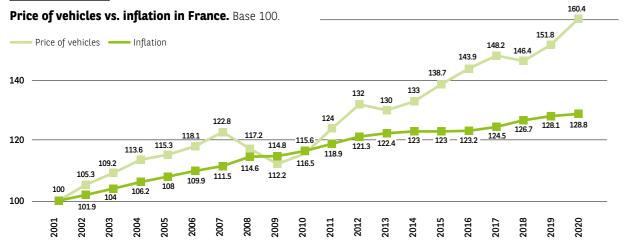


Source: L'Observatoire Cetelem de l'Automobile 2023

CAR PRICES IN FRANCE ARE INCREASING FASTER THAN ANYTHING ELSE

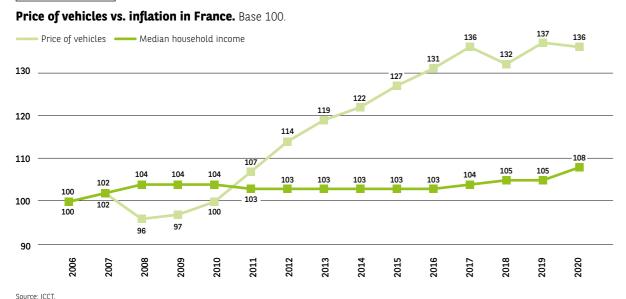
In France, whether you compare it against inflation (Fig. 54) or median income (Fig. 55), the soaring price of vehicles trumps all other rises. This is what we are told by the statistics recorded between 2000 and 2020. Will the spectacular rise of inflation in recent months make a difference? Nothing could be less certain, because the gap is vast to say the least.

Fig. 54 / Context



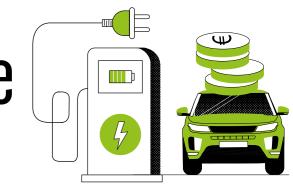
Source: ICCT.

Fig. 55 / Context



The electric coup de grâce

A tough climate... but carmakers remain greedy L'Observatoire Cetelem 2023



THE END OF COMBUSTION ENGINES IN 2035

At a time when demand for new vehicles is relatively low, one might imagine that with the environmental crisis now weighing on the minds of people around the world, this would be a good opportunity to boost sales of electric cars.

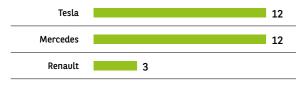
A crucial step in this direction was the European Parliament's vote on 8 June to ban the sale of new internal combustion engine vehicles from 2035. This was the first time a decision of this kind had been made on a continental scale. Many manufacturers have chosen to be proactive and switch to 100% electric production before the deadline. In 2024, Alpine will become the first brand to take the plunge. The Stellantis megacorp will also be at the vanguard of this change, with DS following suit in 2027, Opel in 2028 and Fiat in 2030. 2030 is also the year that Ford (in Europe only), Mercedes, Peugeot and Renault have set as their cut-off date.

PROFIT MARGINS COULD NOT BE HEALTHIER

The magic of electricity has provided manufacturers with an opportunity to further increase margins that have already been rising steadily on the whole. Between 2012 and 2018, they averaged around 6%. They then fell to 4.8% in 2019 and 3.5% in 2020. 2021 saw them rebound sharply. The average profit margin of the world's 16 leading manufacturers now stands at 8.5% (Fig. 56). A strategic shift has led to them raising their prices to offset reduced sales volumes. This promises a decent financial outcome for shareholders, but less so for motorists. However, significant differences can be observed from one brand to the next. For instance, the gap between Tesla and Mitsubishi is 10 points. Enough to make other automakers want to imitate the "king" of the electric-vehicle world, which, one should remember, was founded barely 20 years ago.

Fig. 56 / Context

2021 operating margin of manufacturers In %.



Source: Ernst & Young

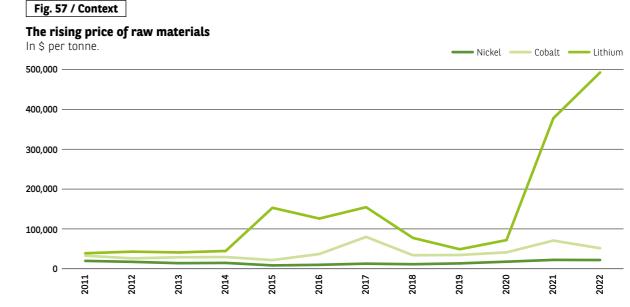
WIDESCALE INVESTMENT IN ELECTRIC VEHICLES

According to Global Data, manufacturers are set to invest heavily in the development of electric vehicles. These companies are expected to spend €600bn over the next decade. Heading the field are the Volkswagen group (\$100bn), Stellantis and General Motors (\$80bn), Toyota (\$70bn), Mercedes and the Renault-Nissan-Mitsubishi alliance (\$40bn).

RARE AND COSTLY MATERIALS

However, the rise of electric vehicles and the profit margins they bring is likely to come up against a major obstacle. The raw materials most commonly used in the manufacture of battery cells, which are a fundamental part of these vehicles and account for around 75% of the cost of batteries, are becoming increasingly expensive. This is particularly true for lithium, one of the three essential materials found in electric vehicles along with cobalt and nickel, although its cost is expected to fall by 2023 **(Fig. 57)**.

Two additional issues could also make it more difficult for production of these materials to be ramped up. Indeed, they are mined in only a very small number of countries and are therefore very sensitive to geopolitical conditions. For example, 10% of the world's nickel is produced in Russia.



Sources: INSEE (nickel), investing.com (cobalt, lithium).

What's more, the mining methods employed are not especially eco-friendly. Lithium extraction, for instance, requires huge quantities of water.

THE ELECTRICITY IN THE AIR IS WEAK

Thus, while the current success of electric vehicles is undeniable and while the regulations that will be coming into force over the next few years will undoubtedly boost sales, the price factor again prompts motorists to express reservations.

1 in 10 respondents state that they own a hybrid or electric vehicle **(Fig. 58)**. It is no surprise that this category of motorist is most likely to be found in Norway, Japan and China. In South Africa and Mexico, however, such vehicles are almost non-



existent. This is also the case on the used-car market. Only 4% of the motorists who bought their vehicle second hand report that they drive a hybrid or electric vehicle. Obviously, the result can be explained in great part by the fact that this is a relatively new market. Once more, Norway and Japan, but also Brazil, are the countries in which the market is the most developed (13%, 9% and 8%).

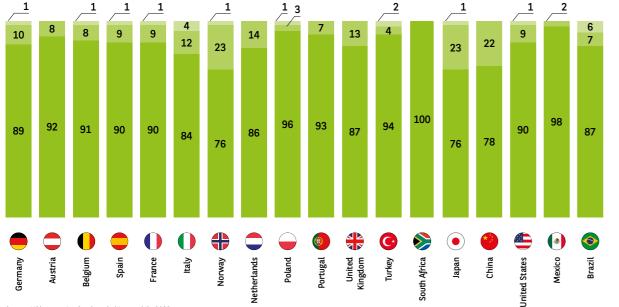
Why are electric vehicles struggling to win people over? 7 out of 10 respondents point to their excessive price, which puts them off buying one. This is a majority opinion in all but two of the countries covered by the survey. Naturally, the nations in question are Norway and China, whose electric vehicle markets are the most mature and the most successful.

Fig. 58

What energy source does your car use?

Share of respondents who have at least one car.

Other Electric or hybrid Petrol or diesel



1% 10%

89%

EUROPE AVERAGE

18-COUNTRY 10% AVERAGE 89%

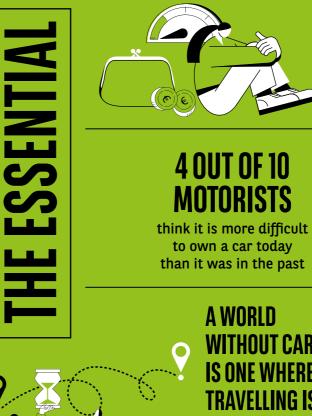
1%

Source: L'Observatoire Cetelem de l'Automobile 2023.

PRICES* THAT MAKE YOU THINK

When comparing similar models, the energy source used has a significant influence on the price. This is demonstrated by 5 examples taken from the French market.

- HYUNDAI KONA I 48V mild hybrid: €22,500, hybrid: €25,000, electric: €34,150
- PEUGEOT 208 | diesel: €22,500, petrol: €16,400, electric: €34,500
- RENAULT TWINGO | combustion: €15,750, electric: €24,050
- RENAULT MÉGANE I combustion: €28,800, electric: €35,200
- VOLKSWAGEN UP! I combustion: €16,550, electric: €25,400





WITHOUT CARS **IS ONE WHERE TRAVELLING IS MORE DIFFICULT AND MORE ARDUOUS**

of the individuals surveyed are not willing to switch from used to new because of the excessive cost

have reduced or plan to reduce the number of vehicles in their household

6 OUT OF 10 PEOPLE



fear that they will not be able to afford to own a car in the future

1 IN 2 PEOPLE

4 OUT OF 10 PEOPLE

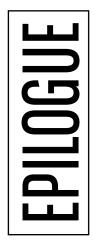
who do not own a car today have owned one in the past

6 OUT OF 10 PEOPLE WHO ARE CARLESS explain that the reason

is the cost of vehicles



7 OUT OF 10 PEOPLE believe that the price of electric vehicles is too high



In its 2010 edition, entitled *Automobiles, a low-cost approach*, L'Observatoire Cetelem anticipated the spectacular development of cheaper vehicles, as epitomised by the success of Dacia. At the time, there was already talk of *the world entering a period of unprecedented economic and financial turmoil,* of *an energy crisis driven by oil prices of up to \$147 per barrel,* of *car sales going into free fall* and of *government incentives for car buyers.*

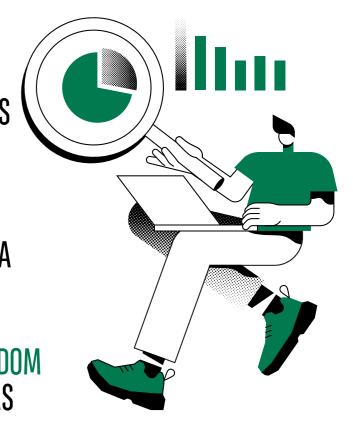
12 years later, in what is a highly uncertain geopolitical context and a tough economic climate characterised by high inflation and the need to adapt to new environmental standards, we are about to enter a period that will be crucial for the automotive sector. Isn't it now time for the advent of low-cost electric cars? And with the big Western brands placing the emphasis on profits while their customers lament the cost of buying their vehicles – and especially the cost of running them – could the future champions of low-cost electric cars ultimately be found in Asia? Indeed, in terms of markets, production, development and experience, these brands would seem to have a clear head start. And while it is true that Western carmakers have embarked upon colossal investment programmes, their focus has been on more expensive vehicles. And although these firms boast a stronger and longer-standing reputation, the world's leading manufacturer of electric vehicles did not exist 20 years ago. But it could also be pointed out that while the current trend is to purchase local and domestic products, such considerations are often swept away and people simply opt for the best they can get.

As this 2023 edition of L'Observatoire Cetelem shows, motorists are not necessarily prepared to do whatever it takes when it comes to cars. Electric vehicles may be one avenue, but not at any price. As it stands today, there is a risk that an economic and social divide will open up over car ownership, further marginalising those who are most dependent on a vehicle in their daily lives. An even greater divide is set to form between those who have the financial resources to access electric cars and those who will be left watching as these innovative vehicles pass them by, out of their financial reach.

While it is likely that we will soon see primarily Asian-made, low-cost electric vehicles emerge, giving many more people access to this technology at a more affordable price, there is also a risk that Western carmakers will lose their influence over the long term.



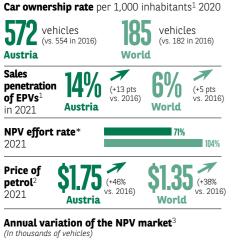
L'Observatoire Cetelem 2023





AUSTRIA VS. WORLD

Passenger vehicle market penetration





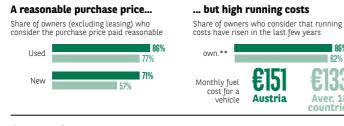
Market forecasts⁴ (In millions of new cars) 2021 0.24 | 2022 0.2 (-19%) | 2023 0.23 (+18%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022.

SUMMARY

AUSTRIA VS. 18-COUNTRY AVERAGE

Using one's car is becoming a luxury



Cost reduction strategies

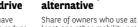
60%

49%

own **

Motorists are looking ... by sometimes choosing not to drive Share of owners who have Share of owners who have

taken measures to reduce the cost of using their vehicle. costs



Soft mobility as an

GIJJ

Aver. 18

countries

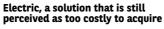


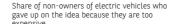


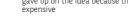
Giving up on internal combustion cars



35%







Rural dwellers

Urbanites

to save...

Austrian motorists are the most likely to feel that their car was reasonably priced, whether they bought it new or second-hand. Yet, although a majority consider that the cost of using their car has increased, they are not particularly keen on taking measures to cut their expenses. Those living in rural areas are more likely than urban dwellers to decide to travel less. Like their German neighbours, they are among the least likely to consider the price of an electric vehicle to be a reason not to buy one.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-vehicle owners.

86 Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways.

Belgium

BELGIUM VS. WORLD

Passenger vehicle market penetration





NPV effort rate* 2021

Price of

petrol²

2021

(+38%)2016)

2016 Belgium World



Market forecasts⁴ (In millions of new cars)



in the past 2021 0.38 | 2022 0.35 (-9%) | 2023 0.4] (+16%)

(+5 pts

vs. 2016)

070

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022.



SUMMARY

Belgian motorists are very close to the average in terms of their belief that they paid a reasonable price for their car, be it new or second-hand, and that the cost of using the vehicle has increased in recent years. Of all the populations surveyed, they spend the most on fuel. Do they take measures to address running costs? Yes, to a degree that is in line with the overall average, with a relatively strong preference for reducing the amount they drive. At the risk of repeating ourselves, their adoption of soft modes of transport is again close to average. Would price be a hindrance to their acquisition of an electric vehicle? No more and no less than the average, of course.

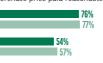
* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways.

BELGIUM VS. 18-COUNTRY AVERAGE

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable



... but high running costs

Share of owners who consider that running costs have risen in the last few years



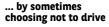
Cost reduction strategies

Motorists are looking

to save...

Share of owners who have taken measures to reduce the cost of using their vehicle.





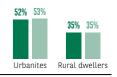
Share of owners who have decided to drive less to reduce costs



Rural dwellers

Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether

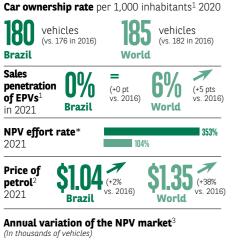
Share of non-owners who have owned a vehicle

Electric. a solution that is still perceived as too costly to acquire



BRAZIL VS. WORLD

Passenger vehicle market penetration





Market forecasts⁴ (In millions of new cars) **2021**].56 | 2022].37 (-12%) | 2023].6 (+17%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022

SUMMARY

BRAZIL VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price... ... but high running costs Share of owners (excluding leasing) who Share of owners who consider that running consider the purchase price paid reasonable costs have risen in the last few years Monthly fuel

Cost reduction strategies

to save...

in the past

Urbanites

Rural

dwellers

74%

own.**

Motorists are looking ... by sometimes choosing not to drive

Share of owners who have Share of owners who have taken measures to reduce the decided to drive less to reduce cost of using their vehicle. costs

Soft mobility as an alternative

GIJJ

Aver. 18

countries

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



EI

Brazil

own *

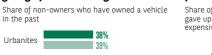
cost for a

vehicle

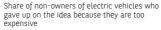
Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether

35%



Electric, a solution that is still perceived as too costly to acquire



Brazilians are among the least likely to believe that the sum they paid for their vehicle was reasonable. Above all, however, they are more liable than any other population, with the exception of the Turks, to state that running costs have increased and to take measures to reduce their impact. An average proportion of urbanites have chosen to travel less, but this is much less the case among those living in rural areas. More motorists than the overall average opt for soft mobility on a daily basis, especially in towns and cities. And, more than anywhere else, but to a similar degree to the Poles, they see the high purchase price of electric vehicles as an obstacle to their purchase.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-vehicle owners.



CHINA VS. WORLD

Passenger vehicle market penetration



World



2021

Sales	100/	1	
penetration	13%	(+12 pts	6%
of EPVs ¹ in 2021	China	vs. 2016)	World

NPV effort rate* 2021 10.4%

Price of petrol ²	\$1.32	
2021	vs. 2016)	

(+38% I.JJ vs. 2016 World China

(vs. 182 in 2016)

X

(+5 pts

vs. 2016)

Annual variation of the NPV market³ (In thousands of vehicles)



Market forecasts⁴ (In millions of new cars) 2021 21.48 | 2022 23.3 (+8%) | 2023 26 (+12%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022.

SUMMARY

In the country that produces more cars than any other, new- and used-car buyers alike are of the view that the purchase price of their vehicle was reasonable. And they are among the least likely in this survey to believe that running costs have increased. They fall within the overall average when it comes to implementing measures to limit these costs, but by far their preferred measure is to use their car less frequently for daily journeys. As regards soft mobility, the number who opt for such solutions is within the overall average, whether it be in urban or rural areas. On the topic of electric vehicles, the use of which is highly developed in China, a small minority of motorists - the lowest proportion in the entire survey - consider price to be a barrier to their acquisition.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomu, ³ OICA. C-Ways.







Motorists are looking to save...



Giving up on internal combustion cars

Share of non-owners who have owned a vehicle in the past

Urbanites

dwellers 35%

CHINA VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price...

... but high running costs

Share of owners who consider that running costs have risen in the last few years

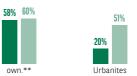


Cost reduction strategies

Share of owners who have taken measures to reduce the cost of using their vehicle.

... by sometimes choosing not to drive Share of owners who have

decided to drive less to reduce costs

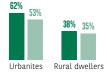




Rural dweller

Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



A move that sometimes means giving up on cars altogether

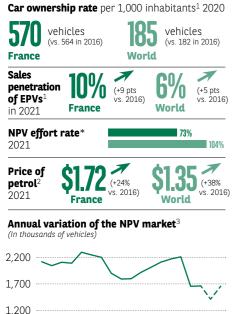
Electric. a solution that is still perceived as too costly to acquire





FRANCE VS. WORLD

Passenger vehicle market penetration

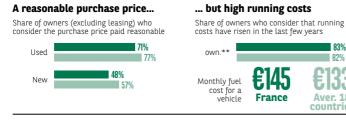


2013

2021].66 | 2022].4] (-15%) | 2023].65 (+17%)

FRANCE VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

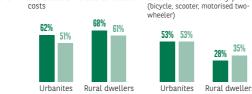


Cost reduction strategies

Motorists are looking ... by sometimes choosing not to drive to save...

Share of owners who have Share of owners who have taken measures to reduce the

Share of owners who use at decided to drive less to reduce least one other mobility product

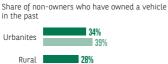


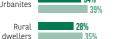
Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether

cost of using their vehicle.

own **







Electric, a solution that is still

C14

France

Soft mobility as an

alternative

GIJJ

Aver. 18

countries



SUMMARY

2005

00

2005

201

The 2023 forecast is contingent on microchip supplies

the market would remain at a similar level to 2022.

returning to normal, but it is difficult to predict when this

will occur. If this were to happen only at the end of 2023,

Market forecasts⁴ (In millions of new cars)

French motorists feel that cars are becoming less and less accessible. Despite their perception that the price of vehicles is reasonable, they find the day-to-day running costs difficult to swallow. To reduce costs, car owners choose to limit how much they travel, especially in rural areas. Alternatively, they opt for soft modes of transport. However, motorists do not see electric vehicles as a genuine solution, because they perceive the acquisition cost to be too high.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-vehicle owners.

90 Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways.

2015 2017 2019 2021



GERMANY VS. WORLD

Passenger vehicle market penetration





NPV effort rate³ 2021

Price of

petrol²

2021

X

(+5 pts

vs. 2016)

(+24% (+38% World German

Annual variation of the NPV market³ (In thousands of vehicles)

Market forecasts⁴ (In millions of new cars)



2021 2.62 | 2022 2.3 (-12%) | 2023 2.75 (+20%)

The 2023 forecast is contingent on microchip supplies

the market would remain at a similar level to 2022.

returning to normal, but it is difficult to predict when this

will occur. If this were to happen only at the end of 2023,

in the past

to save...

Urbanite Rura

dwellers

SUMMARY

In the land of the big saloon car, motorists tend not to be too critical about the price of vehicles and their rising running costs. As a result, they are among the least likely to take measures to save money, both in urban and rural areas, even in terms of reducing the amount they drive. Even though the government coalition includes the Green Party, soft mobility solutions are still struggling to gain real popularity. What's more, price is less of a barrier than in the other countries surveyed when it comes to purchasing an electric vehicle in the future.

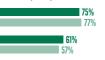
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GERMANY VS. 18-COUNTRY AVERAGI

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable



... but high running costs

Share of owners who consider that running costs have risen in the last few years



Cost reduction strategies

Motorists are looking

Share of owners who have taken measures to reduce the cost of using their vehicle.

... by sometimes choosing not to drive

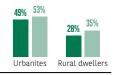
Share of owners who have decided to drive less to reduce costs





Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether

Share of non-owners who have owned a vehicle

35%

Electric. a solution that is still perceived as too costly to acquire





ITALY VS. WORLD

Passenger vehicle market penetration





Market forecasts⁴ (In millions of new cars)

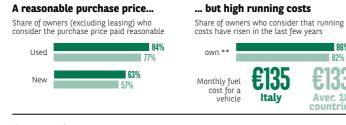
2021].46 | 2022].17 (-20%) | 2023].36 (+16%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022

SUMMARY

ITALY VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

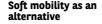


Cost reduction strategies

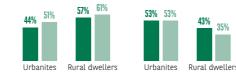
to save...

Motorists are looking ... by sometimes choosing not to drive

Share of owners who have Share of owners who have taken measures to reduce the decided to drive less to reduce cost of using their vehicle. costs



Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether Share of non-owners who have owned a vehicle in the past

35%

57% 60%

own.**





Electric, a solution that is still

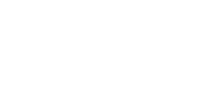
gave up on the idea because they are too



GIJJ

Aver. 18

countries



Price of petrol² 2021

in 2021

2016 World Japan

Annual variation of the NPV market³ (In thousands of vehicles)

Market forecasts⁴ (In millions of new cars)

The 2023 forecast is contingent on microchip supplies

the market would remain at a similar level to 2022.

returning to normal, but it is difficult to predict when this

will occur. If this were to happen only at the end of 2023,



in the past



SUMMARY

Japan, a country with many car manufacturers and large megacities, is no stranger to paradoxes. Indeed, this is the nation that spends the least on fuel each month. It is also where the lowest proportion of motorists consider that the cost of using a vehicle has increased. It therefore makes sense that Japanese drivers are the least likely to take measures to reduce their running costs. They are also the second most reluctant, after the Chinese, to reduce how much they drive in urban areas. Conversely, they are the most likely, after the Poles, to use soft modes of transport for their daily travel needs. Moreover, the Japanese are among the least confident that they pay reasonable prices for new vehicles. When it comes to considering the price of electric vehicles as a barrier to their purchase, for once their views are close to the survey's overall average.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomu, ³ OICA. C-Ways.

Like in Spain, a large proportion of used-car buyers consider that the price they paid was reasonable and a similar number think that the cost of ownership has increased, 6 out of 10 motorists take measures to reduce the impact of these expenses, but a relatively low proportion, compared with the overall average, are keen to drive less, especially in urban areas.

Urbanites

Rural

dwellers

Around half of all motorists in the country opt for soft modes of transport for their daily journeys, even in rural areas. According to three-quarters of those surveyed, the price of electric vehicles is a barrier to their purchase.

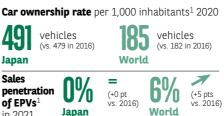
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92 Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways

Japan

JAPAN VS. WORLD

Passenger vehicle market penetration



Japan NPV effort rate³ 2021

to save (+38%)2016

cost of using their vehicle.

44%





A move that sometimes means giving up on cars altogether Share of non-owners who have owned a vehicle 2021 3.68 | 2022 3.13 (-15%) | 2023 3.65 (+17%)

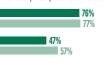
Urbanite

JAPAN VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable



... but high running costs

Share of owners who consider that running costs have risen in the last few years



Cost reduction strategies

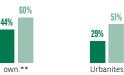
Motorists are looking

Share of owners who have taken measures to reduce the



... by sometimes

decided to drive less to reduce costs

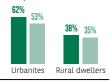




Rural dweller

Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars

Electric. a solution that is still perceived as too costly to acquire





MEXICO VS. WORLD

Passenger vehicle market penetration



(In thousands of vehicles)



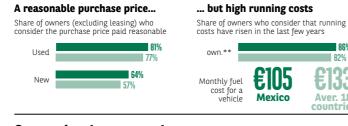
Market forecasts⁴ (In millions of new cars) 2021 0.52 2022 0.46 (-12%) 2023 0.54 (+16%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022

SUMMARY

MEXICO VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury



Cost reduction strategies

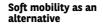
to save...

74%

own **

Motorists are looking ... by sometimes choosing not to drive

Share of owners who have Share of owners who have taken measures to reduce the decided to drive less to reduce cost of using their vehicle. costs



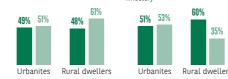
GIJJ

Aver. 18

countries

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)

Mexico



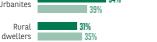
Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether Share of non-owners who have owned a vehicle in the past



perceived as too costly to acquire

gave up on the idea because they are too expensive



Electric, a solution that is still

Share of non-owners of electric vehicles who



Rural dweller

Netherlands

NETHERLANDS VS. WORLD

Passenger vehicle market penetration

Car ownership rate per 1,000 inhabitants¹ 2020

vehicles (vs. 497 in 2016)





NPV effort rate³ 2021

Price of

petrol²

2021



185

World

vehicles

(vs. 182 in 2016)

(+5 pts

vs. 2016)

(+38%

(+22% Netherlands World

Annual variation of the NPV market³ (In thousands of vehicles)



2021 0.32 | 2022 0.3 (-8%) | 2023 0.35 (+17%)

The 2023 forecast is contingent on microchip supplies

the market would remain at a similar level to 2022.

returning to normal, but it is difficult to predict when this

will occur. If this were to happen only at the end of 2023,

Market forecasts⁴ (In millions of new cars)

in the past

Urbanite Rural

dwellers

SUMMARY

Dutch drivers rank among the highest in this survey when it comes to stating that they pay a reasonable price for used vehicles. As regards running costs, they are relatively measured in their belief that these have increased. It therefore makes sense that they are less inclined than most to take measures to cut their expenses. A slim majority of both urban and rural dwellers are willing to travel less. In the land of the bicycle, around half of the people surveyed, both in towns and in rural areas, use soft mobility solutions on a daily basis. Here, the price of electric vehicles is seen as prohibitive.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways.

The Mexicans are satisfied with the price they paid for their vehicle. In fact they are among the most likely to consider it reasonable, but also to state that running costs have increased. It is therefore unsurprising that they are the most willing, after the Turks, to put in place measures to limit these expenses, although they do not embrace the idea of driving less, either in cities or in rural areas. However, they are big fans of soft mobility and are the population most likely to embrace these modes of transport. They are just as vehement in their belief that price is a barrier to purchasing an electric vehicle.

Urbanites

Rural

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-vehicle owners.





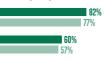
to save

NETHERLANDS VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable



... but high running costs

Share of owners who consider that running costs have risen in the last few years

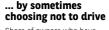


Cost reduction strategies

Motorists are looking

Share of owners who have taken measures to reduce the cost of using their vehicle.

609 19% own **

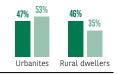


Share of owners who have decided to drive less to reduce costs



Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether

Share of non-owners who have owned a vehicle

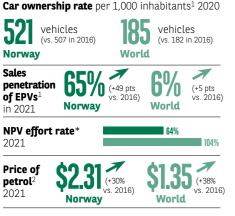
Electric. a solution that is still perceived as too costly to acquire





NORWAY VS. WORLD

Passenger vehicle market penetration



Annual variation of the NPV market³ (In thousands of vehicles)



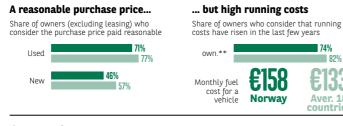
Market forecasts⁴ (In millions of new cars) 2021 0.18 | 2022 0.14 (-19%) | 2023 0.17 (+16%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022.

SUMMARY

NORWAY VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury



Cost reduction strategies

58% 60%

own **

to save...

Motorists are looking ... by sometimes choosing not to drive Share of owners who have Share of owners who have

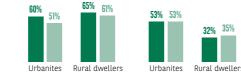
taken measures to reduce the decided to drive less to reduce cost of using their vehicle. costs

Soft mobility as an alternative

τIJ

Norway

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars



Electric, a solution that is still perceived as too costly to acquire

Share of non-owners of electric vehicles who gave up on the idea because they are too expensive



Like China, Norway is a country that has seen electric vehicles take pole position, so it is unsurprising that the Norwegians, again like the Chinese, do not see their price as an obstacle to their purchase, even if only a very narrow majority hold this view. Yet, relatively few Norwegians, compared with the overall average, consider the price of cars to be reasonable, while a smaller proportion believe that running costs have increased. The proportion who take measures to limit these expenses is similar to the overall average, as is the share who use soft mobility solutions on a daily basis. They also express a marked desire to drive less, be it in cities or in rural areas.

Urbanites

Rural

dwellers

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-vehicle owners.

96 Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy, ³ OICA. C-Ways.



POLAND VS. WORLD

Passenger vehicle market penetration

Car ownership rate per 1,000 inhabitants¹ 2020





NPV effort rate* 10.4%

Price of petrol 2021

2021

(+30% +38% . 2016) Poland World

vehicles

(vs. 182 in 2016)

X

(+5 pts

vs. 2016)

Annual variation of the NPV market³ (In thousands of vehicles)

Market forecasts⁴ (In millions of new cars)

The 2023 forecast is contingent on microchip supplies

the market would remain at a similar level to 2022.

returning to normal, but it is difficult to predict when this

will occur. If this were to happen only at the end of 2023,



2021 0.45 | **2022 0.4** (-12%) | **2023 0.46** (+16%)

in the past

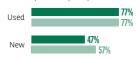
Urbanite Rural dwellers

SUMMARY

The Poles are not particularly inclined to consider that they purchased their car at a reasonable price, especially if it was bought new. And they are among the most likely to be of the opinion that its running costs are excessive. Yet, their propensity to take measures to reduce these expenses is close to the overall average, with urban dwellers being more likely to drive less in order to do so. These urban inhabitants are also more likely than any others in this survey to resort to soft mobility solutions on a daily basis. They also rank first in terms of the proportion of drivers who believe that the high price of electric vehicles prevents them from buying one.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy, ³ OICA. C-Ways.







Motorists are looking to save...





GIJJ

Aver. 18

countries

POLAND VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable

... but high running costs

Share of owners who consider that running costs have risen in the last few years



Cost reduction strategies

Share of owners who have taken measures to reduce the cost of using their vehicle.

61% 60%

own **

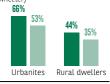
... by sometimes choosing not to drive Share of owners who have

decided to drive less to reduce costs



Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler'



Giving up on internal combustion cars

58%

A move that sometimes means giving up on cars altogether

Share of non-owners who have owned a vehicle

Electric. a solution that is still perceived as too costly to acquire Share of non-owners of electric vehicles who

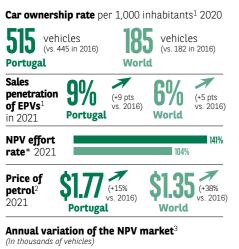
gave up on the idea because they are too expensive





PORTUGAL VS. WORLD

Passenger vehicle market penetration





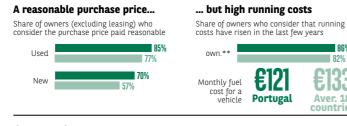
Market forecasts⁴ (In millions of new cars) 2021 0.15 | 2022 0.14 (-6%) | 2023 0.17 (+17%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022

SUMMARY

PORTUGAL VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury



Cost reduction strategies

to save...

64%

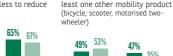
own **

60%

Motorists are looking ... by sometimes choosing not to drive

Share of owners who have Share of owners who have taken measures to reduce the decided to drive less to reduce cost of using their vehicle. costs





alternative

Soft mobility as an

Share of owners who use at

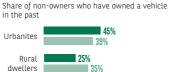


Rural dweller

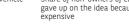
Giving up on internal combustion cars

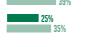
Urbanites

A move that sometimes means giving up on cars altogether



Urbanites









Rural dweller

GIJJ

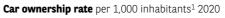
Aver. 18

countries

South Africa

SOUTH AFRICA VS. WORLD

Passenger vehicle market penetration



vehicles

(vs. 182 in 2016)

(+5 pts

vs. 2016





NPV effort rate* 2021

		104%		
1	<u>/\Q</u>	(+21%	¢1	J

(+38% J**I.H**U. **JIJ** . s. 2016) /s. 2016 South Africa World

Annual variation of the NPV market³ (In thousands of vehicles)

Market forecasts⁴ (In millions of new cars)

The 2023 forecast is contingent on microchip supplies

the market would remain at a similar level to 2022

returning to normal, but it is difficult to predict when this

will occur. If this were to happen only at the end of 2023,





Urbanites Rural 6% dwellers

SUMMARY

Price of

petrol²

2021

South Africans who have purchased a new vehicle consider the purchase price to have been quite unreasonable, significantly less reasonable than the 18-country average, in fact. In addition, a large number of motorists, not to say the overwhelming majority, have noticed an increase in running costs. Taking measures to reduce these costs is seen as a natural response. They do so chiefly by reducing their number of journeys, the most common type of action recorded by the survey, especially in urban areas. Rural dwellers are more likely to opt for soft mobility solutions on a daily basis than urbanites. However, the South Africans do not rank highly when it comes to the belief that vehicle prices are an obstacle to ownership.

the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomu. ³ OICA. C-Ways.

Ask the Portuguese if they found their car's purchase price reasonable and they are the most likely to say yes, along with the Austrians. And like many others, they feel that running costs have increased. The proportion who take action to reduce these expenses is close to the average, with urban and rural dwellers alike seeking to reduce their fuel budget by cutting down on travel. This unity of opinion is also reflected by the fact that half the motorists surveyed use soft mobility solutions on a daily basis. They are among the most likely to state that electric vehicle prices are prohibitive.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-vehicle owners.







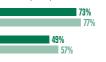
to save...

SOUTH AFRICA VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable



... but high running costs

Share of owners who consider that running costs have risen in the last few years



Cost reduction strategies

Motorists are looking

Share of owners who have taken measures to reduce the cost of using their vehicle.





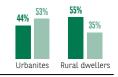
Share of owners who have decided to drive less to reduce costs



Rural dwellers

Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether

Share of non-owners who have owned a vehicle

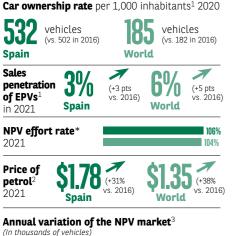
Electric. a solution that is still perceived as too costly to acquire





SPAIN VS. WORLD

Passenger vehicle market penetration



1.600 1,100 600 2015 2017 2019 2021 2023 2013 2005 2005 00 201.

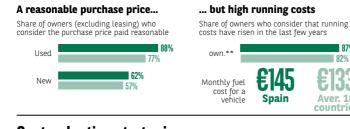
Market forecasts⁴ (In millions of new cars) **2021 0.86** | **2022 0.77** (-10%) | **2023 0.9** (+17%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022

SUMMARY

SPAIN VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury



Cost reduction strategies

to save...

in the past

Urbanites

Rural

Motorists are looking ... by sometimes choosing not to drive

Share of owners who have Share of owners who have taken measures to reduce the decided to drive less to reduce cost of using their vehicle. costs

Soft mobility as an alternative

GIJJ

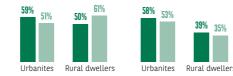
Aver. 18

countries

G14

Spain

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)

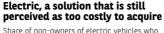


Giving up on internal combustion cars

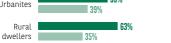
A move that sometimes means giving up on cars altogether Share of non-owners who have owned a vehicle

59% 60%

own.**



expensive



Share of non-owners of electric vehicles who gave up on the idea because they are too



Spain is where the highest proportion of motorists consider the price of a used car reasonable. However, they are also among the most likely to highlight the increase in usage costs. They are relatively keen to take measures to limit their expenses and are among the rare populations. especially in urban areas, to choose to reduce how much they drive. The proportion who opt for soft mobility is close to the overall average. The opinion that electric vehicles are too expensive is slightly more commonly held here than elsewhere.

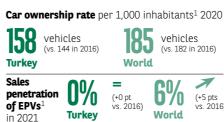
* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-vehicle owners.

100 Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways.

C Turkey

TURKEY VS. WORLD

Passenger vehicle market penetration



NPV effort rate* 2021

Price of

petrol²

2021

10.4%



Annual variation of the NPV market³ (In thousands of vehicles)



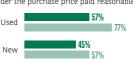
Market forecasts⁴ (In millions of new cars) 2021 0.56 | 2022 0.51 (-10%) | 2023 0.58 (+15%)

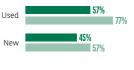
The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022.

SUMMARY

Faced with an unrelenting economic crisis and a falling lira, Turks express the bleakest views in this survey when it comes to the overall cost of owning a vehicle. They are the least likely to describe the acquisition cost as reasonable. Meanwhile, almost all respondents consider that running costs have increased. It therefore makes sense that they should lead the pack when it comes to reducing the impact of these expenses, even if they do not particularly want to drive less, especially in cities. But urban dwellers are among the most enthusiastic about using soft mobility solutions on a daily basis. And they are also among the most fervent in their conviction that electric vehicles are too expensive to buy.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways.





Cost reduction strategies

Motorists are looking to save

Share of owners who have taken measures to reduce the cost of using their vehicle.

X

(+5 pts

vs. 2016)

(+38%)

2016



Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether Share of non-owners who have owned a vehicle

Urbanite

Rural

dwellers

in the past

TURKEY VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable

... but high running costs

Share of owners who consider that running costs have risen in the last few years



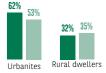
... by sometimes choosing not to drive Share of owners who have

decided to drive less to reduce costs



Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Electric. a solution that is still

perceived as too costly to acquire

Share of non-owners of electric vehicles who

gave up on the idea because they are too expensive 35%



UNITED KINGDOM VS. WORLD

Passenger vehicle market penetration



(In thousands of vehicles)



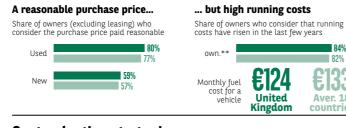
Market forecasts⁴ (In millions of new cars) **2021**].65 | **2022**].46 (-11%) | **2023**].7 (+16%)

The 2023 forecast is contingent on microchip supplies returning to normal, but it is difficult to predict when this will occur. If this were to happen only at the end of 2023, the market would remain at a similar level to 2022.

SUMMARY

UNITED KINGDOM VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

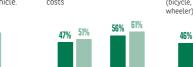


Cost reduction strategies

to save...

Motorists are looking ... by sometimes choosing not to drive Share of owners who have Share of owners who have

taken measures to reduce the decided to drive less to reduce cost of using their vehicle. costs



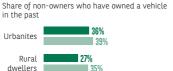
Giving up on internal combustion cars

A move that sometimes means giving up on cars altogether

60%

47%

own **

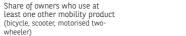


Electric, a solution that is still perceived as too costly to acquire

Share of non-owners of electric vehicles who gave up on the idea because they are too expensive







GIJJ

Aver. 18

countries



GI

United

Kingdom

alternative

Soft mobility as an

United States

UNITED STATES VS. WORLD

Passenger vehicle market penetration





NPV effort rate

2021

2021

rate*	65%

Price of (+54%)petrol² vs. 2016) United States

(+38% World

X

(+5 pts

vs. 2016)

Annual variation of the NPV market³ (In thousands of vehicles)

Market forecasts⁴ (In millions of new cars)

The 2023 forecast is contingent on microchip supplies

the market would remain at a similar level to 2022.

returning to normal, but it is difficult to predict when this

will occur. If this were to happen only at the end of 2023,



in the past 2021 14.95 | 2022 12.4 (-17%) | 2023 14.4 (+16%)



dwellers

to save

519

own **

SUMMARY

In the United States, a share of motorists similar to the overall average believe that they paid a reasonable price for their car, be it new or second hand, and that the cost of using their vehicle has increased in recent years. These high-mileage drivers have the biggest monthly fuel budget. even though fuel prices in the US are low compared to other countries. 1 in 2 motorists take measures to reduce running costs, below the overall average, but their willingness to travel less is in line with the general trend. However, the United States is one country where "soft mobility" has yet to become part of people's vocabulary and daily habits. The high price of electric vehicles is generally considered an obstacle to their purchase, but slightly less so than average.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners. Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomu, ³ OICA. C-Ways.

In the UK, the share of motorists who consider cars to be reasonably priced is in line with the survey's overall average, for both new and used vehicles. Do the Brits feel that running costs have increased? Yes, but neither more nor less than average. However, a narrow majority of motorists intend to take no action to reduce their costs, something that is replicated in only three other countries. An average proportion of people are willing to drive less to use less fuel, while the share who consider the high price of electric vehicles to be a barrier to their purchase is also close to the overall average.

However, the use of soft modes of transport for daily journeys is relatively unpopular, especially in rural areas.

* NPV (New Passenger Vehicle) effort rate: ratio between the average price of a NPV and the average net annual household income (this is not the same as the effort rate in the initial report, which is based on the average household income of a buyer). ** own.: vehicle owners. non-own.: non-vehicle owners.

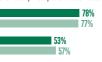
102 Sources: ¹ Electric Passenger Vehicles - ACEA & national statistical institutes. ² GlobalEconomy. ³ OICA. C-Ways.

UNITED STATES VS. 18-COUNTRY AVERAG

Using one's car is becoming a luxury

A reasonable purchase price...

Share of owners (excluding leasing) who consider the purchase price paid reasonable



... but high running costs

Share of owners who consider that running costs have risen in the last few years



Cost reduction strategies

Motorists are looking

Share of owners who have taken measures to reduce the cost of using their vehicle.

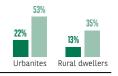


decided to drive less to reduce costs



Soft mobility as an alternative

Share of owners who use at least one other mobility product (bicycle, scooter, motorised twowheeler)



Giving up on internal combustion cars

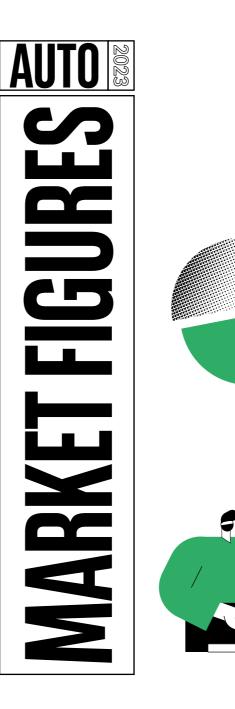
A move that sometimes means giving up on cars altogether

Share of non-owners who have owned a vehicle



Electric. a solution that is still perceived as too costly to acquire





L'Observatoire Cetelem 2023



The new passenger vehicle (NPV) market

	2020	2021	2022*	Variation 2022 vs. 2021	2023*	Variation 2023 vs. 2022
South Africa	246,541	304,340	375,000	23%	400,000	7%
Germany	2,917,678	2,622,132	2,300,000	-12%	2,750,000	20%
Austria	257,721	239,803	195,000	-19%	230,000	18%
Belgium	431,491	383,123	350,000	-9%	405,000	16%
Brazil	1,615,942	1,558,467	1,370,000	-12%	1,600,000	17%
China	20,177,731	21,481,537	23,300,000	8%	26,000,000	12%
Spain	851,210	859,476	770,000	-10%	900,000	17%
United States	14,471,000	14,946,971	12,400,000	-17%	14,400,000	16%
France	1,650,118	1,659,005	1,405,000	-15%	1,650,000	17%
Italy	1,381,753	1,456,674	1,170,000	-20%	1,360,000	16%
Japan	3,809,981	3,675,698	3,130,000	3,130,000 -15% 3,650,000		17%
Mexico	532,433	520,112	460,000	-12% 535,000		16%
Norway	141,412	176,276	142,000	0 -19% 165,000		16%
Netherlands	355,598	324,336	300,000	-8%	350,000	17%
Poland	428,347	446,647	395,000	-12%	460,000	16%
Portugal	142,414	149,740	141,000	-6%	165,000	17%
United Kingdom	1,631,064	1,647,181	1,460,000	1,460,000 -11% 1,700,000		16%
Turkey	610,109	561,853	505,000	-10%	580,000	15%
18-COUNTRY TOTAL	51,652,543	53,013,371	50,168,000	-5%	57,300,000	14%

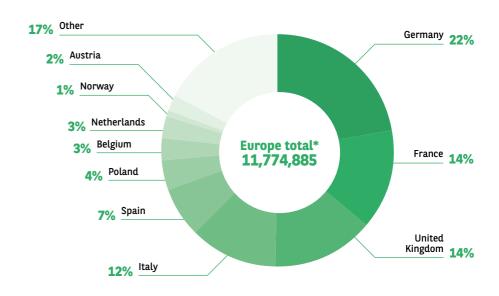
*Estimates and forecasts from L'Observatoire Cetelem de l'Automobile 2023. Sources: L'Observatoire Cetelem de l'Automobile 2023, OICA, ACEA, C-Ways

Global light vehicle (LV) market

	2020	2021	2022*	Variation 2022 vs. 2021	2023*	Variation 2023 vs. 2022
Global sales in millions of units	77.8	81.4	80	-2%	88	10%

Scope: all countries. Light vehicles (LV) = passenger vehicles (PV) + light commercial vehicles (LCV). * Estimates and forecasts from L'Observatoire Cetelem de L'Automobile 2023. Sources: L'Observatoire Cetelem de L'Automobile 2023, OICA, ACEA, C-Ways

New passenger vehicle registrations in Europe* in 2021



* Europe: EU + United Kingdom, Norway, Switzerland and Iceland. Sources: L'Observatoire Cetelem de l'Automobile 2023, OICA, ACEA, C-Ways

Household purchase rate in 6 countries

The calculation is strictly based on registrations for private use only

	Total NPV registrations in 2022*	Sales to private individuals	Sales to companies	Private registrations	Number of households	Household purchase rate
Germany	2,300,000	37%	63%	851,000	40,556,000	2.1%
France	1,405,000	43%	57%	604,150	30,304,000	2.0%
Italy	1,170,000	63%	37%	737,100	26,079,000	2.8%
United Kingdom	1,460,000	50%	50%	731,460	27,792,000	2.6%
Spain	770,000	43%	57%	331,100	18,793,900	1.8%
Belgium	350,000	40%	60%	140,700	4,881,500	2.9%
TOTAL	7,455,000	46%	54%	3,395,510	148,406,400	-2.3%

* Estimates from L'Observatoire Cetelem de l'Automobile 2023. Sources: L'Observatoire Cetelem de l'Automobile 2023, ACEA, National statistical institutes, Manufacturers' federations, C-Ways

Leading brands in Europe* in 2022

	Market share 6 months 2021	Market share 6 months 2022	Change in the number of NPVs sold 2022 vs. 2021	
VOLKSWAGEN	11.4%	10.0%	-23.8%	
ΤΟΥΟΤΑ	6.0%	6.8%	-1.8%	
PEUGEOT	6.5%	6.0%	-21.2%	
BMW	5.8%	5.8%	-14.3%	
MERCEDES	5.4%	5.6%	-10.1%	
AUDI	5.3%	5.3%	-13.5%	
RENAULT	5.7%	5.3%	-20.3%	
KIA	3.9%	5.2%	16.8%	
HYUNDAI	3.7%	4.7%	8.2%	
SKODA	5.3%	4.6%	-24.9%	
OPEL/VAUXHALL	4.2%	4.1%	-16.9%	
DACIA	2.9%	4.0%	18.2%	
FIAT	4.3%	3.7%	-25.4%	

	Market share 6 months 2021	Market share 6 months 2022	Change in the number of NPVs sold 2022 vs. 2021
CITROEN	4.0%	3.5%	-24.7%
SEAT	3.2%	3.3%	-10.6%
MINI	1.4%	1.5%	-11.4%
JEEP	1.1%	1.0%	-20.6%
LAND ROVER	1.1%	0.9%	-31.8%
PORSCHE	0.6%	0.8%	13.6%
DS	0.3%	0.4%	13.2%
LANCIA/CHRYSLER	0.4%	0.4%	-20.6%
LEXUS	0.4%	0.3%	-26.2%
JAGUAR	0.4%	0.2%	-43.2%
ALFA ROMEO	0.2%	0.2%	-5.4%
SMART	0.3%	0.2%	-29.3%

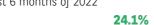
* Europe: EU + United Kingdom, Norway, Switzerland and Iceland. Sources: L'Observatoire Cetelem de l'Automobile 2023, ACEA, C-Ways

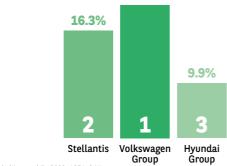
TOP 3 brands in Europe in 2022

First 6 months of 2022



TOP 3 groups in Europe in 2022 First 6 months of 2022





* Europe: EU + United Kingdom, Norway, Switzerland and Iceland. Sources: L'Observatoire Cetelem de l'Automobile 2023, ACEA, C-Ways

The new vehicle market in France

In number of registrations

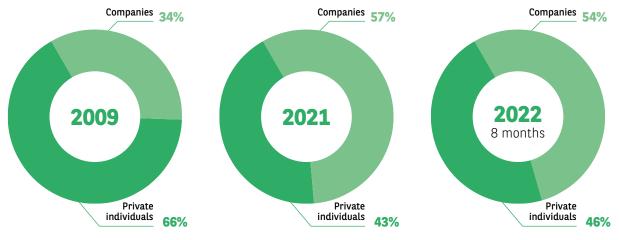
	2014	2015	2016	2017	2018	2019	2020	2021	2022*
NPV - New passenger vehicle	1,795,885	1,917,226	2,015,177	2,110,748	2,173,518	2,214,428	1,650,118	1,659,146	1,405,000
LCV - Light commercial vehicle	372,074	379,424	397,085	438,645	459,038	479,769	401,124	430,787	344,630

* Estimates and forecasts from L'Observatoire Cetelem de l'Automobile 2023. Sources: L'Observatoire Cetelem de l'Automobile 2023, C-Ways, based on SIV data

Market share of electric vehicles in 2021

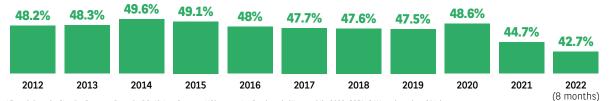
	Electric Market share	Plug-in hybrid market share	TOTAL
South Africa	0.1%	0.0%	0.1%
Germany	13.6%	12.4%	26.0%
Belgium	5.8%	12.6%	18.4%
Brazil	0.1%	0.3%	0.5%
China	13.1%	2.9%	16.0%
Spain	2.9%	5.0%	7.9%
United States	3.4%	1.2%	4.6%
France	10.5%	8.4%	18.9%
Italy	4.6%	4.9%	9.5%
Japan	0.5%	0.5%	1.0%
Mexico	0.4%	0.1%	0.5%
Norway	64.5%	21.7%	86.2%
Netherlands	20.0%	9.7%	29.7%
Poland	0.7%	0.7%	1.4%
Portugal	9.2%	10.7%	19.9%
United Kingdom	11.7%	7.3%	19.0%
Turkey	5.4%	1.7%	7.1%

Sources: L'Observatoire Cetelem de l'Automobile 2023, IEA, EAFO, C-Ways



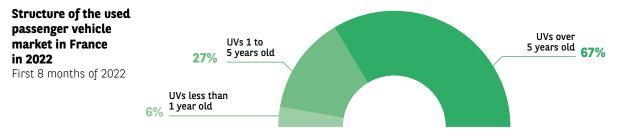
Structure of the new passenger vehicle market in France

Sources: L'Observatoire Cetelem de l'Automobile 2023, CCFA, C-Ways, based on SIV data



NPV market share of French brands* in France

*French brands: Citroën, Peugeot, Renault, DS, Alpine. Sources: L'Observatoire Cetelem de l'Automobile 2023, CCFA, C-Ways, based on SIV data



Sources: L'Observatoire Cetelem de l'Automobile 2023, C-Ways, based on SIV data

METHODOLOGY

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The economic and marketing analyses, as well as the forecasts, were performed in conjunction with the survey and consulting firm **C-Ways**, a specialist in Anticipation Marketing.

Quantitative consumer interviews were conducted by Harris Interactive between 23 June and 8 July 2022 in 18 countries: Austria, Belgium, Brazil, China, France, Germany, Italy, Japan, Mexico, Netherlands, Norway, Poland, Portugal, South Africa, Spain, Turkey, United Kingdom and United States. In total, **16,600 individuals** were interviewed online (CAWI method).

These individuals, aged 18 to 65, were drawn from national samples representative of each country. The quota method was employed to ensure that the sample was representative (gender and age). 3,000 interviews were conducted in France and 800 in each of the other countries.

Co-authored by: Luc Charbonnier and C-Ways Editorial coordination: Patricia Bosc Design: © Altavia Cosmic Illustrations: Altavia Cosmic, Shutterstock



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