LeasePlan What's next?

Outlook

Market Context & Trends 2024

Macroeconomic Context • Inflation: resolution or trend? Interest Rates • Consumer Confidence Index • Impacts on TCO New players in the European market

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> In this edition, we take note of the first indicators that the trend of price increases may be reversing. With that, we are returning to a path of growth in sales of new vehicles and more contained total usage costs.

Introductory note

It's been almost one year since the launch of the first automotive market outlook, whose purpose is to help fleet managers make decisions bearing in mind the economic backdrop of uncertainty we have experienced in recent years. News related to the global economy and, in particular, the automotive market has not been encouraging in the recent past. In this edition, however, we will take note of the first indicators that the trend may be reversing, bringing us back around to a path towards growth in new vehicle sales and more contained total costs of ownership.

This trend is summed up in the table combining macroeconomic indicators and automotive market indicators, which now show evidence of lower prices and higher discounts for new vehicles, together with faster delivery times.

Economic indicators	november 2022	april 2023	october 2023
Inflation	1	ŧ	ŧ
Interest rates	1	1	1
GDP	1	ŧ	ŧ
LeasePlan TCO Index	1	1	1
Automobile Market Indicators			
Prices	1	1	Ļ
Discounts	Ŧ	1	1
Delivery times	1	1	ŧ

Source: LeasePlan Consulting

Macroeconomic Context: Topsy-turvy, inflation accelerates and slows down, while growth softens

There were numerous obstacles overcome by global and domestic economic activity during the first half of the year. We witnessed a downward trend in inflation since early 2023, while interest rates likely peaked according to specialists. For this reason, we may be coming close to a turning point where the effects of the ECB's monetary contraction policy over the past 18 months are finally being seen.

Inflation: a temporary hiccup, or a trend?

In the case of Europe, inflationary performance remains subject to two risks. On the one hand, there is pricing pressure on energy products, even with the progress that has been made in renewable energies and supplier diversification, while on the other hand, there is what is known among economists as "second-round effects", i.e., we have seen some recovery in wages, helping to cushion the effects of inflation, but which does not help in combating monetary erosion. In August, as suggested by analysts' forecasts, inflation experienced the fluctuations in fuel prices, while this accelerated indicator also fluctuated to 5.3%. Even so, it went back to 4.3% in September, the same level as in July, while Eurostat forecasts suggest a new drop to 3.3% in October, continuing a consecutive 10-month decline and bringing back the downward curve in inflation. Euro Area inflation has also seen decreases over the past 12 months, coming in at 4.8% in September (down 0.4 p.p. from August), and with a decline to 2.9% in October.



² Q1 2019 Q2 2019 Q3 2019 Q1 2020 Q2 2020 Q3 2020 Q1 2021 Q2 2021 Q3 2021 Q1 2022 Q2 2022 Q3 2022 Q1 2023 may/23 jun/23 jun/23 setp/23 oct/23

Source: Eurostat

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1.2

Interest rates: one more step... have we hit the peak?

Central banks use monetary policy to restrict consumption, thereby driving inflation downward so that it achieves the goal of 2% in the short and medium term. The ECB has been increasing interest rates since the last quarter of 2022. We took note of this very fact in the last publication of this bulletin in March 2023. The need to stop mounting inflation has forced central banks to raise interest rates. Since the end of the first quarter of this year, official ECB interest rates have risen from 3.0% to 4.5%, with the last interest rate hike occurring on 20 September. There has been an increase of 125 base points in a little more than 125 days, whereby ECB analysts believe this is the peak.

What does this mean? In practical terms, as shown in the graph, interest rates with shorter maturities have gone up, on average, from 2.89% in March to 3.51% in September – an increase of 21% in four months.

After peaking, although rates may go down, they are not expected to return as quickly to the levels seen in mid-2022. Most likely, they will remain at restrictive values for much of 2024.

The market sentiment is that central banks will be able to lower inflation to 2% in the next two years. In the case of Europe, however, everything depends first and foremost on savings accumulated since the pandemic. In the case of Portugal, they have unfortunately reached their limit. The higher monthly burdens of many households, coupled with few incentives for savings, have resulted in one of this century's lowest household saving rates. In the fourth quarter of 2019, the household saving rate was 7.2% of available income. At the end of the first quarter of 2021, in the middle of the pandemic, it nearly doubled to 13.7%. From then on, it has declined steadily until reaching 5.9% in the first quarter of this year, according to data from Statistics Portugal.

In addition to savings, containing inflation and higher interest rates depends on maintaining or gradually discontinuing expansionist fiscal policies, the delayed effects of monetary policies (as occurred with the first central bank increases in late 2021) and the resilience of job markets.

In addition to all of these, German inflation took longer to decrease to levels identical to those of the Portuguese, and has a significantly higher weight on inflation in the Euro Area. This in and of itself puts pressure on prices in the rest of Europe, and hinders interest rate relief.

In the midst of these monetary contraction efforts, how can households and companies prepare? Are we likely about to see a period of economic contraction?

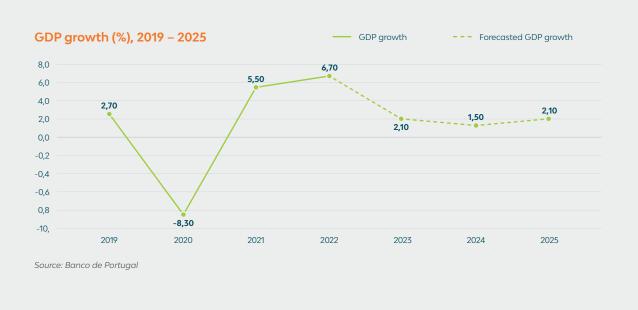
Changes in interest rates (%), 2021 – 2023



1.3

Mounting interest rates are hampering economic growth

As we have seen above, there are three dynamics that have marked the global economy in the first half of the year: (i) economic activity that has been resilient to the most pessimistic predictions from late 2022, (ii) inflation rates on a constant decline everywhere, and last but not least, (iii) increasingly more restrictive financial conditions reflecting the monetary contraction efforts imposed by central banks through interest rate hikes. This dynamic is what justifies positive expectations that the Portuguese GDP will grow 2.1% in 2023. However, the latest global economic indicators suggest that the dynamic we witnessed in the first half of the year has cooled down significantly since the arrival of summer, without any intention to relax the current policy of monetary contraction. The United States, China and the Euro Area predict slowdowns in the coming quarters as a result of restrictive monetary policies. In Europe, through July, there was a contrast between the resilience of peripheral economies and the current vulnerability of central economies (with Germany at the head).



The second quarter of 2023 brought a sharp slowdown in the Portuguese GDP, which had zero consecutive change, up 2.3% year-overyear accordance with the flash estimate from Statistics Portugal¹. The problem is that the daily economic activity indicator² of Banco de Portugal suggests that the scenario may worsen in the third quarter, as shown in the graph. In mid-July, this indicator – which attempts to measure, almost in real time, the year-over-year change in economic activity through variables such as heavy commercial vehicle traffic on motorways, gas and electricity consumption or purchases made in Portugal with cards by residents and non-residents – went into the red and remained there until the week ending 6 August, which included World Youth Day. In other words, at a time when the tourism sector should have thrived, the daily economic activity indicator suggests that GDP growth in the third quarter was weaker than in the previous ones.



Daily economic activity indicator

Source: Banco de Portugal

¹ Source: Statistics Portugal, Quarterly accounts

² Source:Banco de Portugal: Daily economic activity indicator - 31 August 2023 (bportugal.pt)

1.4

Decrease in consumer confidence index and economic climate indicator

The consumer confidence index is another indicator that is worth monitoring. We hit historic lows in early 2022, but saw the first signs of improvement in January 2023. In view of the consecutive interest rate hikes, which continue to take up more and more household income, how long will consumers remain confident? According to the numbers, the consumer confidence index hit its highest level in July since the start of the war in Ukraine, then resumed its downward trend until October, a sign that families are likely more pessimistic about the country's economic prospects and the financial standing of their household in the coming year.



Contrary to the initial signs in January and July 2023, the consumer confidence index fell again in October. An indicator that households may be more pessimistic about the economic development of the country in 2024.

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Another indicator – that of the economic climate, which measures the confidence of businesspeople – also declined in July and August, after having stabilized in June. Note that, according to business and consumer surveys

conducted by Statistics Portugal, this reduction reflects a universal downturn in all of the main business sectors, namely manufacturing, construction, public works, retail and services.



Fonte: INE, referring to manufacturing, construction, public works, retail and services

2

Impacts on TCO

Economic climate indicator

Let us now look at a regular section of our information bulletin: in view of the scenario described in the previous chapter, what has changed in the total cost of ownership (TCO) of vehicles, and which TCO components have been most affected?

Remember that TCO is analysed based on a fixed set of vehicles of different segments and engine types representing the best-selling models in the domestic market, and the most commonly found in LeasePlan's rental contracts. In this edition, we will examine developments in operating costs and the commercial policies of carmakers, with a particular focus on pricing and discount practices over the last half-year, as well as the competitiveness of electric vehicles from the standpoint of TCO.

What impact does the labour shortage in workshops have on vehicle operating costs and on downtimes? Can we recognize certain signs of stabilization vis-à-vis the first edition of this bulletin from March 2022? Finally, should fleet managers keep making choices based on the rental ceiling?

2.1

LeasePlan TCO Index: developments in the last half of the year

As we can see in the graph, increases in TCO have been constant. While in November of last year we saw increases of 20% over the baseline (March 2022), they have gradually slowed down since this time. The increase totalled 8 p.p. from November of last year to March of this year (in other words, 6.6%), while in the past six months, despite the new increase, we see a new slowdown in intensity to 2 p.p. (equivalent to 1.5% compared to March of this year). Notwithstanding the softening in the rise of costs, the impact of this scenario on companies and households is clear since, in the past 18 months, the LeasePlan TCO Index grew by 30%.

Which TCO components suffered the most pressure in the last three months?



LeasePlan Portugal TCO Index

Source: LeasePlan Portugal Consulting

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2.2

Analysis of TCO components: Interest Rates, Vehicle Prices and Operating Costs

2.2.1. Interest Rates

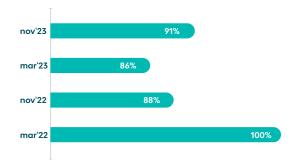
As illustrated in the graph, **interest rates have been the variable responsible for most of the increase in TCO**, both in relative and absolute terms, accounting for one third of the total rise in LeasePlan's TCO Index since March of 2022. Despite expectations that the pace of interest rate hikes has peaked out, in truth, the respective interest rate cuts will not occur, as recently stated by the ECB, until there are signs of a consistent drop in inflation, which may mean that we will have to live with our current interest rate levels for the entire first half of 2024.

2.2.2. Vehicle Prices

The pricing and discount analysis we present was based on a set of vehicles comprising LeasePlan's TCO Index, which we use to identify trends in changes to catalogue prices and discounts for each make and model. From March 2022 to March 2023, catalogue prices rose 7%, while from March to November 2023 prices saw their first decrease. While it was only 1%, it also represents a shift in the previous trend here, to the benefit of TCO.

nov'23 106% mar'23 107%

Changes in discounts



Changes in catalogue prices

Source: LeasePlan Portugal Consulting

100%

nov'22

mar'22

In the variable of discounts, we can see that carmakers are also starting to gradually abandon the more conservative commercial policy that was possible during times of product shortages. In other words, while in March 2022 the market could enjoy discounts that we index here at 100%, twelve months later these were down 14%; however, in November 2023, we saw examples of a shift with higher discounts that will result in more vehicles available for delivery after a resumption of production capacity at factories.

2.2.3. Operating Costs:

«How do long downtimes and the shortage of workshop labour affect operating costs?»

Operating costs were one of the topics addressed in the previous edition of the automotive market outlook published in April. At the time, we identified the impact of inflation on some of the constituent components of operating costs such as crude, rubber, energy, metals and materials. As we saw at the time, despite higher raw material prices affecting operating costs, LeasePlan did not pass on these increases to the same degree in customer rentals.

In this edition, we propose looking at two other factors that directly affect operating costs: the number of days of vehicle downtime and the value of workshop labour.

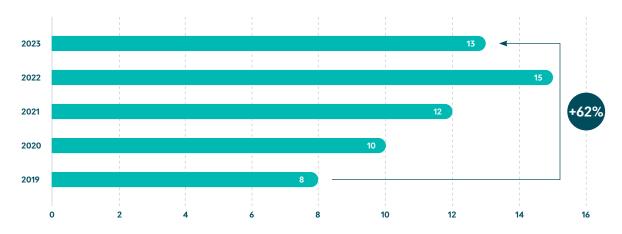
Impact of more days of vehicle downtime

The number of days of vehicle downtime due to breakdown has risen over time, due to longer waiting times for the delivery of parts and lower workshop capacity, both for diagnostics and to perform the work itself. This has affected operating costs. The question asked by many fleet managers is:«How do more days of vehicle downtime directly affect operating costs?»

The answer lies in the costs of a replacement vehicle. In 2019, a broken down vehicle would be immobilized for an average of 8 days, with replacement vehicle costs being calculated based on this figure.

In 2023, the average downtime rose to 13 days, i.e. 62% higher than in 2019, meaning that the estimated replacement vehicle costs now use this new figure as a reference.

However, it is also important to note that the average days of downtime due to breakdown was also higher in 2022, at around 15 days, leading us to believe that we are beginning to see positive signs in this regard as well.



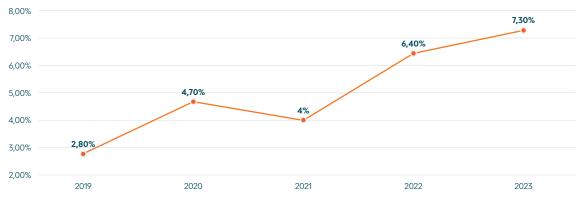
Average days of downtime per breakdown*

*Breakdown downtimes includes all downtimes of more than 48 hours in the workshop Source: LeasePlan Portugal Consulting



Increase in workshop labour costs

The cost of work at workshops has also experienced more intense adjustments in the recent past. The qualifications needed for this type of job are less appealing to the working population in Portugal, resulting in a labour shortage, which has put lots of pressure on the automotive industry. In view of this lack of workers, wages tend to increase, which is naturally reflected in the TCO of vehicles. In the last four years, the TCO component related to the maintenance cost of vehicles has been greatly affected. Workshop labour inflation in 2019 was around 3%; four years later, this same indicator increased again, but this time to 7.3%.



Changes in labour costs

Source: LeasePlan Portugal Consulting

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What's next?

2.3

Competitiveness of electric vehicles from the standpoint of TCO: «Should fleet managers keep making choices based on the rental ceiling?»

Choosing a model to be part of a fleet policy is still normally done based on a monthly rental ceiling. This means that, if no electric vehicles exist as competitive alternatives to combustion vehicles in terms of the monthly rental amount, fleet policies will change very little as a result, and combustion vehicles are still chosen at the time of renewal.

Our recommendation has been to replace the criterion of rental ceiling with TCO ceiling, in order to reflect all of the costs generated for the company by the vehicle, namely taxes and fuel, or energy. In this way, considering the increasingly broader and more competitive supply of electric vehicles, the attractiveness of electricity costs compared to fuel, and legislation currently in force which is favourable to electric vehicles, the choice of electric vehicles becomes inevitable.

To demonstrate our recommendation, we use an example with two models from different segments by engine type – the Renault Megane IV 1.5 Blue dCi and BMW Series 4 420d auto (both diesel) and the Renault Megane e-Tech EV40 and BMW I4 eDrive40 (both 100% electric) – for which we calculated rent and TCO based on mileage of 30,000 km/year and a period of use of 48 months, also considering VAT costs. From the standpoint of rental ceiling, the diesel model by Renault represents just 3% more than the electric model, while for the BMW models this difference is only 10%.

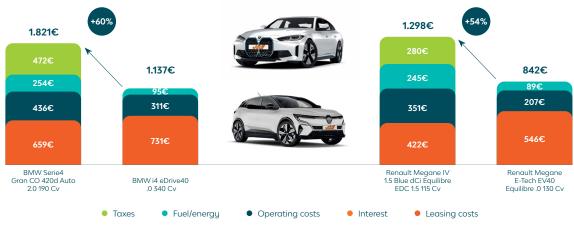


Ceilings from the standpoint of rental

Source: LeasePlan Portugal Consulting

> However, if we change our analytical perspective and consider all of the costs that a vehicle's use entails, including those for energy and taxes, the minor difference in rent between the different engine types that we analysed changes in favour of the electric vehicle from the standpoint of TCO, representing a difference of 54% of the total cost of ownership for the Renault models and 60% for the BMW models.

Reviewing the fleet policy and including ceilings from the standpoint of TCO may result in major savings for companies by truly representing all of the costs directly tied to a vehicle's use, and not only its monthly leasing amount.



Ceilings from the standpoint of TCO

Source: LeasePlan Portugal Consulting

3

Did you know...

3.1	3.2	3.3	3.4
The average age of the fleet has contributed towards longer average downtimes	LeasePlan has a new replacement vehicle option for its customers	Delivery times have seen continuous improvements since May	Chinese manufacturers will likely disrupt the European market

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What's next?

3.1

The average age of the fleet has contributed towards longer average downtimes

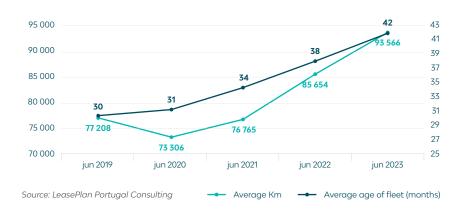
Average downtimes have been increasing over the last 24 months for a variety of reasons. The shortage of parts in the automotive market – a direct result of production and supply chain problems due to the COVID-19 pandemic and the war in Europe – was one of the main reasons.

But there were others too. With the option to extend contracts, the average age of fleet has been on the rise, causing vehicles to arrive at workshops with much higher mileages than those recorded through 2019. These factors naturally contribute towards more vehicle wear, resulting in more extensive and complex repairs and longer downtimes as well.

Average downtimes have become 62% longer. The expected return to normalcy in

factory production and supply chains is directly tied to this reality, although unfortunately, even in the last quarter, we had the example of Autoeuropa suspending its production due to a lack of materials.

The average age of fleets has been on the rise since 2019. While in this year it was around 30 months (right side column), in 2023 it was up to 42 months. The average mileage, a clear symbol of more vehicle wear, was also higher compared to 2019. On average, a vehicle arriving at a workshop due to a breakdown or accident had around 75,000 km, while today this figure has increased to around 95,000 km. These factors contribute directly towards more days of downtime, as we have seen above.

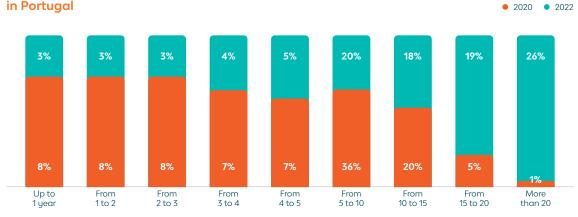


Age and average mileage of fleet in downtime



However, is this higher fleet age a peculiarity specific to rental fleets? Or do all of the nation's cars represent major increases in the average age of fleet as well?

In fact, the age of cars on the nation's roads has risen significantly over the past 20 years. In the annual report presented by ACAP at the end of last year, the association reported this very fact: vehicles more than 20 years old in 2022 accounted for 26% of the active fleet in Portugal, compared to 1% in 2000. If we focus on the percentage of vehicles on the road that are more than 10 years old, we can see that they were 63% of the total active fleet in 2022, compared to 26% in 2000.



Age of light passenger vehicle car fleet in Portugal

Source: ACAP 2022



3.2

LeasePlan has a new replacement vehicle option for its customers

In the last edition of this outlook, we noted the difficulties experienced by rent-a-car companies in supplying vehicles to customers as a result of market disruptions and vehicle shortages. Specifically, we mentioned the problems that leasing companies have faced when looking for a replacement vehicle to handle situations of customer immobilization.

Along these lines, LeasePlan has updated its replacement vehicle service, which is now proposed and supplied per segment (from among several available engine types), substituting the previous traditional service based on a category corresponding to only one engine type within a given segment.

In addition, rent-a-car companies are gradually discontinuing the replacement vehicle pick-up and drop-off service at workshops. As such, for customers who have agreed to this service, it will now be done using TVDE vouchers or taxis for travel between the workshop and the rent-a-car company, instead of picking up and dropping off the replacement vehicle at the workshop.

For customers who have this service contracted, it will now be carried out through TVDE vouchers or via taxi service for transportation between the workshop and the rent-a-car.



What's next?

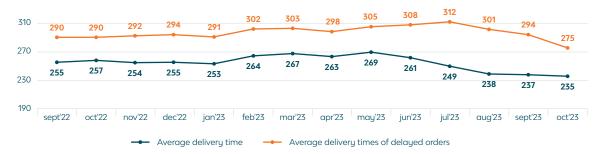
3.3

Delivery times have seen continuous improvements since May

Delivery times are one of the market challenges we have addressed in every edition of our outlook. This indicator is also showing improvements, not only in the delivery turnover of vehicles arriving at this time, but especially in the scheduled delivery dates of those being ordered just now, and whose anticipated delivery is beginning to come closer to what we were accustomed to through 2020.

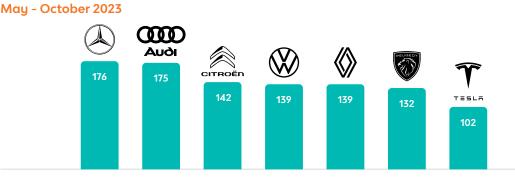
Since May 2023, average vehicle delivery times have been constantly on the decline, coming in at 235 days in October 2023. With regard to delayed orders, the decrease here has started to become more accentuated in the past two months, reaching numbers in October below those seen one year ago. All of this means that carmakers have finally started to show improvements vis-à-vis the scenario we have been facing, and that production levels are beginning to respond more quickly to demand.

The anticipated deliveries of orders placed from May to October 2023 are also an encouraging factor. Mercedes is the make with the highest number of days for the delivery of a vehicle, at 176 days, a significant improvement over the delivery times of more than 12 months, which to this day we are seeing in vehicles being delivered from orders placed in 2022.



Average delivery time in days, (2022 - 2023)

Forecast waiting days for orders placed, by make,



Source: LeasePlan Portugal Consulting

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Chinese manufacturers will likely disrupt the European market

The entry of new players in the European automotive market has been one of the main topics on the agenda of the auto industry as a whole. The appearance of Chinese builders in Europe, primarily for electric engines, promises to change European consumption habits. In the case of Portugal, these carmakers have entered the domestic market in a more evident manner in 2022, starting with the make Aiways and MG, followed by BYD in 2023. All are founded on electric vehicles with sales increases from 2021 to 2023. This is demonstrated in the graph on the right. MG was the only Chinese make operating in Portugal in 2021, although still taking its first steps, with only 16 sales in the second half of this year. Aiways joined MG in 2022, with 290 vehicles sold between the two makes. In 2023, in the first half of the year alone, BYD joined in, with sales now reaching 656 vehicles, 126% more than the entire previous year.

We believe that these new brands will expand their positioning in Portugal. Their historical performance in their markets of origin suggests this very thing. A study by McKinsey from late 2022 suggested that two thirds of European consumers would be interested in choosing a vehicle of one of these makes if this facilitated their transition to electric mobility, meaning that those interested in the energy transition are not particularly loyal to European carmakers. This change in behaviour represents a window of opportunity for these new players and for the energy transition in the European road transport sector.



Sale of Chinese vehicle makes in Portugal

Source: ACAP | Registration Report, 2021, 2022 and 2023

Main recommendations

In view of that described over the previous pages, which characterizes the scenario we are experiencing, LeasePlan recommends that decision-makers and fleet managers evaluate measures – some more tactical and others more structural – to respond to the existing constraints, including the following possibilities:

✓ Continue to evaluate the pertinence of contract extensions;

Solution Accelerate the adoption of 100% electric vehicles, which will lower TCO;

 ✓ Financial planning of orders considering that delivery times are faster than they were
12 months ago, trends in interest rates and carmaker discounts, as well as the current age of the fleet;

Solution of TCO as a means of vehicle selection for fleet policies (instead of the monthly rental criterion);

Regular explanatory communication with employees who use company vehicles on the status quo of the automotive market and its impact on fleet policy.

Whatever option you are considering, your LeasePlan account manager will be fully available, as always, to assess and give advice on the suitability of each one. **Please do not hesitate to contact us.**



What are the practical decisions in the face of uncertainty?

Transition to electric mobility seen as an opportunity

"The difficulties experienced in the automotive market in 2021 and 2022 expedited our fleet renewal to 2023. Despite the daunting circumstances, we turned this challenge into an opportunity by completely overhauling our fleet policy. After analysing, seeking out consulting and assessing benchmarks, we kick-started the changes to our fleet policy and renewed part of our fleet with 100% electric vehicles in early 2023, thus embarking on our journey of fleet electrification. These changes always bore in mind sustainability, the comfort of our drivers and a guarantee of future continuity through improved cost control."

Kelly Services, September 2023

"In view of our current reality, we decided to move forward with the transition to electric mobility. The renewal of the fleet for certain functions is now done by choosing 100% electric vehicles, along with expediting combustion vehicle purchases due to the shortage in the market."

Abbot Laboratórios, September 2023

"Bearing in mind our business and the current challenges of the automotive market and green energy, we decided to significantly change the percentage of our combustion vehicles. As such, around 50% of our vehicles will be 100% electric. This is an extremely important change in terms of integrating Jaba Recordati into renewable energies, while simultaneously aiming to be more efficient."

Jaba Recordati, September 2023

Contract extensions continue to be an option

"At WPP, we chose to extend some of our rental contracts in progress to ensure that, for ceilings in effect under our fleet policy, we are not forced to impose a change to lower vehicle segments. For higher ceilings, we have been managing to exchange vehicles. Since interest rates are expected to keep rising, we believe that these problems will persist or even get worse."

WPP, September 2023

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What's next?

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